



Network Infrastructure



Data and Internet Services

As the state government is encouraging the use of information technology and e-Commerce among enterprises and government organizations, the Company will actively develop the e-Commerce through extensive cooperation.

3. Characteristic data and Internet businesses

Data business

The Company employs the technologies of asynchronous transfer mode ("ATM") and frame relay ("FR") to provide data carrier service, as part of its data service expansion. As of 31 December 2001, total bandwidth leased for ATM and FR carrier operations amounted to 826 x 2Mbps.

Internet business

The Internet related services that the Company currently provides include dedicated line Internet access, dial-up Internet access, Internet data center ("IDC") and international roaming of Internet access. In addition, the Company actively develops other Internet application businesses, including ICP services and e-Commerce services.

As of 31 December 2001, Internet subscribers increased to 3.544 million, up 7.5 times (2000: 415 thousand). Of which, the number of dedicated line subscribers amounted to 4,555, and the number of dial-up subscribers reached 3.540 million.

As at the date of this report, the Company provides incoming international roaming Internet services for a total of 148 countries and regions, while outgoing international roaming Internet services are available in 103 countries and regions.

Development strategies

With regard to data communication, the Company's focus is optimization of its network. The Company intends to set up an international first-class carrier platform for the Company's integrated businesses through enhancing the security and reliability of the network, timely upgrade and expansion of the network, and refining the MPLS function. The Company will also introduce various data services and multi-media value-added services, such as video conferencing system on the IP platform, QoS guaranteed ATM / FR operations, and circuit simulation by connecting the PSTN with packet switch network.

As for Internet business, the Company will continue to increase the number of subscribers for its dedicated line and dial-up Internet access and, at the same time, the Company will leverage on the

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Paging

While applying stringent measures to tighten the capital expenditure for the paging business, the Company intends to rationalize the network infrastructure and reduce staff size and costs.

4. Maintaining dominant position in paging business

Products and services

The Company offers numeric paging and Chinese paging services on local, provincial and national levels.

The Company has introduced two-way paging services, and provides wireless data services including stock quotation, flight information, weather, news and entertainment through the paging network. With the launch of paging-cellular bundled services, short messages can be available through both pagers and handsets which have the SMS function. This in turn has brought much convenience to the subscribers.

Subscriber base

The Company has added 11.186 million new subscribers. As of 31 December 2001, the number of pager subscribers reached 32.907 million, falling by 11.613 million or 26.1% year-on-year (the end of 2000: 44.520 million). Of which, 287 thousand were information pager users.

As paging adopts the transmission method by way of broadcasting, it is inexpensive, and will continue to enjoy some irreplaceable advantages over other technologies in the development of certain value-added services. The Company believes that there will be a basically steady paging subscriber base in the foreseeable future.

Average revenue per subscriber per month ("ARPU")

In 2001, the average revenue per paging subscriber per month was RMB 9.4, a decline of RMB 5.9 or 38.6%, compared to RMB 15.3 for 2000. The decline was attributable to the decreasing up-front fee for cellular communication and other telecommunications businesses. The Company will seek to introduce more value-added service, and to jointly develop the paging market with other operators, thereby seeking to stabilize the average revenue per paging subscriber per month.



Churn rate

In 2001, the churn rate of paging business increased to 57.6% (2000: 28.4%). The increase in churn rate was mainly due to the migration of paging subscribers to cellular communication and other telecommunications services, and the continued structural changes in the paging subscriber base.

Development strategies

While applying stringent measures to tighten the capital expenditure for the paging business, the Company intends to rationalize the network infrastructure and reduce staff size and costs. The Company will seek to expand value-

added services for paging, and promote information paging and two-way wireless personal digital assistant services, so as to maintain the Company's paging market scale. In order to ensure the efficiency of the paging business, the Company will fully utilize the resources of the paging business, develop operator-assisted short messages, enhance customer services, and outsource the call centre business. Leveraging on the advantages derived from an integrated business profile, the Company will actively lead paging subscribers to use the Company's cellular communication services through the paging-cellular bundled service.





Network Infrastructure

Emphasis will be put to increase the transmission capacity and reliability, enhance network self-healing capability and transmission reliability, so as to improve the technological levels and communication capabilities of the network of the Company.

5. Network infrastructure

Network construction

The Company has a state-of-art broadband optical fibre transmission network with nationwide coverage. The network utilizes cutting edge technologies of self-healing SDH structure and DWDM. Together with the core switching network based on ATM + IP technologies, they serve as the common network platform supporting various telecommunications operations of the Company, including cellular communication, international and domestic long distance, data, Internet and paging. Thus, highly secure and reliable communication services are offered to the subscribers at a relatively lower cost.

As at 31 December 2001, the Company had completed a high speed and reliable inter-provincial long distance backbone transmission network comprising of a number of fibre rings and certain branch network systems. The Company's optical fibre transmission network reached 333 thousand kilometres in length covering 303 cities, of which its optical fiber backbone transmission network accounted for 78



thousand kilometres. Apart from satisfying self transmission demand, the Company commenced leasing of sections of the network and fibers to other telecom operators and corporate customers.

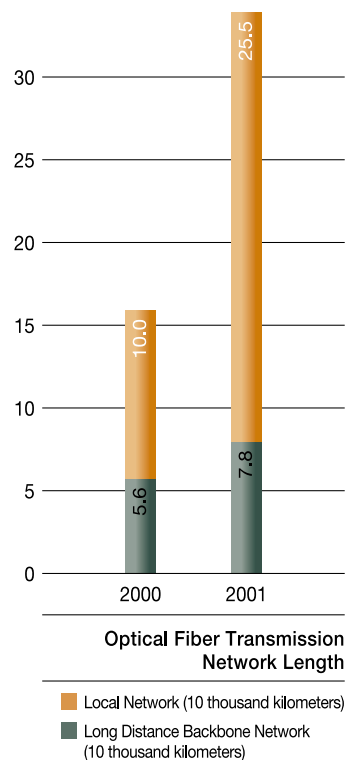
Parallel to construction of the domestic optical fibre backbone transmission network, the Company has also actively participated in the construction of an international backbone transmission network. In April 2000, the Company entered into an agreement for the construction of Asia Pacific Cable Network No. 2 Project ("APCN2"). By the end of 2001, the Company had obtained 4 x 155Mbps half circuit capacity from the Project. The Company had also provided the full circuit service between mainland China and Hong Kong.

In order to expand the Company's long distance, data, Internet, and cellular communication businesses, targeting major corporate customers, the Company has formulated the "Ten Thousand Office Building Connection Project" in the construction of networks for metropolitan areas. As of 31 December 2001, the Company connected 11,726 office buildings with broadband transmission network, mainly comprised of optical fiber.

Development strategies

In 2002, the Company will improve the wavelength division multiplexing ("WDM") platform for the inter-provincial backbone transmission network, whilst improving the inter-provincial and intra-provincial long

distance backbone optical fiber transmission network. The Company also expects to roughly complete the long distance backbone maintenance and support system. Emphasis will be put on increasing the transmission capacity and reliability, as well as enhancing the network self-healing capability and transmission reliability, so as to improve the technological levels and communication capabilities of the network of the Company. The Company will expedite the construction of an international transmission gateway, laying the foundation for the expansion of international businesses.



III. SALES AND MARKETING

1. Operating principles

Under the “Customer First” principle, the Company is dedicated to uphold the “market-oriented and customer-focused” rationale, and fully capitalize on the advantages of an integrated telecommunications operator. Leveraging on the government’s preferential tariff policy, the Company flexibly adjusts its sales and marketing strategies for different geographical regions, market segments and customer bases to fully satisfy the varied needs of customers. The Company also enhances the depth and coverage of its sales and marketing activities and provides customer services of high quality and efficiency.

2. