

REFORMING CHINA'S TELECOMMUNICATIONS LAWS

LESSONS FROM THE AUSTRALIAN EXPERIENCE?

by Martyn Taylor*

A. The challenge of sustainable Chinese economic development

China has achieved a dramatic economic transition under the leadership of successive Presidents Deng Xiaoping and Jiang Zemin. From 1978, the traditional Chinese agricultural economy, based on communist command structures, has been transformed into a socialist market economy with a burgeoning industrial and service sector.¹ These economic reforms have been reinforced by far-reaching institutional and legal reforms, as is well documented in the literature.² As a result, China has achieved economic growth rates averaging an astounding 8.9% per annum over the past 15 years.³ China's economy now ranks as the world's second largest behind the United States in real terms, suggesting China already ranks as a global economic superpower notwithstanding its developing status.

However, as the World Bank has noted, China must overcome daunting internal challenges if it is to sustain its present growth trajectory.⁴ Such challenges include rising income inequality, declining international competitiveness, regional disparities and rising unemployment.⁵ These challenges are compounded by the global information revolution, which will force Chinese industry to undergo further rapid restructuring to remain internationally competitive. Relevantly, to address such challenges, the World Bank recommended to the Chinese government in October 2001 that China's existing five year strategic plan should be amended to further promote the development of Chinese telecommunications infrastructure.⁶ Indeed, while China has the largest telecommunications network in the world (dwarfing that of Australia), the accessibility of that network to the Chinese population remains comparatively low, indicating significant scope for further infrastructure development, as illustrated by the comparison in **Table One** below.

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¹ The term "socialist market economy," refers to a situation in which market forces are relied on to improve efficiency while the government continues to manage many aspects of economic production, including by retaining a high degree of state-ownership.

² See AES Tay "Introduction : Law and Legal Culture in China" in AES Tay & G Doeker-Mach (eds) *Asia-Pacific Handbook - Volume 1: People's Republic of China* (Nomos Verlagsgesellschaft, Baden-Baden, 1998), pp 39-53. See also B Naughton *Growing Out of the Plan: Chinese Economic Reform, 1979-1993* (Cambridge University Press, New York, 1995).

³ See World Bank "Country Economic Review: People's Republic of China" PRC 2000-09, World Bank, Washington DC, October 2000, adjusted for recent statistics.

⁴ See CJ Dahlman & JE Aubert "China and the Knowledge Economy: Seizing the 21st Century", World Bank Development Study (China), World Bank, Washington DC, October 2001.

⁵ Significant income disparities now exist, for example, between the richer coastal provinces and the poorer hinterland areas where ethnic minorities are heavily concentrated.

⁶ Chinese economic policy for the development of the telecommunications sector is articulated within China's Tenth "Five Year Plan" (2001-2005) which sets out various targets for such matters as telephone line penetration and infrastructure investment.

Within the context of its rapid economic reform programme, China has already moved swiftly in recent years to reform its telecommunications sector. Such reforms were expedited by China's entry into the WTO in 2001, resulting in significant amendments to Chinese telecommunications regulation.⁷ However, towards the end of 2001, the Chinese government indicated that it would prioritise and implement yet further telecommunications law and policy reforms.⁸ Such reforms remain firmly on the Chinese policy agenda for 2003 and are likely to remain central to China's future economic development strategy, particularly given the World Bank's October 2001 recommendations.⁹

Against this background, this paper identifies further reforms that could be made to China's existing telecommunications laws and overall regulatory structure to address critical issues that Australia experienced during its own telecommunications law reforms. In undertaking this analysis, this paper undertakes a comparative analysis of Australia's and China's current telecommunications laws and assesses their effectiveness in meeting their respective policy objectives. This paper concludes with a number of law reform recommendations for the Chinese Government, consistent with the economic development strategy identified by the World Bank in its October 2001 report.

*Table One: Key comparative statistics between China and Australia*¹⁰

Statistic	China	Australia
Population	1,273.1 million	19.4 million
Land area	9.3 million square km	7.6 million square km
GDP (2000 est.)	US\$4.5 trillion	US\$445.8 billion
GDP per capita (2000 est.)	US\$3,600	US\$23,200
GDP composition	15% agriculture, 50% industry, 35% services	3% agriculture, 26% industry, 71% services
Telephones lines in use	185.1 million ¹¹	9.6 million
Telephone lines per capita (%)	15%	50%
Mobile telephones	155.8 million ¹²	10.3 million
Mobile phones per capita (%)	12%	53%
Internet users	27.5 million	8 million
Internet usage per capita (%)	2%	41%

⁷ See S Nelson "Regulatory Watch: China" (2001) 33(12) *Business Asia* 9.

⁸ See "China Moves Ahead with Monopoly Phone Split", Total Telecom Asia, www.totaltele.com, 11 December 2001.

⁹ China's APEC Individual Action Plan for 2001, for example, comments that: (a) during 2002-2005, China will progressively open its telecommunications market after its entry into the WTO; (b) during 2005-2010, China will continue to implement opening policy, strengthen international cooperation and exchanges, and promote further opening of the Chinese telecommunications industry; and (c) during 2010-2020, China will actively create conditions to promote the integration of China's telecommunications industry into the world. See Government of China "Peoples Republic of China: Individual Action Plan 2001", APEC, Singapore, 2001.

¹⁰ Statistics as at March 2002, unless otherwise stated.

¹¹ See "China Mobile Users Hit 155.85 Million Mark in February: China Reports Record Rise in Mobile Phone Users", Total Telecom Asia, www.totaltel.com, 27 March 2002.

¹² See Total Telecom Asia, above n 11.

B. Comparative telecommunications sector reforms

In order to analyse Australia and China's current telecommunications laws, it is necessary to understand the historical context to their respective telecommunications reforms. Telecommunications sector reforms were initiated, on an international basis, during the late 1970s and early 1980s in recognition that state ownership was hindering the development of telecommunications infrastructure and the adoption of new services and technologies.¹³ Such reforms were partly motivated by the rapid evolution of new technologies and the considerable capital investment that would have been required by governments to implement such technologies and meet growth in demand.¹⁴ Such reforms were also motivated by an increasing international emphasis on competition policy and market mechanisms as a means to promote economic efficiency and increase social welfare. The primary purpose of such reforms was to provide consumers with a greater quality and diversity of services at a lower overall cost.¹⁵

I. Australian historical and policy context

Historically, Australian domestic telecommunications services were provided by the Australian Post Office and, later, the Australian Telecommunications Commission (ATC).¹⁶ International telecommunications services were provided by the Overseas Telecommunications Commission (OTC).¹⁷ The ATC and OTC each comprised statutory commissions operating statutory monopolies in their respective sectors. In 1989, the Australian government corporatised the ATC while enacting the *Telecommunications Act 1989* to implement the first stage of Australian telecommunications reforms.¹⁸ This legislation permitted limited competition in the provision of certain value-added services, while establishing an independent regulatory agency (AUSTEL) to protect consumers and ensure fair competition.¹⁹

In 1991, the Australian government enacted the *Telecommunications Act 1991* which facilitated the market entry of Optus Communications Limited (Optus) by way of competitive tender, and Vodafone Limited (Vodafone), as large-scale private sector competitors.²⁰ Meanwhile, the OTC and ATC were amalgamated to form Telstra Corporation Limited (Telstra) under 100% government ownership.²¹ Optus and Vodafone were granted statutory access rights to various Telstra networks and services, supervised by AUSTEL as independent industry regulator.²² Retail competition was increased by encouraging market entry by resellers who resold basic carriage services provided by Telstra.

¹³ See W Melody (ed) *Telecom Reform: Principles, Policies and Regulatory Practices* (Technical University, Denmark, 1999).

¹⁴ See, for example, discussion in P Smith "What the Transformation of Telecom Markets Means for Regulation" *Public Policy for the Private Sector*, Note No. 121, World Bank Group, July 1997.

¹⁵ See B Wellenius "Telecommunications Reform - How to Succeed", *Public Policy for the Private Sector*, Note No 130, World Bank Group, October 1997.

¹⁶ The ATC was established under the *Telecommunications Act 1975 (Cth)*.

¹⁷ The OTC was established under the *Overseas Telecommunications Act 1946 (Cth)*.

¹⁸ See also *Telecommunications Act 1989 (Cth)*. This legislation was enacted following a major earlier enquiry into Australian telecommunications. See JA Davidson (Chairman) "Report of the Committee of Inquiry into Telecommunications Services in Australia", AGPS, Canberra, 1982. See also Minister for Transport and Communications "Australian Telecommunications Services: A New Framework", Ministerial Press Release, Federal Government of Australia, 1988.

¹⁹ Part 17, *Telecommunications Act 1989 (Cth)*.

²⁰ *Telecommunications Act 1991 (Cth)*, commenced 1 July 1991. Optus operated both fixed and mobile telephony networks. Vodafone operated only mobile telephony networks. See also Minister for Transport and Communications, Hon. Kim Beazley, *Micro-Economic Reform: Progress Telecommunications*, Ministerial Press Release, Federal Government of Australia, 17 November 1990.

²¹ Part 4, *Telstra Corporation Act 1991 (Cth)*.

²² Parts 8 and 9, *Telecommunications Act 1989 (Cth)*.

In 1997, a new *Telecommunications Act 1997* was enacted in conjunction with significant amendments to Australia's *Trade Practices Act 1974*.²³ These amendments were expressly intended to promote market entry and greater competition.²⁴ As a result, there are now more than 60 holders of carrier licences in Australia and around 130 providers of telephony carriage services, indicating that Telstra, as incumbent, is now subject to significant competition.²⁵ Relevantly, during 1997 and 1999, the Australian government reduced its ownership of Telstra to 50.1%.

Underlying these Australian telecommunications reforms was a government policy emphasising the long-term interests of Australian consumers.²⁶ This emphasis was complemented by the Australian government's desire to enhance the efficiency and international competitiveness of the Australian telecommunications industry.²⁷ To achieve these objectives, the Australian government sought to promote the greatest practicable use of industry self-regulation, but implemented a sophisticated overarching regulatory framework to guide such self-regulation and to ensure it remained consistent with Australian policy objectives.²⁸

II. Chinese historical and policy context

Paralleling Australia, China's telecommunications services were historically provided by a departmental statutory monopoly, the Ministry of Post & Telecommunications (MPT).²⁹ Until 1994, the MPT was instrumental in promoting the development of the Chinese telecommunications sector in accordance with China's successive "Five Year Plans".³⁰ In 1993, MPT's statutory monopoly on telecommunications services was curtailed.³¹ The State Council approved a Chinese state-owned entity, the JiTong Communications Company (JiTong), to roll out its own data communications network in competition with MPT.³² Other firms were permitted to provide limited competition in paging, mobile telephony, email and video communications services.

On 17 July 1994, the statutory monopoly of MPT was formally ended by a directive from the Chinese State Council. Simultaneously, the commercial activities of the MPT were transferred into an entity known as China Telecom with responsibility for providing domestic and international telecommunications services. The MPT remained as an agency responsible for the development and enforcement of regulatory policy.³³ Meanwhile, the China United

²³ *Telecommunications Act 1997 (Cth)*, Act No. 47 of 1997.

²⁴ See discussion in Explanatory Memorandum to the Telecommunications Bill 1996.

²⁵ See Productivity Commission *Telecommunications Competition Regulation* (Productivity Commission, Canberra, 2001), chapter 3.3.

