

Research Assessment Exercise 2020
Impact Case Study

University: The Hong Kong University of Science and Technology

Unit of Assessment (UoA): 22-Business

Title of case study: Opening China's Telecommunications Market for Hong Kong Investors

1. Summary of the impact

Policies for the telecommunications sector within the significant Closer Economic Partnership Agreement (CEPA) cross-border trade agreement between Hong Kong and mainland China have been influenced by research by Xu Yan, linked to his earlier studies on telecommunications policy in Hong Kong and mainland China carried out at HKUST. Such work has had impact on policy by informing senior government policymakers locally and nationally through recommendations on how to liberalize the Chinese telecommunications market under CEPA, and contributed to economic impact following the opening up of this sector to Hong Kong investors under the agreement, mainly in value-added services and particularly in Guangdong Province.

2. Underpinning research

Professor of Information Systems, Business Statistics and Operations Management Xu Yan (joined HKUST in 1997) has established himself as an expert on the telecommunications sector and its regulation in Hong Kong and mainland China through a series of published comparative studies that address telecommunication policy issues, in particular market liberalization. Xu's distinctive perspective on this area draws on his in-depth east-west knowledge resulting from previous working experience in the Ministry of Posts and Telecommunications of China and its affiliated university, doctoral studies on telecommunications policy in the UK, and a dedicated research focus on telecommunications market over the past 15 years, with almost all of his publications up to 2015 centered on this area and related issues.

In 2001, he examined the impact of regulatory frameworks on fixed-line and mobile interconnections with reference to the case of China and the Hong Kong Special Administrative Region (SAR) [R1]. Another paper considered the implications of China joining the World Trade Organization (WTO) for foreign direct investment in China's telecoms sector [R2]. These studies, and other research on the development of telecommunications in China [e.g. R3] paved the way for his subsequent focus on the Closer Economic Partnership Agreement (CEPA), signed between Hong Kong and mainland China on 29 June 2003, and its implications for the Hong Kong telecommunications sector.

Following the signing of the agreement, Xu's expertise was immediately sought by the Communications Association of Hong Kong (formerly Internet and Telecommunications Association of Hong Kong) (CAHK) to undertake research on the new opportunities, and ways to realize them in the face of China's sensitivities and conservative position within its WTO agreement to opening this sector. CAHK, established in 1983, is Hong Kong's sole industry association for basic and value-added telecommunication services providers, with more than 40 corporate members.

Xu conducted a survey among member companies of CAHK and interviewed two major players (Hong Kong Telecom and Sunday Communication), which identified key issues of concern, such as the management control of enterprises operating in China. His analysis and recommendations both reflected the Hong Kong industry's perspectives and drew on the previous studies [R1 to R3]. In the report [R4], he made the case for the following:

- i) The setting-up of a CEPA Share, similar to the Golden Share used by the UK's Thatcher government when British Telecom was privatized in the 1980s. The CEPA Share would give the Chinese government the right to veto decisions made by companies managerially

controlled by Hong Kong investors to alleviate Chinese government's concerns over national security.

- ii) Establishing a special telecommunications zone in the Pearl River Delta (the "Zone"), geographically located next to Hong Kong. It was proposed that the Zone would cover most of Guangdong Province, allowing Hong Kong-registered telecom service providers to enjoy broader benefits from liberalization while serving as a "laboratory" for the Chinese government to evaluate the effects of market liberalization and extend it to the rest of China if it turned out to be safe and successful.

In 2010, CAHK requested that Xu Yan update the 2004 report. The updated report, with reference to feedback from CAHK members, raised more issues [R5]. For example, opening Mobile Virtual Network Operations (MVNO) to Hong Kong investors. In September 2015, Xu published a comprehensive review of the long journey to market liberalization, with CEPA Supplement XI, implemented in March 2015, presented as a milestone in opening China's domestic telecommunications market to overseas investors [R6].

3. References to the research

[R1] Xu Yan, 2001. The Impact of the Regulatory Framework on Fixed-Mobile Interconnection Settlements: the Case of China and Hong Kong. *Telecommunications Policy*, Vol. 25, No. 7, pp. 515-532.

[R2] Xu Yan, 2002. China's Accession to the WTO and Its Implications for Foreign Direct Investment in Chinese Telecommunications. *Communications & Strategies*, Issue 45, pp. 17-47.

