The information presented in this Section is either derived from various government and private publications or obtained from communications with the Ministry of Information Industry, unless indicated otherwise. Neither we nor any of our affiliates or advisers, nor the underwriters or any of their affiliates or advisers, have independently verified the information presented in this section. This information may not be consistent with other information compiled within or outside China.

Overview

The telecommunications industry in China has experienced rapid growth in recent years. According to the Ministry of Information Industry, the total number of wireline access lines in service increased from 108.8 million as of the end of 1999 to 180.4 million as of the end of 2001, representing a compound annual growth rate of 28.8%. Wireline telephone penetration rate increased from 8.6% to 14.1% during the same period. As a result of the increasing demand for information services and technology development, the market for data communications and Internet services in China also experienced rapid growth during that period. The number of Internet users in China increased from 8.9 million as of the end of 1999 to 33.7 million as of the end of 2001, representing a compound annual growth rate of 94.6%.

The following table sets forth certain information relating to the telecommunications and information industry in China as of the dates indicated.

	As of December 31,			Compound Annual Growth Rate
	1999	2000	2001	(1999-2001)
China's population (in millions)	1,258	1,267	1,276	0.7%
China's GDP per capita (RMB)	6,551	7,081	7,543	7.3%
Wireline				
Access lines in service (in millions)	108.8	144.8	180.4	28.8%
Penetration rate(1)	8.6%	11.4%	14.1%	—
Mobile				
Subscribers (in millions)	43.2	84.5	144.8	83.1%
Penetration rate(1)	3.4%	6.7%	11.3%	—
Internet				
Users (in millions)	8.9	22.5	33.7	94.6%
Penetration rate(1)	0.7%	1.8%	2.6%	—

(1) Determined by dividing the number of subscribers or users by the total population of China.

Sources: Data in respect of China's population and GDP per capita are derived from information published by the National Statistical Bureau; data in respect of mobile subscribers are derived from information published by the Ministry of Information Industry; data in respect of Internet users are derived from information published by China Internet Network Information Center, or CNNIC.

Wireline Telephone Services

The table below sets forth industry and other information regarding China and certain other countries and regions in ascending order of wireline telephone penetration as of the date or for the period indicated.

	As of or for the year ended December 31, 2001			
	Population	GDP Per Capita	Number of Wireline Access Lines in Service	Wireline Penetration
	(millions)	(US$)	(thousands)	
India	1,027.0	470	34,732	3.4%
China	1,276.0	909	180,368	14.1%
Brazil	171.8	2,810	37,431	21.8%
Singapore	4.1	20,880	1,948	47.1%
South Korea	47.7	8,870	22,725	47.6%
Australia	19.3	18,459	10,060	52.1%
France	59.3	21,960	34,033	57.4%
Hong Kong	6.8	24,048	3,898	57.7%
United Kingdom	60.1	23,750	35,326	58.8%
Japan	127.3	32,720	76,000	59.7%
Germany	82.4	22,500	52,280	63.5%
United States	285.9	35,900	190,000	66.5%

Sources: Data in respect of China's population and GDP per capita are derived from information published by the National Statistical Bureau; data in respect of China's wireline subscribers are derived from information published by the Ministry of Information Industry; data in respect of population and the number of wireline subscribers for other countries are derived from publications of the International Telecommunication Union; data in respect of GDP per capita for other countries are derived from publications of the Economist Intelligence Unit.

China's economy has grown rapidly in recent years, which has led to increases in average income level and demand for more advanced telecommunications services. As a result, both local and domestic long distance wireline telephone traffic in China has increased. This trend is reflected in the significant growth of the wireline telephone penetration rate and total usage in China. The wireline penetration rate in China remains significantly lower than those in more developed markets in Asia and elsewhere. The above penetration rates are calculated using the total population. As members of the same household may share one access line, the effective wireline penetration rate in each country may be higher than that set out above.

Other than us, wireline operators in China include China Telecom Group, China Netcom Group, China Unicom and China Railcom.

Mobile Communications Services

According to the Ministry of Information Industry, the number of mobile communications service subscribers in China increased from 43.2 million as of the end of 1999 to 144.8 million as of the end of 2001. Mobile communications services are currently available in most cities in China. The mobile penetration rate has increased from 3.4% as of the end of 1999 to 11.3% as of the end of 2001. Mobile operators in China include China Mobile and China Unicom.

Data and Internet Services

The data communications sector in China has grown rapidly in recent years. Historically, data services in China were primarily comprised of low-bandwidth X.25 services and digital data network, or DDN, services. The rise of the Internet and the wider adoption of broadband applications, as well as increased demand for corporate networks and internal communications, have stimulated demand, especially from high-usage business customers, for higher-bandwidth DDN services and more sophisticated broadband data services such as frame relay and asynchronous transfer mode, or ATM, services. According to the Ministry of Information Industry, subscribers of DDN services increased from approximately 358,500 in 2000 to approximately 438,600 in 2001 and subscribers of frame relay and ATM services increased from approximately 44,800 in 2000 to approximately 75,700 in 2001.

Usage of the Internet in China has increased rapidly in the last several years due to reduced Internet access charges, the declining cost of Internet access devices, increased wireline penetration and increased offerings of Internet content and applications. The chart below sets forth the number of DDN, frame relay and ATM and Internet users in China as of the dates indicated.

	As of December 31,		
	1999	2000	2001
DDN (in thousands)	270.0	358.5	438.6
Frame relay and ATM (in thousands)	—	44.8	75.7
Internet users (in millions)	8.9	22.5	33.7

Sources: Data in respect of DDN, frame relay and ATM services are derived from information published by the Ministry of Information Industry. Data in respect of Internet users are derived from information published by CNNIC.

Broadband access networks allowing high-speed transmission continue to be deployed and expanded rapidly in China. They mainly utilize digital subscriber line, or DSL, technology and fiber optic cables connecting local area networks. This rapid development of broadband access services is driven by the increase of Internet content and application offerings.

Other than us, the main providers of data and Internet services in China include China Telecom Group, China Netcom Group and China Unicom.

Industry Trends

We believe that the future development of the telecommunications industry in China will be characterized by the following trends:

Continued growth in the telecommunications industry in China

We believe that the telecommunications industry in China will experience continued growth along with the development and modernization of China's economy. With relatively low wireline telephone penetration at 14.1%, the telecommunications industry in China offers significant growth potential. In addition, China's Internet penetration is expected to continue to increase rapidly.

Increasing demand for broadband telecommunications services

The rapid proliferation of multimedia content and applications in China has led to growing demand for broadband telecommunications services that permit high-speed transmission of voice, data and video. The market for these broadband services has expanded rapidly as technological advances have made them increasingly affordable and convenient. As the bandwidth grows, so does the demand for increasingly sophisticated, high-value Internet services.

Increasing demand for value-added telecommunications services and information technology expertise

As the telecommunications needs of government and corporate users become increasingly sophisticated, we expect increased demand for value-added telecommunications services. For example, we expect customers to switch from traditional, uniform data transmission services to tailored and managed data services. In addition, as telecommunications, media and information technology continue to converge, we believe that customers will require not only telecommunications services, but also information technology expertise. We expect that telecommunications operators that are capable of providing systems integration, consulting and other information technology solutions will be able to better understand and serve their customers' communications needs.

An increasingly competitive environment

We expect competition in the telecommunications industry in China to continue to increase as a result of government policies in favor of competition, rapid changes in technology, convergence of telecommunications and information services, and China's recent entry into the WTO. Increasing competition will encourage all providers of telecommunications services to expand and upgrade their networks, improve services, introduce value-added services and enhance their operational efficiency. We believe that the Chinese government will continue to foster a relatively orderly competitive environment in the telecommunications industry in China.

An increasingly transparent regulatory environment

The Telecommunications Regulations are intended to ensure the transparent regulation of China's telecommunications industry. We expect that the Chinese government will continue to improve regulatory transparency of the telecommunications industry. In addition, China's recent entry into the WTO is expected to gradually open up the domestic telecommunications market to foreign participation, which we believe will facilitate progress toward a more transparent regulatory environment.