²⁶ See comments in OECD *Communications Outlook 1999 - Telecommunications Regulatory Issues (Australia)* (OECD, Paris, 1998).

²⁷ See ACA "The Australian Telecommunications Regulatory Environment: Overview", ACA, Canberra, October 2001.

²⁸ See section 4, *Telecommunications Act 1997 (Cth)*.

²⁹ Certain telecommunications infrastructure was also operated by the Ministry of Electronics Industry, for defence purposes, and by the Chinese People's Liberation Army, which had its own dedicated telecommunications infrastructure.

³⁰ See JL Zhao Da "Telecommunications Development and Economic Growth in China" (1994) 18(3) *Telecommunications Policy* 211-215.

³¹ Chinese telecommunications regulations were also simultaneously strengthened by a Directive from the State Council of China. See "State Council Directive on Strengthening Regulations in the Management of the Telecommunications Sector", Directive of the State Council of China, 8 August 1993.

³² See <http://www.jitong.com.cn/english/index.html>.

³³ China Telecom remains the largest network operator in China. It has extensive fixed voice and data networks including switching centres and transmission lines.

Telecommunications Corporation (**China Unicom**) was formed by the Chinese Ministry of Electronic Industry (**MEI**), providing another state-owned competitor to China Telecom.³⁴

In March 1998, within the context of significant reforms to the Chinese bureaucracy, the MEI and MPT were consolidated to form the Ministry of Information Industry (**MII**).³⁵ The MII became the principal regulator of the telecommunications and information industry and was initially granted operational control over both China Telecom and China Unicom.³⁶ During 1999 and 2000, China Telecom and China Unicom were restructured to promote greater competition, creating a total of seven distinct Chinese state-owned telecommunications enterprises each with primary operations in a different functional aspect of telecommunications, as set out in **Table Two** below. In 2000, these seven state-owned enterprises were each given independent operational responsibility.³⁷

Underlying these reforms was a Chinese policy driven by a number of different, and at times contradictory, policy concerns. These policy concerns included, for example, Chinese national security, co-ordinated regional development and the promotion of competitive domestic industry.³⁸ Yet given the relatively low accessibility of telecommunications to the Chinese population and extreme socio-economic diversity, Chinese telecommunications policy remained consistently oriented towards the development of telecommunications infrastructure. This infrastructure development policy assumed a two-pronged approach.³⁹

- Telecommunications policy in China's more advanced coastal regions has emphasised the deployment of sophisticated new technologies and next-generation networks.⁴⁰

- Telecommunications policy in inland provinces has emphasised basic connectivity.⁴¹

As China's infrastructure development objectives are gradually achieved, it is likely that Chinese telecommunications policy will increasingly focus on competition policy. Such a change in focus is required by China's basic telecommunications obligations under the WTO and is consistent with China's long term economic plans. Indeed, the Chinese Government's recent draft Long Term Development Plan to 2015 expressly contemplates the establishment of a fair, transparent and effective market competition mechanism for telecommunications.⁴²

³⁴ Also known as the Lian Tong Corporation.

³⁵ See <http://www.mii.gov.cn>. The MII also assumed the telecommunications and information responsibilities of the Ministry of Radio, Film & Television (**MRFT**), the China Aerospace Industry Corporation, and the China Aviation Industry Corporation.

³⁶ The MII is now a super-agency overseeing telecommunications, multimedia, satellites, and the Internet.

³⁷ See J Brewis "China Telecom Can Make the Breakthrough" (1990) 180 *Corporate Finance* 6.

³⁸ See, for example, discussion in DC Pitt, N Levine & Y Xu "Touching Stones to Cross the River: Evolving Telecommunications Policy Priorities in Contemporary China" (1996) 5:13 *Journal of Contemporary China* 347-365.

³⁹ See P Gao "Transformation of China's Telecommunications Sector: A Macro Perspective (2000) 24(8) *Telecommunications Policy* 719.

⁴⁰ See X Yan "One Country, Two Systems: Contrasting Approaches to Telecommunications Deregulation in Hong Kong and China" (1999) 23(3) *Telecommunications Policy* 245. See also "Chinese Investment Boosts Telecom" (1999) 25(3) *Consulting - Specifying Engineer* 9.

⁴¹ See discussion in M Newlands "The Five Year Plan" *Communications International*, London, September 2001, p 34.

⁴² See M Newlands "Advantage China" *Communications International*, London, September 2002, p 33.

Table Two: Chinese state-owned telecommunications enterprises

State-owned enterprise	Description of 1999/2000 restructuring
China Telecom	China Telecom continued as operator of China's fixed-line telephony business with a 99% market share in that market. ⁴³
China Mobile	China Mobile Communications Corporation (China Mobile) was established to operate China's mobile telephony business with a 50% market share in that market. ⁴⁴
China Satellite	China Satellite Communications Group Corporation (China Satellite) was established to operate the key part of China's satellite business previously owned by China Telecom. ⁴⁵
China Unicom	China Unicom was strengthened by divesting China Mobile's paging business to it while permitting it to maintain its 25% market share in mobile telephony and to roll out new CDMA mobile technologies. ⁴⁶
China Netcom	China Netcom Communications (China Netcom) was established as a new state-owned entity to build and operate a broadband data transmission network and to provide Internet services. ⁴⁷
China Railcom	China Railcom was established as the second-largest fixed network provider by transferring to it a telephony network established by the Chinese Ministry of Railways along China's rail networks.
JiTong	JiTong continued unchanged.

III. Conclusions and recommendations

China and Australia have both adopted a broadly similar pattern of telecommunications sector reforms. Government departments providing telecommunications services were initially restructured to separate their commercial activities from their regulatory and policy-making functions. Departmental operational monopolies were then corporatised, while being subjected to progressively greater private sector competition. Next, the regulatory and policy-making functions of such departments were isolated and bolstered. To promote market entry, a basic regulatory framework was enacted, including specific constraints on market power to promote competition. Any particular social policy concerns were addressed by issue-specific regulatory instruments. Finally, foreign investment has been permitted and, in Australia's case, encouraged. Each of these reform elements are considered in turn below.

⁴³ See <http://www.chinatelecom.com.cn/en/>. According to the MII, for the year to April 2001, China Telecom accounted for 53% of all telecommunications revenue in China, and over 90% of non-mobile telecommunications revenue.

⁴⁴ See <http://www.chinamobile.com/english/english.htm>. Based on information compiled by the MII, China Mobile holds about 50% of the Chinese mobile phone market.

⁴⁵ ChinaSat Operates two satellites: ChinaSat-6 and the planned ChinaSat-8. It has been given a mandate from Beijing to operate satellite-related businesses, including data, video, audio, channel leasing and equipment export and import. It has also been authorised to provide internet protocol telephony services. See, for example, discussion in W Farris "The Future for Telecoms Companies in WTO China" (2001) 20(9) *International Financial Law Review* 56.

⁴⁶ See <http://www.chinaunicom.com.cn/>.

⁴⁷ See <http://www.cnc.net.cn/english/indexe1024.html>.

While the Chinese and Australian reforms are broadly consistent, their particular implementation has significantly differed as has their underlying policy orientation. While Australian telecommunications regulation has been driven by a desire to increase competition, Chinese telecommunications regulation has been driven by more eclectic objectives, particularly a desire to promote infrastructure development. Yet as China is likely to increasingly focus on competition policy over the next decade, Chinese and Australian telecommunications policy is likely to become increasingly aligned.

C. Corporatisation of commercial activities

The first stage of the telecommunications reforms in Australia and China involved the isolation of the commercial activities of governmental departments. These commercial activities provided the basis for the subsequent creation of state-owned telecommunications enterprises by a process of corporatisation.⁴⁸ Such corporatisation was intended to encourage these commercial activities of government to be conducted under corporate governance structures with an emphasis on greater accountability in the allocation of resources and greater efficiency.⁴⁹ Critical issues arising from such corporatisation in China and Australia have included the extent of operational autonomy of corporatised enterprises, the appropriate long-term market structure, and the extent of subsequent privatisation.

I. Australian corporatisation approach

The *Telstra Corporation Act 1991* provided the mechanism for the Australian government to corporatise its commercial activities, creating Telstra as a single state-owned enterprise.⁵⁰ During 1997 and 1999, Telstra was partially privatised by way of sale of shares to the Australian public in tranches of 33.3% and 16.6% respectively.⁵¹ Further privatisation of Telstra may occur if the current Australian Liberal-National federal coalition government is elected for another term.

As a state-owned enterprise, Telstra has been granted a high degree of operational autonomy although it remains subject to specific accountability requirements. The Board of Telstra must keep the Minister of Finance apprised of any significant events and must report to the Minister on a regular basis.⁵² The Minister also has special powers to make written directions to Telstra, tabled in Parliament, which must be complied with by Telstra unless they relate to work done, or services, goods or information supplied by Telstra.⁵³ While these statutory requirements have a high degree of transparency, the Australian Government controls the appointment of the Telstra Board so continues to influence Telstra's business activities. Investors remain concerned, in particular, that Telstra may be pressured to bear the costly burden of various Governmental social policy objectives.⁵⁴ During the federal election year in 2001 in Australia, Telstra's share price was materially devalued, partly due to the perceived political risk associated with costly Labour party social policies.⁵⁵

⁴⁸ See discussion in World Bank *Bureaucrats in Business: World Bank Policy Research Report* (World Bank, Washington DC, 1995).

⁴⁹ See World Bank, above n 48.

⁵⁰ *Telstra Corporation Act 1991 (Cth)*, Act No. 146 of 1999.

⁵¹ See, for example, Explanatory Memorandum to the *Telstra (Dilution of Public Ownership) Bill 1996*. See also *Telstra (Dilution of Public Ownership) Act 1996 (Cth)*. See also *Telstra (Further Dilution of Public Ownership) Act 1999 (Cth)*.

⁵² Part 2, Division 3, *Telstra Corporation Act 1991 (Cth)*.

⁵³ Part 3, *Telstra Corporation Act 1991 (Cth)*.

⁵⁴ See "Telstra Corporation: Weathering the Storm", ABN AMRO Equities Research Report, Sydney, April 2001.

⁵⁵ See ABN AMRO, above n 54.

A significant issue arising during the corporatisation of Telstra was the extent to which it should be structurally separated into wholesale and retail operations.⁵⁶ Structural separation is perceived as a means of promoting competition as it prevents vertically-integrated firms leveraging their wholesale market power into downstream retail markets. It also reduces incentives for vertically-integrated firms to deny competitors access to wholesale facilities. Partly due to the likely impact on the sale value of Telstra, the Australian government decided against structural separation and instead favoured relatively heavy regulatory controls. While structural separation of Telstra is still mooted by the Australian government from time to time, most recently in December 2002, it is likely that the fallout from existing Australian shareholders would now make such separation politically unpalatable.

II. Chinese corporatisation approach

Unlike Australia, China has favoured the creation of multiple state-owned enterprises. This is partly due to China's larger size, but also due to the differing policy objectives of different factions of government. As each Chinese governmental agency has sought to assert its power and influence, so inter-agency rivalry has resulted and different agencies have formed different state-owned enterprises to give effect to their particular policy objectives. Rivalry between MEI and MPT, for example, facilitated the market entry of both JiTong and China Unicom under the direction of the MEI, notwithstanding a fierce rear-guard action by MPT to preserve its monopoly over public telecommunications.⁵⁷ Recent rivalry between MII and the Chinese State Administration of Radio, Film and TV (SARFT) facilitated the market entry of China Netcom under the direction of SARFT.⁵⁸

The relationship between Chinese state-owned enterprises and the relevant Ministries has not been as transparent as in Australia. Allegations have historically been made that Chinese Ministries have favoured the particular state-owned enterprise that they control.⁵⁹ For example, prior to 1998, both JiTong and China Unicom complained that MPT was unfairly promoting the interests of China Telecom, particularly in relation to telecommunications interconnection disputes.⁶⁰ While allegations of unwarranted governmental interference and continued favourable protection of particular state-owned enterprises are still made from time to time, the situation has improved in recent years as the Chinese Government has sought to increase the operational autonomy of the various state-owned enterprises. This regulatory independence issue is further discussed below.

As with Australia, China is now facing concerns regarding the appropriate structure of state-owned enterprises to promote competition *vis a vis* concerns of devaluing prized government privatisation assets. Prior to May 2002, the existing seven relevant state-owned enterprises listed in Figure Two above dominated their respective functional areas, leading to concerns that such a structure did not promote effective competition given minimal

⁵⁶ Such structural separation, for example, was implemented in New Zealand in 1998 in relation to the New Zealand electricity industry and required separation of transmission line business from energy businesses. See *Electricity Industry Reform Act 1998 (NZ)*.

⁵⁷ See "China: Unicom Breaks Monopoly in Telephone Service" *China Business Information Network*, New York, 20 July 1998, p 1.

⁵⁸ See "Into the Crucible: Chinese Telecoms" *The Economist*, London, 3 November 2001, p 79.

⁵⁹ See discussion in X Yan "Fixed-Mobile Interconnection: The Case of China and Hong Kong SAR", Telecommunication Case Study, Office of the Secretary General of the International Telecommunications Union, Hong Kong, 2001.

⁶⁰ See, for example, discussion in Y Xu, DC Pitt & N Levine "Interconnection: A Bottleneck to Future Chinese Telecommunications Deregulation?" in P Enslow, P Desrochers & I Bonifacio (eds) *21st Century Communications Networks* (IOS Press, Washington DC, 1997) p 106-14. See also GP He "Various Technical Problems in the Interconnection between China Unicom GSM Network and P&T PSTN Network" (1998) *China Communications*, July 1998, p 32-35. See also SV Lawrence "Telecoms Brawl" (1999) 162(39) *Far Eastern Economic Review* 69.

competitive overlap.⁶¹ In May 2002, to increase competition, the Chinese State Council further restructured these state-owned enterprises to create six multi-functional state-owned enterprises with a high degree of competitive overlap.⁶² The restructuring is summarised in Figure Three below:

Table Three: Chinese state-owned telecommunications enterprises

State-owned enterprise	Description of 2002 restructuring
China Telecom	China Telecom was restructured by transferring its fixed line networks in northern China to China Netcom. The new China Telecom will be permitted to operate a mobile telephony business.
China Netcom	China Netcom received the fixed line network of China Telecom in northern China and the business of JiTong. The new China Netcom will be permitted to operate a mobile telephony business.
China Mobiles	China Mobiles continues unchanged as China's largest operator in the mobile telephony market
China Unicom	China Unicom continues unchanged and now provides a full range of telecommunications services with a focus on mobile telephony.
China Railcom	China Railcom continued unchanged and now provides a full range of telecommunications services with a focus on fixed-line telephony.
China Satcom	China Satcom continued unchanged, but is now expanding beyond satellite services into other aspects of the Chinese telephony market.

In addition, the State Council is likely to partially or fully privatise some of these state-owned enterprises to raise funds for further infrastructure investment. Relevantly, to date, a number of Hong Kong subsidiaries of these enterprises have already been privatised to raise capital for infrastructure investment. China Telecom was one of the first mainland SOEs to be partially privatised, with an IPO of around 10% occurring in November 2002.

III. Conclusions and recommendations

While the Australian and Chinese approach to corporatisation has diverged, the Australian experience provides a number of insights for China. The Australian Government's policy decision was to preserve Telstra's privatisation value by retaining the benefits of vertical integration and economies of scope and scale. However, given concerns regarding Telstra's market power, the Australian Government employed regulatory techniques, in the form of targeted competition legislation, to ensure Telstra remained subject to significant competitive constraints.⁶³

While China is now favouring further structural reforms with the intention of promoting greater competitive overlap between its various state-owned enterprises, such reforms are unlikely to address the underlying issue of market power associated with

⁶¹ See comments by C Liu "Director of the Department of Policy and Regulations Comment on the Reform of Telecommunications in China", MII Press Release, Beijing, 1 January 1999.

⁶² See Total Telecom Asia, above n 8.

⁶³ See ACCC "Record Keeping Rules for the Telecommunications Industry", ACCC, Canberra, April 1999.

significant vertical integration. Furthermore, the Chinese Government's policy to date has been to preserve the privatisation value of Chinese state-owned enterprises and vertical separation would be likely to significantly reduce such value. Accordingly, infrastructure access issues arising from vertical integration are likely to require further regulatory attention. In particular, as Australia's experience demonstrates, to the extent vertical integration remains the Chinese Government should consider the extent to which targeted competition legislation may be appropriate given that incentives towards anti-competitive behaviour will remain. The relevant competition issues are considered in greater detail below.

In addition, a key concern with Chinese telecommunications regulation has been an alleged historical bias in favour of particular incumbent state-owned enterprises. This bias has been exacerbated by insufficient transparency between the Chinese Government's regulatory and commercial operations. To the extent state ownership remains, some degree of governmental influence is inevitable even with a high degree of transparency, as illustrated by the Australian experience with Telstra. Full privatisation would provide the most convenient and effective solution to address such allegations of unwarranted political interference given that the governmental conflict of interest between regulatory and commercial functions would be removed. Australia, for example, is moving towards full privatisation of Telstra to address similar concerns.

D. Demarcating regulatory and policy-making functions

The second stage of telecommunications reforms in China and Australia complemented the first stage and involved the separation of the regulatory and policy functions of government from commercial activities. Such regulatory and policy functions were, in turn, bolstered by creating specialist regulatory agencies. These regulatory agencies adopted a particular regulatory focus, consistent with prevailing government policy in China and Australia at the time.⁶⁴ Critical issues arising from the demarcation of regulatory and policy-making functions in China and Australia have included regulatory independence, inter-agency rivalry, and the appropriate level of separation of enforcement and policy-making activities.

I. Australian regulatory agencies

The importance of separating the commercial activities of government from its policy-making and regulatory functions was highlighted in Australia as early as 1986, when the High Court of Australia reasoned that the ATC's market power at that time partly arose from its ability to influence telecommunications regulation.⁶⁵ Australia's subsequent telecommunications reforms have now achieved a high degree of separation between governmental regulatory and operational activities. Telstra has minimal influence over the development of Australian telecommunications policy and has little material influence over regulatory activities.

In addition, the policy-making and regulatory functions of government have themselves been separated in Australia. Following the enactment of the *Telecommunications Act 1997*, three governmental entities now regulate Australia's telecommunications markets:

- The Australian Communications Authority (**ACA**) is responsible for technical and general industry regulation.⁶⁶ The ACA is an independent statutory body charged with the supervision and administration of telecommunications regulation, including licensing, facilitating self-regulation, and ensuring compliance with relevant standards.

⁶⁴ As noted above, while Australia's policy-makers emphasised market entry and competition, China's policy-makers have concentrated on the co-ordination of efficient infrastructure investment.

⁶⁵ *Tytel Pty Ltd v Australian Telecommunications Commission* (1986) 67 ALR 433.

⁶⁶ See <http://www.aca.gov.au>.

- The Australian Competition & Consumer Commission (ACCC) is responsible for the supervision and enforcement of Australia's competition laws.⁶⁷ The ACCC is an independent statutory body charged with responsibilities which include the enforcement of Australia's Part XIC access regime, as discussed below. The ACCC, in particular, is well respected in Australia partly due to its perceived political independence.

- The Australian Department of Communications, Information Technology and the Arts (DCITA) is responsible for the development of Australian telecommunications law and policy.⁶⁸ DCITA also supervises the administration of the Australian telecommunications regime and advises the Minister on the exercise of his statutory powers in relation to that regime.

In practice, this tripartite structure has proved highly effective. Inter-agency rivalry has been mitigated by clearly demarcating the areas of responsibility of each agency and by providing DCITA with overall responsibility for resolving any differences of opinion or approach.

II. Chinese regulatory agencies

Importantly, policy-making in China has involved the complex inter-play of many different interests, subject to national priorities as determined by the Communist Party leadership, and as reflected through the State Council and other organs of Government. Government policy has typically been formed via a lengthy process of inter-agency bargaining, resulting in considerable inter-agency rivalry or "turf warfare".⁶⁹ Such rivalries have shaped the Chinese competitive landscape, given that they have resulted in the entry of a new state-owned competitors which embody different governmental policies, as discussed above.⁷⁰

To mitigate such turf warfare, the Chinese government consolidated the MPT and MEI into a single omni-powerful industry regulator, the MII. The MII is now solely responsible for the development, implementation and enforcement of Chinese telecommunications law and policy. However, the creation of the MEI has not eliminated turf warfare. Continued turf warfare is reputed to continue to impair the efficiency of Chinese telecommunications sector regulation. Convergence of telecommunications and media technologies has exacerbated the potential for such rivalries. Policy conflicts, for example, have arisen between MII and the SARFT over who should have jurisdiction to regulate telecommunications and broadcasting cable operators, to the frustration of Premier Zhu Rongji.⁷¹ This conflict resulted in significant over-regulation of broadband cable sector and wasteful infrastructure duplication as SARFT and several other Ministries collaborated to facilitate the entry of China Netcom.⁷²

⁶⁷ See <http://www.accc.gov.au>.

⁶⁸ See <http://www.dcita.gov.au/>.

⁶⁹ See, for example, P Lovelock & J Ure "Telecommunications Policy-Making in China: A Two-Tier Bargaining Model", Telecommunications Research Project, Centre of Asian Studies, University of Hong Kong, 1998. See also J Ure "Telecommunications in China - More than was Bargained For?" (1997) 2 *New Technology Quarterly* 34.

⁷⁰ See discussion in Y Xu, Y, N Levine & DC Pitt "Competition Without Privatisation: The Chinese Path" in S Macdonald & G Madden (eds) in *Telecommunications and Socio-Economic Development* (Elsevier, Amsterdam, 1998), pp 375-92. See also "Beijing Telecom: China's Role Model" (2000) 34(11) *Telecommunications* 2.

⁷¹ See J Chan, M Ellis & A Zhao "Cable TV - What Do the New Procedures Offer", *China Law and Practice*, Paul Weiss, June 2000.

⁷² China Netcom was created from a policy proposal to build a high-bandwidth Internet network. After approval by the Chinese Government, the company was formed by the China Academy of Sciences, SARFT, the Ministry of Railways and the Government of Shanghai. See also discussion in "Into the Crucible: Chinese Telecoms" *The Economist*, London, 3 November 2001, p 79.

While the MII is structurally independent from state-owned telecommunications operators it continues to maintain a close relationship with the state-owned incumbents.⁷³ Indeed, this relationship has assisted China to achieve its telecommunications infrastructure development targets.⁷⁴ Former MII officials, for example, were appointed to the key management positions in the state-owned enterprises while many other staff members of the state-owned enterprises are former MII bureaucrats with strong personal ties that could influence MII officials.⁷⁵ Additionally, continued state ownership of these enterprises may make it difficult for the MII to be perceived as impartial in the face of increasing private and foreign competition. Accordingly, while separation of policy-making and regulatory functions from commercial activities in China continues to increase, such separation remains incomplete and it remains to be seen whether the MII can maintain its perceived neutrality and independence.

The consolidation of power in the MII has also created its own difficulties. The MII has been perceived as too powerful given its central control over both policy formulation and enforcement, leading to reduced inter-agency accountability. Indeed, the predecessor to the MII to some extent became infamous for its apparent policy reversals.⁷⁶ This is illustrated by the China Unicom fiasco in which 21 foreign investors were permitted to inject US\$1.3 billion via Chinese-foreign joint ventures between 1995 and 1998 to finance China Unicom's provincial cellular networks.⁷⁷ However, following concerns expressed by the Chinese government that that such investment was circumventing Chinese foreign investment restrictions, China Unicom conceded that these investments did not comply with Government policies.⁷⁸ Accordingly, China Unicom ordered these foreign investors to withdraw their investments.⁷⁹

Partly to address these concerns, and in light of China's WTO admission, the Chinese government has established a new Telecommunications Commission that is likely to have a similar function to Australia's DCITA and will co-ordinate the relationship between MII and other agencies. The policy role of the MII is likely to be reduced so that it eventually becomes a hybrid of Australia's ACA and ACCC, charged with enforcing and implementing

⁷³ See, for example, comments in C Hsu & G Chua "China: With or Without Change, Telecoms Continues to See Growth and Opportunities", Perspective Research Report (Asia Pacific), Pyramid Research, Hong Kong, 21 December 2001.

⁷⁴ Article 4 of the Telecommunications Regulations provides, for example that: "*Telecommunications carriers shall abide by laws, follow commercial morality and accept supervision and concede to examinations according to the laws and regulations*".

⁷⁵ See comments in Y Xu & DC Pitt "Chapter 15: Competition in the Chinese Cellular Market: Promise and Problematic" in DG Loomis & LD Taylor (eds.) *The Future of the Telecommunications Industry - Forecasting and Demand Analysis* (Kluwer Academic Publishers, Boston, 1999), p 247-264.

⁷⁶ See A Zhang "What's Ahead for China's Telecoms Market?", PriceWaterhouseCoopers, January 2002. See also discussion regarding the "calling party pays" controversy in P Waters & D Cottier "Foreign Investment in China's Telecommunications: The Impact of Global Trends", Paper Presented to PT Supercomm Asia 2001, Shanghai, April 2001. See also the discussion in "Face Value: The Minister of Arbitrary Power" *The Economist*, London, 9 December 2000, p76.

⁷⁷ The legal ambiguity of the joint venture model sent a misleading signal to carriers such as Bell Canada, Cable and Wireless, France Telecom, NT&T, and Sprint International, which took a risk in the absence of clear rules, hoping for a future slice of China Unicom's market.

⁷⁸ See detailed discussion in JK Chan "The Regulatory Waiting Game" (1999) 26(3) *The China Business Review* 4. See also "China Closes Doors To Foreign Telecommunications Providers" *Communications Today*, Potomac, 24 September 1998, p 1.

⁷⁹ These foreign investors received a return of their principal plus a nominal return well below that anticipated. See discussion in X Yan & K Kan "Dancing with Wolves: Is Chinese Telecommunications Ready for the WTO?" China Academy of Telecommunications Research (Ministry of Information Industry, Beijing) and Department of Information and Systems Management (Hong Kong University of Science and Technology, Hong Kong), 2000. See also Z Xiaohua "China's 'F-C-C' Schemes: Are Early Birds Targets?" (1998) 9(19) *Telecommunications Reports International* 10.

rules and regulations set by the Commission. The Telecommunications Commission would assume responsibility for over-arching strategy and policy development, under greater supervision from the State Council.

III. Conclusions and recommendations

Regulatory independence is critical to the effective development of long-term competition.⁸⁰ Generally, the greater the independence of the regulatory agency, the more effective the regulator will be at ensuring fairness to market entrants, and the more effective the subsequent development of competition will be.⁸¹ While Australia has achieved a high degree of regulatory independence, China has not yet done so. Partly as a result, the perceived quality of China's regulatory regime has been affected by historical allegations that Chinese regulatory agencies have unfairly favoured the interests of the Chinese state-owned enterprises with whom they are affiliated.

As noted above, with the intended privatisation of many of the existing state-owned enterprises, the ability of the Chinese government to exert direct control over these enterprises will be removed, as will the incentives for the Chinese government to favour particular state-owned enterprises. Such privatisation would require the Chinese government to influence the conduct of market protagonists in a more transparent manner, by appropriate telecommunications regulation. Bearing this in mind, it is important that the quality of such regulation is maximised by improving the quality of the regulatory agencies that will supervise and enforce it.

However, China's current approach consolidates both regulatory and policy-making powers within a single agency. The dangers of such concentration of power have been clearly evident, including reduced accountability and *ad hoc* policy formulation. The creation of the new Chinese Telecommunications Commission may provide an opportunity to resolve such issues and, in this regard, the Australian experience provides further insights. Ideally, that Commission should principally assume a policy-making role in the same manner as with the DCITA in Australia, while the enforcement and implementation role should remain with the MII. The Commission should also assume overall responsibility for refereeing turf warfare between different Chinese agencies and for achieving greater co-ordination of Chinese regulatory policy.

E. Implementing basic regulatory obligations

To assist telecommunications markets to operate effectively, governments have imposed a range of basic regulatory obligations. These obligations have typically sought to benefit three different interest groups, namely end consumers, the community, and other telecommunications operators. As with most other nations, China and Australia have each utilised telecommunications licensing as a vehicle for imposing such basic telecommunications regulation. Critical issues arising in Australia and China in relation to such telecommunications licensing have included the extent of regulatory coverage, a desire to maximise regulatory flexibility, and the appropriate extent of industry self-regulation.

⁸⁰ See OECD "Relationship between Regulators and Competition Authorities", Committee on Competition Law and Policy, Paris, 24 June 1999.

⁸¹ See PL Smith & B Wellenius "Mitigating Regulatory Risk in Telecommunications", Public Policy for the Private Sector, Note No. 189, World Bank Group, July 1999, p2. See also World Bank *Bureaucrats in Business*, above n 48.

I. Australian licensing regime

Australia's licensing regime commenced with the *Telecommunications Act 1991* and was significantly refined with the enactment of the *Telecommunications Act 1997*.⁸² Importantly, the 1997 legislation sets out the broad regulatory framework, while many particular regulatory obligations have been imposed by subordinate legislation. Such an approach provided greater flexibility to the Australian government, thereby enabling it to better respond to the rapid pace of change in the dynamic Australian telecommunications industry. In addition, the Australian government has emphasised voluntary industry regulation. Industry codes, for example, provided further flexibility to address new issues that have arisen from time to time.⁸³

In order to apply basic regulatory obligations, Australia's licensing regime makes an initial distinction which is common to most licensing regimes, namely between:

- carriers, which are owners or operators of underlying public telecommunications network infrastructure;⁸⁴ and
- carriage service providers (CSPs), which are entities that provide telecommunications services to the public using that network infrastructure.⁸⁵

Each are considered in turn below. Most carriers are also CSPs as they use their own infrastructure to provide telecommunications services to the Australian public.

- **CSPs:** Under the Australian regime, CSPs do not require a licence, but must comply with a range of "service provider rules" which, in turn, require CSPs to comply with Australian telecommunications legislation and with certain access obligations set out in Australian competition legislation.⁸⁶ Where CSPs provide basic telecommunications services, they must ensure that those services achieve a particular level of quality and include particular elements, including operator and directory assistance, untimed local calls, emergency call services, call preselection and itemised billing.⁸⁷ Such services must also be provided via standardised customer contracts.⁸⁸

Relevantly, CSPs must comply with applicable industry codes and must enter into Australia's telecommunications ombudsman scheme, reflecting the Australian Government's emphasis on industry self-regulation.⁸⁹ CSPs must also, for example, ensure that telephone number information is provided to the central number database operated by Telstra and CSPs must comply with the Australian telephone numbering plan.⁹⁰ CSPs must also co-operate with various government agencies for such purposes as national security, law enforcement and disaster management.⁹¹

⁸² See Explanatory Memorandum to the Telecommunications Bill 1996.

⁸³ See list of registered industry codes at <http://www.aca.gov.au/codes/index.htm>.

⁸⁴ Part 3, *Telecommunications Act 1997 (Cth)*.

⁸⁵ Part 4, *Telecommunications Act 1997 (Cth)*. See DCITA "Telecommunications Carrier Industry Development Plans: Information Kit for Carriers", Canberra, Issued May 1998, Revised July 1999.

⁸⁶ See Part XIB and Part XIC of Australia's *Trade Practices Act 1974 (Cth)* as discussed below.

⁸⁷ See, for example, Parts 17 to 22, *Telecommunications Act 1997 (Cth)*. See also, for example, Parts 4 to 8, *Telecommunications (Consumer Protection and Service Standards) Act 1999 (Cth)*.

⁸⁸ Part 23, *Telecommunications Act 1997 (Cth)*.

⁸⁹ See Part 6, *Telecommunications Act 1997 (Cth)*. See also Part 6, *Telecommunications (Consumer Protection and Service Standards) Act 1999 (Cth)*.

⁹⁰ Part 22, *Telecommunications Act 1997 (Cth)*.

⁹¹ Part 16, *Telecommunications Act 1997 (Cth)*.

- **Carriers:** Carriers are more heavily regulated and require a “carrier licence” from the ACA which is subject to a range of carrier licence conditions.⁹² There are no restrictions on the number of carrier licences that may be issued by the ACA so the market is not subject to artificial entry restrictions. Many of the obligations on carriers are similar to the obligations on CSPs. However, carriers have a number of additional rights and obligations by virtue of their ownership or operation of network infrastructure.

In particular, carriers must comply with an “industry development plan” which sets out how each carrier intends to promote the development of the Australian telecommunications sector.⁹³ Importantly, carriers must make a contribution to a universal service levy to assist Telstra to recover its costs of providing of telephony services to uneconomic areas of rural Australia.⁹⁴ Carriers also have certain rights arising from their status as holders of a carrier licence, including certain rights of use of, and entry onto, land in order to establish and maintain telecommunications infrastructure.⁹⁵ However, they have correspondingly greater infrastructure access obligations.⁹⁶

II. Chinese licensing regime

Until 2000, there was a dearth of telecommunications legislation in China. Chinese telecommunications regulation was largely based on fragmented administrative decrees addressing mainly technical standards and service tariffs.⁹⁷ The process for issuing and implementing such rules and regulations was non-transparent and inconsistent, exacerbating the difficulties faced by private sector market entrants.⁹⁸ Chinese regulation also tended to be influenced by the incumbent state-owned enterprises who could shape the regulatory environment in a manner favourable to their competitive interests.

On 20 September 2000, to address these concerns, the Chinese Government promulgated the *Regulations of the People's Republic of China on Telecommunications (Regulations)* to unify Chinese telecommunications regulation while increasing transparency and updating the regulatory regime.⁹⁹ These Regulations marked a milestone in China's effort to manage Chinese telecommunications markets through regulation and created a range of obligations associated with licensing, competition policy, service standards, infrastructure development, and network security. Historically, China's licensing regime restricted market entry, as well as providing a vehicle for regulation. However, the Regulations contained many pro-competition measures intended to assist China's campaign for accession to the WTO.

The Regulations were intended to provide a provide an interim solution pending the enactment of a full Telecommunications Law which would sit at the apex of the telecommunications legislative hierarchy. However, this law has now been contemplated for over 6 years.¹⁰⁰ As at December 2002, no draft has yet been circulated of this law and there is no timetable for its implementation, although the Law may be promulgated in 2003 or 2004.

⁹² Sections 61-63, *Telecommunications Act 1997 (Cth)*.

⁹³ Schedule 1, Part 2, *Telecommunications Act 1997 (Cth)*.

⁹⁴ See *Telecommunications (Universal Service Levy) Act 1997 (Cth)*. See also Part 2, Division 13, *Telecommunications (Consumer Protection and Service Standards) Act 1999 (Cth)*.

⁹⁵ Schedule 1, Parts 3 to 5, *Telecommunications Act 1997 (Cth)*.

⁹⁶ Part 24, *Telecommunications Act 1997 (Cth)*.

⁹⁷ See discussion in X Xu “China's Telecoms Industry Paves the Way to WTO Accession” (2001) 20(1) *International Financial Law Review* 31.

⁹⁸ See W Knetsch “Inside Chinese Telecoms” (1999) 33(8) *Telecommunications* 19. See also J Wang “Signs of Opening in Telecom” (1999) 26(3) *The China Business Review* 7.

⁹⁹ *Regulations of the People's Republic of China on Telecommunications*, Order No. 201 of the State Council, 25 September 2000 (**Telecommunications Regulations 2000**).

¹⁰⁰ See comments in JP Horsley “China's New Telecommunications Regulations and the WTO” (2001) 28(4) *The China Business Review* 34.

Unfortunately, the likelihood of further regulatory change in the near future increases the risks of investing in China's telecommunications sector.

The Regulations now establish a Chinese telecommunications licensing regime which adopts the same basic distinction as the Australian telecommunications licensing regime, namely the distinction between infrastructure-owners and infrastructure-users. In particular, the Regulations distinguish between:¹⁰¹

- basic telecommunications businesses (**BTBs**), which are businesses that involve building or operating public telecommunications network infrastructure;¹⁰² and

- value-added telecommunications businesses (**VATBs**), which are businesses that involve the provision of telecommunications services over that network infrastructure.¹⁰³

The operation of a telecommunications business in China is conditional upon obtaining a BTB or VATB licence. Unlike Australia, the supply of BTB licences is closely integrated with China's restrictions on foreign investment, as discussed later. The Chinese Government also retains a high degree of discretion regarding the potential issuance of licences.¹⁰⁴

However, there is a lack of clarity in the definitions of BTBs and VATBs. As a result, certain providers that do not own or operate network infrastructure may still require a BTB licence, notably if they were to provide voice telephony services over the assets of another party (e.g. resale). Ideally, the Regulations should be amended to increase the level of clarity and ensure that entities that do not own or operate telecommunications infrastructure should only require a VATB licence.

Furthermore, the coverage of China's telecommunications regulatory regime is not as comprehensive as Australia's, leading to several important omissions, including number portability and preselection.¹⁰⁵ Relevant requirements of the Regulations include that:

- BTBs and VATBs must provide telecommunications services in accordance with service standards stipulated by the MII.¹⁰⁶ As with Australia, failure to meet these service standards can result in liquidated damages payable to end users.¹⁰⁷ However, unlike Australia, BTBs and VATBs are also required to "accept social supervision" in order to improve the quality of their telecommunications services.¹⁰⁸

¹⁰¹ However, while in Australia the distinction is established by broad statutory principles, the Chinese approach relies on the relevant government agency to pre-determine the classification of particular services within comprehensive classification catalogues. See Article 8, Telecommunications Regulations 2000. See also discussion in S Lawson "China Spells out Some Telecommunication Services Rules" (2000) 22(44) *InfoWorld* 68.

¹⁰² Article 8, Telecommunications Regulations 2000 defines "basic telecommunications services" as "*the provision of public network infrastructure, the transmission of public data and basic voice communication*" with examples set out in the Attachment to the Telecommunications Regulations 2000.

¹⁰³ Article 8, Telecommunications Regulations 2000 defines "value-added telecommunications services" as "*the provision of telecommunications and information services through public networks*" with examples set out in the Attachment to the Telecommunications Regulations 2000.

¹⁰⁴ See B Zhang "Assessing the WTO Agreements on China's Telecommunications Regulatory Reform and Industrial Liberalisation" (2001) 25(7) *Telecommunications Policy* 461.

¹⁰⁵ Preselection refers to the ability of a customer to pre-determine their service provider on a permanent basis. Number portability refers to the ability of customers to keep their telephone number when they change their telephone service network provider

¹⁰⁶ Article 31, Telecommunications Regulations 2000.

¹⁰⁷ Article 32, Telecommunications Regulations 2000.

¹⁰⁸ Article 39, Telecommunications Regulations 2000.

- Itemised billing must be provided free of charge to customers and customers must be notified of abnormally large bills.¹⁰⁹ The consequences of customers failing to pay invoices are prescribed in the regulations.¹¹⁰ BTBs and VATBs are also required to notify customers of outages.¹¹¹ While the thrust of such obligations is similar to Australia, the level of their legislative granularity is significantly greater.

- The design and construction of telecommunications networks must correspond with national security requirements and network security requirements and must comply with Governmental plans, constructions and operations.¹¹² Unlike Australia, telecommunications infrastructure development is subject to state planning and is correspondingly heavily regulated by the Chinese central and local governments.¹¹³

- The Regulations also address a number of essential telecommunications services, such as emergency call services. Emergency call services, for example, must be provided at no charge in China as in Australia.¹¹⁴

The Regulations were intended to be supplemented by “implementing rules” which would flesh out many of the broad principles and obligations. However, as at December 2002, few if any implementing rules have been promulgated. Furthermore, the Chinese Government has reiterated on several occasions that the Regulations must be viewed only as an interim measure providing a basis on which a fully comprehensive Chinese national Telecommunications Law can subsequently be developed.

III. Conclusions and recommendations

A key concern with China's current regulatory regime is that it still requires the unifying structure likely to be provided by the Telecommunications Law. At present, multiple issues are addressed in the Regulations in a fairly eclectic manner at different levels of detail. On the one hand, many issues are addressed broadly almost as statements of intent, creating potential legal uncertainty. On the other hand, the granularity of other aspects of the Regulations appears inappropriately high, such as obligations relating to customer billing, creating potential inflexibility. In addition, a number of critical issues are presently omitted from the regulatory regime, creating industry uncertainty as to how such issues will be resolved and scope for commercial disputes. Such uncertainty is anathema to private and foreign investors who need regulatory certainty upon which they can make their investment decisions. The fact that China has not issued implementing rules, and has stated that the Regulations are to be considered only an interim measure, has further heightened such uncertainty.

The current challenge for China is therefore how to bolster and expand its regulatory regime while addressing the various regulatory issues at an appropriate level of detail, without losing flexibility. In this regard, the Australian experience provides a number of insights. The level of sophistication and detail of the Australian regulatory regime is significantly greater than that of China and each of the issues omitted from the Chinese regime are addressed by Australian legislation. Yet notwithstanding such granularity, Australian regulation remains relatively flexible.

To achieve such coverage yet flexibility, Australia has deliberately adopted a structure whereby broad regulatory obligations and principles are set out in legislation, with

¹⁰⁹ Article 34, Telecommunications Regulations 2000.

¹¹⁰ Article 34, Telecommunications Regulations 2000.

¹¹¹ Article 36, Telecommunications Regulations 2000.

¹¹² Article 61, Telecommunications Regulations 2000.

¹¹³ Section 4, Telecommunications Regulations 2000.

¹¹⁴ Article 37, Telecommunications Regulations 2000.

specific detail fleshed out by subordinate regulation and industry codes. Australia has also relied on a hybrid of industry self-regulation and governmental regulation, known as "co-regulation".¹¹⁵ On detailed technical matters, for example, the industry itself determines the appropriate level of regulation which is then incorporated into Australian law by ACA notification. Such an approach could prove useful in China.

In summary, the key to success for China will lie in crafting an integrating regulatory framework that resolves the key industry uncertainties in a coherent fashion, provides assurances to private and foreign investors, and responds flexibly to technological innovation and changes in government policy priorities.

F. Imposing specific regulatory constraints on market power

The principal concern of competition regulation in the telecommunications sector is with the ability of firms with substantial market power to exploit that market power with adverse effects on market competition.¹¹⁶ Such market power may be particularly acute in the case of telecommunications as it is impossible for any market entrant to provide full telecommunications capability without interconnecting to the incumbent carrier's network.¹¹⁷ Accordingly, the incumbent has significant market power arising from its control over existing telecommunications infrastructure.¹¹⁸ Australia and China have each adopted specific regulatory constraints to address such issues. Critical issues arising from such regulation have included the appropriate extent of telecommunications-specific regulation, appropriate infrastructure interconnection requirements, and the desirability of price controls.

I. Australian competition obligations

Historically, Australia's approach to the regulation of market power involved restrictions on the behaviour of the "dominant carrier" (i.e. Telstra), coupled with requirements to charge in accordance with filed tariffs and certain non-discrimination obligations.¹¹⁹ AUSTEL, as industry regulator, had the power to disallow anti-competitive tariffs.¹²⁰ Disputes involving interconnection were subject to arbitration by AUSTEL.¹²¹

In light of various recommendations flowing from Australia's Hilmer Report into national competition policy in August 1993, the Australian government moved to implement a

¹¹⁵ See J Plante "Telecommunications Co-regulation: The Australian Experience", OFTEL Stakeholder Workshop on Industry Self-regulation, London, June 2000. See also K Nicolaidis "Co-regulation: Beyond Traditional Standardisation" in A Sykes (ed) *Products Standards for Internationally Integrated Goods Markets* (Brookings Institution, Washington DC, 1995). See J Black "Constitutionalising Self-regulation" (1996) 59 *Modern Law Review* 25, 27.

¹¹⁶ See MD Taylor "Light-handed Regulation of Telecommunications in New Zealand: Is Generic Competition Law Sufficient?" (1999) 2 *International Journal of Communications Law & Policy* 42. See also M Armstrong "Competition in Telecommunications" (1997) 13(1) *Oxford Review of Economic Policy* 64. See also M Armstrong & J Vickers "Competition and Regulation in Telecommunications", in M Bishop, J Kay & C Mayer (eds) *The Regulatory Challenge* (Oxford University Press, Oxford, 1995), 288-307.

¹¹⁷ See D Lewin & R Kee *Interconnect: A Global Guide to Effective Telecommunications* (Ovum, United Kingdom, 1997).

¹¹⁸ See, for example, M Klein "Competition in Network Industries" World Bank Working Paper - Infrastructure, World Bank, Washington DC, 1996. See also, for example, D Newbury *Privatisation and Liberalisation of Network Utilities* (OUP, Oxford, 1997). See also S Gorinson "Essential Facilities and Regulation" (1989) 58 *Antitrust Law Journal* 871.

¹¹⁹ Part 9, Division 4, *Telecommunications Act 1991 (Cth)*. See also AUSTEL "Customer Access Arrangements for Interconnection/Equal Access", Report to the Minister for Transport and Communications, AUSTEL, Melbourne, 1991.

¹²⁰ Section 191, *Telecommunications Act 1991 (Cth)*.

¹²¹ Part 8, Division 5, *Telecommunications Act 1991 (Cth)*.

more effective competition regime for telecommunications based on generic competition legislation.¹²² The Australian *Trade Practices Act 1974* was amended to include a new Part XIB and XIC which set out more stringent competition obligations on telecommunications firms and created a telecommunications-specific access regime.¹²³ In particular:

- **Part XIB:** Under Part XIB, the ACCC can issue “competition notices” if it has reason to suspect that any carrier or CSP is in breach of the “competition rule”.¹²⁴ The competition rule involves a more severe application of Australia’s generic competition obligations to Australian telecommunications markets. Non-compliance with a competition notice attracts significant penalties, including fines of up to a AU\$1 million per day.¹²⁵ The ACCC has already issued several competition notices against Telstra, most recently in March 2002.¹²⁶

- **Part XIC:** Under Part XIC, the ACCC may “declare” services provided over telecommunications infrastructure where it considers that such declaration would promote the long-term interests of end-users.¹²⁷ Such declaration is typically made only if access to that service is essential to competition and the service is not subject to significant competition.¹²⁸ Where a service is declared, statutory non-discrimination, access and interconnection obligations apply to that service. In the event of disputes relating to access to the declared service, the ACCC may arbitrate the dispute and make binding determinations.¹²⁹ This Part XIC access regime has resulted in a proliferation of access disputes in the Australian telecommunications industry, largely involving Telstra.¹³⁰

Under Australian telecommunications regulation, a separate access regime also applies to enable access to particular underlying infrastructure, including giving carriers a statutory right to make use of facilities owned by other carriers (i.e., a form of mandated infrastructure sharing).¹³¹ In the event of disputes over access, the ACCC again has the power to arbitrate such disputes.¹³²

To date, almost all access disputes in Australia have concerned the price of access to the relevant telecommunications service. Given the critical importance of determining a price which balances the interests of access seekers against the interests of access providers, the ACCC has publicly announced the relevant pricing methodologies that it will apply to resolve access disputes. In the Australian context, a “TSLRIC” pricing methodology is predominantly used which prices the service at a level which enables the access provider to recover the underlying costs of providing that service plus a reasonable risk-adjusted return on investment.¹³³

¹²² See FG Hilmer, M Rayner & G Taperell *National Competition Policy: Report by the Independent Committee of Inquiry* (Australian Government, Canberra, 1993).

¹²³ See Explanatory Memorandum to the Trade Practices Amendment (Telecommunications) Bill 1996.

¹²⁴ Part XIB, Division 3, Subdivision A, *Trade Practices Act 1974 (Cth)*.

¹²⁵ Section 151BX(3), *Trade Practices Act 1974 (Cth)*. See also ACCC “Anti-competitive Conduct in Telecommunications Markets”, Information Paper, ACCC, August 1999.

¹²⁶ To date the only competition notices have been issued against Telstra and relate to Internet interconnection (1998), commercial churn (1999) and wholesale broadband (2002).

¹²⁷ Part XIC, Division 2, *Trade Practices Act 1974 (Cth)*.

¹²⁸ See ACCC “Telecommunications Services - Declaration Provisions, A Guide to the Declaration Provision of Part XIC of the Trade Practices Act”, ACCC, Canberra, July 1999.

¹²⁹ Part XIC, Division 8, *Trade Practices Act 1974 (Cth)*.

¹³⁰ See discussion in Productivity Commission, above n 25.

¹³¹ Schedule 1, Parts 3 to 5, *Telecommunications Act 1997 (Cth)*.

¹³² See, for example, paragraph 18 of Schedule 1, Part 3, *Telecommunications Act 1997 (Cth)*.

¹³³ See discussion in ACCC “Access Pricing Principles: Telecommunications Guide”, ACCC Discussion Paper, ACCC, Canberra, July 1997. See also discussion in ACCC “Assessment of Telstra’s Undertaking for Domestic PSTN Originating and Terminating Access”, ACCC Final Decision, ACCC, Canberra, June 1999. See also K Ergas “TSLRIC, TELRIC and Other Forms of Forward-Looking Cost

In addition to these access obligations, Telstra is subject to specific price controls. In particular, Telstra must ensure that the overall price of a defined basket of its telecommunications services continues to decline by a rate of 4.5% relative to inflation. Particular services are also subject to “sub-caps” within this basket, including a cap on local calls of 22 cents and a requirement for aggregate local calls and line rental increases not to exceed the inflation rate (although they may be adjusted relative to each other).¹³⁴

II. Chinese competition obligations

Given China’s historical background of state-ownership and control, the Chinese telecommunications sector remains heavily regulated by world standards and is still to be fully liberalised and deregulated.¹³⁵ Furthermore, China’s policy model to date may be perceived as a form of “managed competition” in which the Chinese government manages the market to achieve its particular policy ambitions. Historically, a prime motivating force in the industry has been competing state interests rather than competitive market forces. The concept of a “socialist market economy” in the telecommunications sector still contemplates that the activities of state-owned telecommunications enterprises will remain subject to a high degree of governmental influence, enabling the Chinese government to better implement its Five Year Plans. However, continued significant governmental involvement potentially reduces the scope for private sector competition and risks introducing adverse market distortions.

The challenge for China is how to introduce greater competition principles into its overall regulatory regime while gradually reducing government intervention. In this regard, China’s accession to the WTO has placed a clear obligation on China to further adopt Chinese competition policies. The Regulations themselves already clarify that the supervision and administration of Chinese telecommunications must conform with the principle of “*the encouragement of competition*”.¹³⁶ However, China will also be required to now implement the pro-competitive regulatory principles contained in the WTO “Reference Paper” on Basic Telecommunications, so further reforms are likely to be forthcoming.¹³⁷

China’s generic competition legislation is not as comprehensive as Australia’s generic *Trade Practices Act 1974* and fails to address many issues of concern relating to telecommunications competition.¹³⁸ While the Chinese government has indicated it will enact comprehensive competition legislation in 2003, such legislation apparently has low priority relative to other policy initiatives. Competition issues in the Chinese telecommunications sector have thus been addressed within the context of the Regulations, principally via:

Models in Telecommunications: A Curmudgeon’s Guide”, Paper prepared for the 1998 EU Competition Workshop at the Robert Schuman Centre of the European University Institute, 1998.

¹³⁴ See *Telstra Carrier Charges - Price Control Arrangements, Notification and Disallowance Determination No. 1 of 2001*.

¹³⁵ China Telecom, for example, retains a monopoly over international calls and has a 99% market share in basic fixed-line telephony. See International Telecommunications Union *World Telecommunications Development Report 2001* (ITU, Geneva, 2000).

¹³⁶ Article 4, Telecommunications Regulations 2000.

¹³⁷ General Agreement on Trade in Services, Annex B of the Agreement Establishing the World Trade Organisation, done at Marrakesh on 15 April 1994 (1994) 33 *ILM* 1167 (**GATS**). GATS Annex on Telecommunications (1994) 33 *ILM* 1192 (**Telco Agreement**). See Reference Paper (1997) 36 *ILM* 367. See also LB Sherman “Introductory Note on Reference Paper to the Telecommunications Annex to GATS” (1997) 36 *ILM* 354. See discussion in PI Spector “The World Trade Organisation Agreement on Telecommunications” (1998) 32 *International Lawyer* 217.

¹³⁸ *The Law for Countering Unfair Competition* adopted at the Third Session of the Standing Committee of the Eighth National People’s Congress in China and promulgated on 2 September 1993. This law does address some competition issues. For example, Article 12 prohibits tie-in sales. Article 27 prohibits price fixing or bid rigging. However, the Law is principally directed at fair trading in general and addresses such matters as bribery, deceptive advertising and coercive sales. The Law is not as comprehensive as the generic competition laws of most nations.

- (a) price controls; and
- (b) interconnection-specific regulation.

Each are considered in turn below.

- Price controls: Historically, price controls have been pervasive in the Chinese telecommunications sector. Price floors were justified as ensuring stable telephony revenue to encourage government-mandated infrastructure investment.¹³⁹ Price ceilings were justified to protect consumers from over-charging. Notwithstanding such price controls, allegations of predatory pricing still existed. China Unicom, for example, alleged that China Telecom was engaging in predatory behaviour and was utilising a price squeeze to reduce China Unicom's competitive effectiveness.¹⁴⁰ Over the past 2 years, many of the price restrictions have been relaxed and minimum prices have been reduced to promote more effective competition. As a result significant tariff rebalancing has occurred, providing greater scope for competition.¹⁴¹ However, significant price controls still remain.

In particular, two types of price controls may be applied by the MII to telecommunications services if it considers such services to be insufficiently competitive. Government-guided rates can be imposed for both BTB and VATB services, requiring prices to be set within a range prescribed by the MII. Government-fixed rates can be imposed for BTB services.¹⁴² The price setting process is moderately transparent, requiring the MII to consult with Chinese industry and the State Development and Planning Commission before seeking approval from the State Council.¹⁴³ It is likely that these price controls will be gradually phased out as competition increases in the Chinese telecommunications sector.

- Interconnection regulations: The Regulations set out basic principles applicable to the interconnection of telecommunications networks, including overriding principles of “*technological feasibility, economical reasonableness, fairness and justice, and reciprocal cooperation*”. These Regulations are supplemented by more specific interconnection regulations.¹⁴⁴ Under Chinese law, “dominant” telecommunications operators may not refuse requests for interconnection by other telecommunications operators and must formulate binding MII-approved interconnection rules based on principles of transparency and non-discrimination. Network operators must also interconnect with one another in accordance

¹³⁹ Due to regulatory concerns over “vicious competition” leading to the devaluation of state assets, China Telecom and China Unicom were required by the MII to comply with price controls. China Unicom was only permitted to reduce its tariff by a maximum of 10 per cent below the regulated rate. Although some local operating companies of China Unicom and China Telecom sought to circumvent this regulation by offering discounts to subscribers, they were immediately prohibited by MII from doing so. In April 2000, the MII required China Telecom and China Unicom to execute an agreement, and each party agreed to follow the regulated tariff of the MII.

¹⁴⁰ See L Holland “Tuned in to China” (1999) 162(1) *Far Eastern Economic Review* 1.

¹⁴¹ Over the past 2 years, China Telecom has sought to rebalance its telecommunications tariffs to better prepare for greater competition in basic telephony services. Its previous pricing structure was based on high installation fees but low monthly fees and call charges. However, the latter barely covered the operating costs of local operating companies.

¹⁴² Prices are still considered high in China. See discussion in C Dodgson “China Looking for the Great Leap Forward” *Communications International*, London, November 2000, p 84.

¹⁴³ Article 25, Telecommunications Regulations 2000.

¹⁴⁴ *Regulations for Administration of Interconnection of Public Telecommunication Networks*, promulgated by the MII with effect from 10 May 2001.

with any regulations proscribed by the MII with respect to the technical standards, management and settlement methods.¹⁴⁵

If operators fail to reach agreement on the terms of interconnection they may apply for statutory mediation or binding expert arbitration. The MII is empowered to promulgate further specific regulations for the administration of interconnection and for the determination of interconnection charges. The Regulations set out a more general principle that charges for telecommunications services will be determined on a cost basis, taking into account the requirements of the national economy, the development of the telecommunications sector and affordability to end users.¹⁴⁶

In addition to the above, the Regulations set out a number of competition obligations with more generic application. In particular, there are specific prohibitions against unreasonable cross-subsidisation, unfair pricing below cost, and the imposition of restraints on customers.¹⁴⁷

III. Conclusions and recommendations

While China's existing telecommunications markets are not yet fully competitive, and China continues to adhere to a form of managed competition with significant price controls, China is progressively liberalising its markets to realise full scale competition. However, as China moves toward market-based policies, it is important for it to develop an effective competition policy. In this regard, Australia's experience provides three important insights:

- First, successful implementation of competition policy is dependent on effective competition laws, well-defined property rights and overall adherence to the Rule of Law.¹⁴⁸ While the latter two elements are becoming increasingly well established in the Chinese legal system, effective generic competition laws have not yet been enacted and should be given higher priority on the Chinese reform agenda. In particular, generic competition policy reforms should ideally complement future telecommunications reforms and would be consistent with China's WTO obligations.

- Second, China should implement a basic regulatory framework to promote telecommunications-specific competition, particularly in respect of infrastructure access. While the Regulations address such issues, Australia's experience suggests that they do not extend far enough. The Chinese Regulations, for example, do not contemplate such critical issues as network unbundling and do not prohibit a wholesale provider from refusing to supply services for anti-competitive reasons.

- Third, China should ensure that its enforcement agencies are adequately funded and resourced, given that pro-active enforcement will remain essential to promoting and preserving competition in the Chinese market. The earlier comments relating to regulatory independence apply.¹⁴⁹

¹⁴⁵ Article 22, Telecommunications Regulations 2000. See discussion in X Yan "The Impact of the Regulatory Framework on Fixed-Mobile Interconnection Settlements: The Case of China and Hong Kong" (2001) 25(7) *Telecommunications Policy* 515.

¹⁴⁶ Article 23, Telecommunications Regulations 2000.

¹⁴⁷ Article 42, Telecommunications Regulations 2000.

¹⁴⁸ See F Fishwick *Making Sense of Competition Policy* (Cranfield, London, 1993). See also discussion in RS Khemani, JW Rowley & L Waverman "Competition Policy, Accountability and Economic Adjustment" (1999) *International Business Lawyer* 482. See also discussion in CR Crishtak, B Hadjimichael & U Zachau *Competition Policies for Industrialising Countries: World Bank Policy and Research Series Paper 7* (World Bank, Washington DC, 1989).

¹⁴⁹ See the earlier discussion in Section 3 of this paper.

China's current regulatory approach of a mandatory interconnection offer, coupled with potential MII oversight, is potentially stricter in some respects than Australia's Part XIC regime. However, the effectiveness of this regime is only as effective as the agencies that supervise and enforce it. Issues of transparency and natural justice therefore remain critical. Furthermore, given the critical importance of pricing in telecommunications interconnection, the MII should publish a guiding pricing methodology. In this respect, Australia's experience is useful, with Australia favouring a "TSLRIC" pricing model to ensure prices reflect underlying costs.¹⁵⁰

China's tariff structure also requires urgent deregulation if competition policy is to be effectively employed in China. As Australia's experience with local call pricing illustrates, Government price controls have the potential to significantly distort economic incentives. China Telecom's interconnection prices, for example, are not necessarily cost based in some areas, partly due to the cross-impact of MII tariffs on fixed line and mobile products, but also due to China Telecom's ability to bundle services subject to price controls with those not subject to such controls.¹⁵¹ Reform of price controls is a necessary prelude to effective price competition in the Chinese telecommunications markets.

G. Addressing market failure by targeted regulatory instruments

A clear intention of telecommunications reforms in China and Australia has been to assist market mechanisms to operate efficiently. However, in certain circumstances markets may lead to an allocation of resources considered sub-optimal or socially undesirable, resulting in "market failures". Of particular concern are market failures associated with:

- management of limited strategic resources, such as the control, ownership and transfer of telephone numbers (**Numbering**); and
- universal service obligations (**USO**), namely the provision of basic telephony services to uneconomic areas for social reasons.

Telephone numbers have strategic value in the telecommunications industry and can be exploited by incumbent firms as a means to dissuade competition. USO requirements are necessary to give effect to government social policies. Both issues have been addressed in China and Australia by targeted regulatory instruments.

I. Australian numbering and USO issues

Numbering: Telephone numbering issues were addressed at an early stage in Australia by retaining ownership of telephone numbers with the Government. All telephone numbers in Australia are now allocated to carriers by the ACA in accordance with the *Australian Telecommunications Numbering Plan*.¹⁵² This allocation may occur in a number of ways, including by auction or tender. Once a number is allocated, the carrier to whom it is allocated has a statutory "right of use" in relation to that number under the *Numbering Plan*.¹⁵³

If a customer wishes to keep the same telephone number, but physically connect to a network owned by another carrier, then a "number portability" issue arises. Australia has

¹⁵⁰ See earlier discussion relating to the TSLRIC pricing model.

¹⁵¹ See "China Cuts Prices for Telecom Services" (1998) 20(11) East Asian Executive Reports 17. See also discussion in "China: Opening China's Telecom Market: Process is Slow, Nontransparent, Piecemeal and Often Frustrating" (1998) 20(11) East Asian Executive Reports 8. See also discussion in *The Economist*, above n 71.

¹⁵² Australian *Telecommunications Numbering Plan 1997*, made by the Australian Communications Authority pursuant to subsection 455(1) of the *Telecommunications Act 1997 (Cth)*.

¹⁵³ Part 22, *Telecommunications Act 1997 (Cth)*.

gradually implemented procedures to allow number portability over the past few years and in 2001 implemented number portability in relation to mobile telephony.¹⁵⁴ Telephone numbers in Australia are now freely transferable between different carriers. Telstra also maintains a numbering database of all telephone numbers and customer addresses on behalf of the Australian telecommunications industry for the purposes of directory assistance and production of telephone directories.¹⁵⁵

USO: The universal service obligation in Australia has proved controversial. A key policy concern of the Australian government is that constituents in remote rural areas are given the same standard of telecommunications services, at the same cost, as constituents in the major Australian capital cities.¹⁵⁶ In particular, the government's express policy is that basic telephony services should be reasonably available to all people in Australia on an equitable basis, regardless of where they reside or carry on business.¹⁵⁷ Under the conditions of its carrier licence, Telstra is currently required to provide such basic telephony services to all Australians as the default Australian "universal service provider".

However, the underlying costs of providing basic telephony services to rural areas are significantly greater than providing such basic telephony services to metropolitan areas.¹⁵⁸ Given fierce price competition in metropolitan areas, Telstra cannot increase its metropolitan charges to cross-subsidise rural areas. Accordingly, Telstra provides telephony services to rural Australia at a loss.¹⁵⁹ To assist Telstra to recover this loss, the Australian government imposes a universal service levy on all carriers and then redistributes that levy to Telstra.¹⁶⁰ The level of that levy has proved highly controversial. The Australian Government has capped the levy at roughly AU\$300 million, however Telstra has historically claimed that its actual unrecovered costs of providing the USO are closer to AU\$1.8 billion. From 1991, the Australian Government introduced a policy of USO tendering to appease rural constituents known as "USO contestability". Few if any, serious operators have participated in such tenders, indicating that Telstra's claims regarding the relevant USO costs may be closer to the truth than the Australian Government would currently like to believe.

II. Chinese numbering and USO issues

Numbering: As with Australia, the Chinese Government has favoured centralised management of numbering resources and ownership of telephone numbers has remained with the Chinese Government.¹⁶¹ The Numbering resource is currently administered by the MII and other operators must pay standard charges to the MII for the utilisation of the Numbering resource.¹⁶² The MII may allocate telephone numbers either by auction or designation.¹⁶³ Once an operator has acquired the right to use numbers, all other telecommunications operators are required to co-operate with it to ensure the efficient use of the overall numbering resource.¹⁶⁴ Unlike Australia, only limited number portability has been implemented in China as at December 2002.

¹⁵⁴ See discussion by the ACA at <http://www.aca.gov.au/number/local.htm#Mobile>.

¹⁵⁵ This is a condition of Telstra's carrier licence.

¹⁵⁶ See discussion by the ACA at <http://www.aca.gov.au/consumer/uso/whatistheuso/usointro.htm>.

¹⁵⁷ Section 9, *Telecommunications (Consumer Protection and Service Standards) Act 1999 (Cth)*.

¹⁵⁸ See P Cribbett "Population Distribution and Telecommunications Costs", Staff Research Paper, AusInfo, Canberra, August 2000.

¹⁵⁹ See ACA "Telecommunications Universal Service in Australia" ACA Media Release, Canberra, 7 January 1998.

¹⁶⁰ See R Alston "Government sets USO Telecommunications Subsidies for 2000-01", Media release 64/01 by the Minister for Communications, Information Technology and the Arts, Canberra, 17 April 2001.

¹⁶¹ Article 27, Telecommunications Regulations 2000.

¹⁶² Article 28, Telecommunications Regulations 2000.

¹⁶³ Article 29, Telecommunications Regulations 2000.

¹⁶⁴ Article 30, Telecommunications Regulations 2000.

USO: As China has poor telecommunications coverage in many rural areas and a significant rural-urban wealth differential, the need for a universal basic telephony service is clearly acute and remains fundamental to current Chinese Government telecommunications policy. To date China has relied on cross-subsidisation within the context of mandated pricing to enable China Telecom to provide basic telephony to rural areas; effectively an informal USO. However, with the onset of competition and the relaxation of price controls such cross-subsidisation will become unsustainable. Furthermore, any privatisation of China Telecom will require the Chinese Government to formalise its USO.

In this respect, the Regulations already contemplate a Chinese universal service regime and enable the MII to impose a USO on certain telecommunications operators in accordance with regulations to be proscribed by the MII.¹⁶⁵ The cost incurred by such operators would be compensated in accordance with the mechanism proscribed in such regulations.¹⁶⁶ In February 2002, the MII announced its intention to implement a Chinese USO regime, probably within the 2003 year. The USO regime is most likely to involve a levy on all telecommunications operators in China based on their annual revenue.

III. Conclusions and recommendations

In relation to numbering issues, the Chinese and Australian approaches are broadly similar. However, China will need to ensure that it implements full number portability to increase each customer's willingness to switch between different telecommunications providers, thereby promoting competition. Mobile number portability, for example, does not yet exist in China, hence Chinese mobile phone users cannot switch between different providers without being required to change their phone numbers. Associated customer inertia can be disadvantageous to market entrants. Australia implemented mobile number portability from September 2001.

In relation to universal service issues, China must develop an effective strategy to enable the sustainable provision of basic telephony to rural areas. The current Chinese approach relies on cross-subsidisation and is contingent on continuing price controls. China Telecom, for example, has relied heavily on cross-subsidies from eastern to western China, and from mobile and long-distance services to local phone services, such cross-subsidisation achieved as a result of price controls. Such price controls effectively require consumers in low cost areas to bear the cost of providing services to high cost consumers. However, as noted previously, the removal of such price controls is a necessary precursor to full price competition in the Chinese market. This then begs the question, how will China Telecom's USO be funded if it cannot rely on such cross-subsidisation?