[R3] Xu Yan, Douglas C. Pitt, 2002. *Chinese Telecommunications Policy*. Artech House Telecommunications Library Series, Artech House Books: Boston, London.

[R4] Xu Yan, Tam Chit-wa, 2004. *Further Cooperation between Hong Kong and the Mainland's Telecommunications Sector under the CEPA Framework*. Research Report for the Internet and Telecommunications Association of Hong Kong, May. The final report can be found at <http://www.bm.ust.hk/isom/files/IS/Further%20Cooperation%20between%20Hong%20Kong%20and%20the%20Mainland.pdf>

[R5] Xu Yan, 2010. *Further Cooperation between Hong Kong and the Mainland's Telecommunications Sector under the CEPA Framework (Updated)*. Communications Association of Hong Kong.

[R6] Xu Yan, 2015. "The Closer Economic Partnership Agreement (CEPA) between China and Hong Kong SAR: From Gesture to Commitment", *Telecommunications Policy*, Vol. 39, No. 10, pp. 913-920.

4. Details of the impact

Pathway to impact

Xu's concept of a special telecommunications zone immediately caught the attention of different stakeholders, including the Liaison Office of the Central Government of China and the Commerce, Information and Technology Bureau of the HKSAR. In April 2004, *Wen Wei Po*, a Hong Kong-based Chinese language state-owned newspaper, hosted a forum to discuss this initiative. (Sina.com report: <http://news.sina.com.cn/o/2004-04-18/09172337022s.shtml>). The opening of the forum was chaired by Li Gang, then Deputy Director of the Liaison Office of the Central Government of China, and closed by Francis Ho, then Permanent Secretary of the Commerce, Industry and Technology Bureau of the HKSAR Government, indicating the significance placed on the proposal. Xu was also interviewed by the media (e.g. *Sing Pao Daily News*, 19 April 2004).

The following month, Xu's initial report for the Communications Association of Hong Kong (CAHK) was presented to Jiang Yaoping, then Vice-Minister of the Ministry of Industry and Information Technology, during a May 2004 CAHK delegation visit to Beijing and to the Ministry

of Commerce of China. In the CAHK press release on the delegation's visit, it noted that Vice-Minister Jiang said he would study the document. (On file, English translation available). The report was also presented to John Tsang, then Secretary for Commerce, Information & Technology Bureau in Hong Kong, during a courtesy visit before the delegation.

In 2010, CAHK submitted Xu's updated report to the Ministry of Industry and Information Technology and the Ministry of Commerce.

Impact on policy and the economy

From 2012, the Chinese government has gradually opened its telecommunications market to Hong Kong investors. Most notably, the concept of a telecommunications special zone originally proposed by Xu has been partially adopted.

While CEPA Supplement IX in 2012 and Supplement X in 2013 (effective 01/01/14) opened up new telecommunication opportunities, CEPA Supplement XI in 2014 marked a larger step by the Chinese government toward further telecommunication liberalization. Under Supplement XI, Hong Kong service suppliers were allowed to set up joint ventures or wholly owned enterprises registered and located in Guangdong Province to provide value-added services within mainland China, including multi-party communications services, store and forward services, and call center services. Internet access services could also be provided to users within Guangdong Province only. Importantly, there was no restriction on the proportion of Hong Kong service suppliers' shareholding, signifying that the door to Guangdong had finally opened [S1].

Currently, the Chinese government has opened six value-added services to Hong Kong investors without restrictions on the proportion of Hong Kong capital, plus five other value-added services where the proportion of Hong Kong capital in the shareholding should not exceed 50%, a highly favorable policy compared with overseas economies working under the WTO agreement. In response, many businesses in Hong Kong have been motivated to apply for Hong Kong service supplier certificates, necessary to apply for licenses from the Chinese government to enter the Chinese telecommunications market. As of 30 June 2019, the Hong Kong government had issued Hong Kong Service Supplier certificates to 68 value-added telecommunications services providers and four telecommunications services providers, compared with only six applications for certificates in 2004.

Kenneth Kwai Hin LAU, Chairman of CAHK, affirmed in testimony that CAHK had engaged Xu to conduct both policy studies and he served as president of its regulatory issues group from 2006-17. He noted that Xu had made "*great contributions*" to the sector, including the updated CEPA policies, which "*have reflected the proposals made by Prof Xu. For instance, fully opening certain value-added services to Hong Kong investors in several cities of Guangdong Province is a significant step towards his proposed concept of a telecommunications special zone*" [S2].

A prominent corporate example of a CEPA telecommunications policy user and beneficiary was Pacnet (founded as Hong Kong Supernet Ltd by HKUST faculty as Hong Kong's first Internet Service Provider in the 1990s and then bought by a Singaporean investor). Being based in Hong Kong for more than five years, Pacnet was qualified to apply for a Hong Kong Service Supplier certificate and, in 2009, became the first joint venture under CEPA to obtain an IP VPN license and offer services in China, with Xu speaking on CEPA at its celebration forum. The company continued to look for opportunities in the mainland telecommunications industry over the period under review [e.g. S3, S4], benefiting significantly from the growing liberalization driven in part through Xu's work with CAHK and implemented through the various CEPA supplements, highlighting the economic impact of such liberalization on telecoms firms and services to their customers.

Further impact was shown when in December 2014, Pacnet was acquired by Telstra Corp, Australia's largest telecommunications company, with Telestra seeking to expand its operations in China and Asia Pacific through the US\$697M acquisition [S5]. The deal was completed in April 2015, with Brendon Riley, then Telestra Group Executive, Global Enterprise and Services, stating that: "The completed acquisition will double Telestra's customers in Asia and greatly increase our network reach and data centre [sic] capabilities across the region. This includes the addition of the largest privately owned intra-Asia cable network, 29 data centres, and the ability to further grow our

China operations through the existing joint venture.” This indicates both the scale of Pacnet’s operations by this time as well as the significance of its China market and joint venture to its new business owner.

Xu’s research has had further impact through his participation in high-level Hong Kong and international industry-related organizations including: i) In 2017, Xu was appointed by the Chief Executive of Hong Kong to be a member of the Communications Authority of the HKSAR Government [S6]; ii) he was a member of the Regulatory Affairs Advisory Committee for the Office of the Communications Authority from 2008-18; and iii) he is a longstanding board member of the International Telecommunications Society.

Xu’s influence on policy and industry was acknowledged and shared in the media in an article in 2017, published by the *South China Morning Post*, which stated: “Xu’s recommendations and research for the Audit Commission of Hong Kong Government, Communications Association of Hong Kong (CAHK), Central Policy Unit has helped shape the government's telecommunications and innovation strategies.” [S7]

5. Sources to corroborate the impact

[S1] CEPA Supplement XI/Trade and Industry Department (2014) press release: New agreement signed under the framework of CEPA to achieve basic liberalization of trade in services between Guangdong and Hong Kong. Available from

<https://www.tid.gov.hk/english/aboutus/presspeech/press/2014/20141218.html>

[S2] Letter from Kenneth Kwai Hin LAU, Chairman of the Communications Association of Hong Kong. [on file]

[S3] Example 1: PACNET press release on service expansion in Chongqing, China, 23 October 2013.

<https://www.media-outreach.com/release.php/View/657/Pacnet+Awarded+IDC+License+by+the+MIIT+to+Provide+Data+Center+Network+Services+in+Chongqing%2C+China.html>

[S4] Example 2: PACNET press release on Tianjin Tier III data center opening, 28 October 2014

<https://www.media-outreach.com/release.php/View/1139/Pacnet+Opens+Tier+III+Data+Center+in+Tianjin+China.htm>

[S5] “Telestra completes acquisition of Pacnet”, Telestra news release, 16 April 2015.

<https://www.telstraglobal.com/sg/insights/news/newsitem/telstra-completes-acquisition-pacnet>

[S6] Government of the HKSAR Press Release: Government announces appointments to Communications Authority. March 31, 2017.

<https://www.info.gov.hk/gia/general/201703/31/P2017033100365.htm> (appointment ended March 2019).

[S7] South China Morning Post, Expert Insight Series 2017: Professor Xu Yan. 12 June 2017.

<https://www.scmp.com/news/article/2128767/scmp-x-hkust-expert-insight-series-2017-professor-xu-yan>