Australia's experience provides several insights. While Australia imposed a levy on all carriers to contribute to the cost of Telstra's USO, this levy proved highly susceptible to political influence. China should ideally seek to mitigate this political risk by implementing a highly transparent and independent mechanism for costing the USO. Australia's experience also suggests that the Chinese Government should carefully consider the appropriate scope of the USO to ensure it remains affordable, particularly given the vast rural areas in western China. For example, the operational costs in western China are believed to be exceptionally high because of the harsh natural conditions and low population. This situation is similar to the high costs Telstra experiences in providing telephony services to outback Australia.¹⁶⁷

¹⁶⁵ Article 44, Telecommunications Regulations 2000.

¹⁶⁶ See K Wieland "All Eyes on Mainland China" (2001) 35(1) *Telecommunications* 17.

¹⁶⁷ See discussion in B Zhang "Telecom Competition, Post-WTO Style" (2000) 27(3) *The China Business Review* 12.

H. Promoting greater foreign investment

Finally, Chinese and Australian telecommunications reforms have involved the opening of the respective markets of both nations to foreign investment. Such foreign investment has provided necessary capital for infrastructure investment while further increasing competition. Critical issues arising in relation to such foreign investment in both Australia and China have included the appropriate level of such investment and the extent to which foreign investment should be restricted.

I. Australian approach to foreign investment

Historically, to address concerns regarding foreign control of strategic assets, the Australian government imposed foreign ownership restrictions on Telstra in the prelude to Telstra's partial privatisation. These restrictions ensure that no single foreign person can own more than 5% of Telstra and no group of foreign persons can own more than 35%.¹⁶⁸ In addition, Telstra must remain incorporated in Australia and maintain a substantial operational business in Australia.¹⁶⁹ The Chairperson and majority of directors of Telstra must be Australian citizens.¹⁷⁰ Initially, foreign ownership restrictions were also placed on both Vodafone and Optus, although these restrictions have now been lifted.

Otherwise, Australia has no remaining foreign investment restrictions applicable specifically to the telecommunications sector. Rather, all foreign investors are subject to Australia's generic foreign investment laws.¹⁷¹ These laws require notification to the Federal Treasurer, via the Foreign Investment Review Board, of proposed acquisitions by foreign persons in excess of proscribed statutory thresholds.¹⁷² Once a proposed acquisition is notified, the Federal Treasurer has 30 days in which to decide whether or not to object to the acquisition. The Federal Treasurer may block the acquisition if satisfied that it would be contrary to the Australian national interest.¹⁷³ The application of this regime to telecommunications foreign investment was tested in 2001 when SingTel Limited of Singapore acquired Optus. Notwithstanding concerns regarding Singapore ownership of certain infrastructure vital to Australian national security, that transaction was ultimately approved.¹⁷⁴

II. Chinese approach to foreign investment

Historically, China has expressly prohibited foreign investment in most parts of its telecommunications sector, ostensibly for national security and sovereignty reasons but allegedly also to retain control over Chinese communications. Where foreign investment was permitted, such investment was heavily restricted and subject to arbitrary state-intervention.¹⁷⁵ Accordingly, foreign participation was typically limited to contracts for equipment supplies or specific work on particular infrastructure projects.¹⁷⁶ With China's accession to the WTO,

¹⁶⁸ Part 2A, Division 4, *Telstra Corporation Act 1991 (Cth)*.

¹⁶⁹ Part 2A, Division 8, *Telstra Corporation Act 1991 (Cth)*.

¹⁷⁰ Part 2A, Division 9, *Telstra Corporation Act 1991 (Cth)*.

¹⁷¹ The relevant requirements are set out in the *Foreign Acquisitions and Takeovers Act 1975(Cth)* and *Foreign Acquisitions and Takeovers Regulations 1989 (Cth)*.

¹⁷² See <http://www.firb.gov.au/>

¹⁷³ Sections 18 and 19, *Foreign Acquisitions and Takeovers Act 1975(Cth)*.

¹⁷⁴ See P Costello (Treasurer) "Singapore Telecommunications Limited - Application for Foreign Investment Approval to Acquire Cable & Wireless Optus Limited", Press Release No. 060 by the Treasurer, Canberra, 22 August 2001.

¹⁷⁵ See LD Chuang "Investing in China's Telecommunications Market: Reflections on the Rule of Law and Foreign Investment in China" (2000) 20(3) *Northwestern Journal of International Law & Business* 509.

¹⁷⁶ See M Mueller "The WTO and China's ban on Foreign Investment in Telecommunication Services: A Game-Theoretic Analysis" (2000) 24(8) *Telecommunications Policy* 731. See also P Westover "M&A in Asia: An Overview of the Telecoms Sector" (2001) 20(9) *International Financial Law Review* 31.

China has reformed these telecommunications-specific restrictions. While foreign investment in the Chinese telecommunications sector remains heavily restricted, these restrictions will be gradually relaxed over a 5 year period from 2002.¹⁷⁷

In particular, China's foreign investment regulations applicable to telecommunications are now set out in the *Provisions on the Administration of Foreign-invested Telecommunications Enterprises 2001 (FITE Provisions)* which are supplemented by operating permit procedures.¹⁷⁸ These FITE Provisions contain various licensing qualification criteria, and set out application and approval procedures, which must be met and followed before a foreign entity can invest in the Chinese market.¹⁷⁹ Essentially, this involves a two-tier approval process by MII and MOFTEC. In all circumstances, such investments must be made via a Chinese-foreign equity joint venture, severely limiting investment vehicle flexibility.¹⁸⁰ While foreign investors have sought to adopt structures to circumvent such restrictions, these remain high-risk structures that are currently tolerated but could equally be declared illegal of the Chinese government's view on the benefits of foreign investment were to change.

Importantly, the extent to which investment may occur in Chinese BTB and VATB businesses is restricted in accordance with a transitional timetable established pursuant to China's WTO commitments. Foreign investment up to a level of 49% in a BTB and 50% in a VATB will be gradually phased in over the 2002 to 2007 period, commencing with VATB services, then BTB mobile and fixed-line services. Beijing, Shanghai and Guangzhou are the first geographic regions to be subject to such foreign investment, followed by the 17 major Chinese cities. From 2007, no geographical restrictions will apply.¹⁸¹ In effect, these geographic restrictions prevent foreign investment in the existing state-owned geographically unrestricted enterprises until 2007, potentially curtailing Chinese privatisation activities.

III. Conclusions and recommendations

Notwithstanding China's entry into the WTO, China's restrictions on foreign investment in telecommunications remain among the strictest in the world. This contrasts starkly with Australia's desire to encourage foreign investment in its telecommunications sector. The issue arises, what are the likely consequences of this difference in approach? In this regard, China's continued restrictions on market entry are likely to continue to restrict competition in the Chinese market, to the detriment of Chinese consumers and overall economic efficiency. Furthermore, future investment in Chinese infrastructure will continue

¹⁷⁷ See B Etzel "The Next Telecom Homeland: China China's Acceptance into WTO This Month Boosts Prospects" *The Investment Dealers' Digest: IDD*, New York, 12 Nov 2001, p 1.

¹⁷⁸ *The Provisions on the Administration of Foreign-Invested Telecommunications Enterprises*, Decree No. 333 of the State Council of the People's Republic of China, promulgated by the State Council on 11 December 2001, took legal effect from 1 January 2002.

¹⁷⁹ This could occur, for example, by establishing a subsidiary in China or acquiring a stake in a Chinese firm.

¹⁸⁰ A Chinese-foreign equity joint venture is a form of limited liability company with a registered capital set by law as a proportion of its total investment. The venture remains subject to Chinese law in general as well as specific laws for foreign-investment enterprises. See, for example, discussion in YY Wu "Joint Venture Law of the People's Republic of China" in AES Tay & G Doeker-Mach (eds) *Asia-Pacific Handbook - Volume 1: People's Republic of China* (Nomos Verlagsgesellschaft, Baden-Baden, 1998), pp 498-526. See also discussion in BC Potter "China's Equity Joint Venture Law: A Standing Invitation to the West for Foreign Investment?" in AES Tay & G Doeker-Mach (eds) *Asia-Pacific Handbook - Volume 1: People's Republic of China* (Nomos Verlagsgesellschaft, Baden-Baden, 1998), pp 527-553.

¹⁸¹ See detailed discussion in "China Opens Door to Telecom but MII Still Guards the Gate" (2002) 5(2) *World Telecom Law Report* 24. See also discussion in Clifford Chance "Investing in China's Telecom Sector: China Opens its Telecoms Services to Foreign Investment", Clifford Chance, Shanghai, February 2002.

to be financed by foreign debt, rather than foreign equity. Both issues are potentially disadvantageous to Chinese long-run economic development.

Accordingly, a clear recommendation of this paper is that China needs to further relax its foreign investment restrictions to promote greater market competition and to increase the mechanisms for foreign investment. The challenge for the Chinese Government is to recraft internal political ideology, and counter internal vested interests, in a manner that will enable such restrictions to be further reduced.

I. Conclusions

Notwithstanding their significantly different socio-economic and political contexts, the telecommunications reforms of China and Australia have surprisingly similar themes. The manner in which Australia has successfully addressed certain issues provides clear insights for China. In particular, given that China will be required to rely more heavily on competition policy in future years, Australia's experience in promoting effective telecommunications competition remains clearly relevant.

Based on the analysis set out in this paper, six key recommendations can be made to the Chinese Government:

- **Recommendation 1 (Full privatisation):** China should move towards full privatisation of its state-owned enterprises as soon as possible, thereby removing the governmental conflict of interest between regulatory and commercial functions. Such privatisation would reduce the international perception that China's state-owned enterprises could potentially influence government policy to suit their competitive objectives.

- **Recommendation 2 (Policy-making separation):** China should curtail some of the powers of the MII by giving its new Telecommunications Commission the role of policy formulation, leaving the MII with enforcement and administrative functions. China should also ensure the MII is adequately resourced and subject to requirements of transparency and natural justice, thereby ensuring Chinese regulatory policy is implemented fairly and effectively.

- **Recommendation 3 (Telecommunications legislation):** China should quickly enact a comprehensive and unified Telecommunications Law which resolves key industry uncertainties in a coherent fashion, provides assurances to private and foreign investors, and responds flexibly to technological innovation and changes in government policy priorities. The current Regulations are insufficient.

- **Recommendation 4 (Competition legislation):** China should enact targeted competition legislation focused on infrastructure access, thereby mitigating competition issues arising from vertical integration. China should also adopt underlying generic competition laws and should emphasise the development of competition policy, consistent with the APEC Competition Principles and China's WTO obligations.

- **Recommendation 5 (Promoting competition):** China should implement key reforms intended to bolster competition. In particular, China should phase out all price controls to ensure greater price competition. As part of such reforms, China should implement an affordable USO funded by an independently determined USO levy. China should also move to quickly implement full number portability.

- **Recommendation 6 (Foreign investment):** China should further relax its foreign investment restrictions. Such relaxation would complement China's privatisation activities and would assist the financing of China's infrastructure development.

By implementing these six recommendations, China will take significant steps towards implementing the economic development strategy identified by the World Bank in its October 2001 report.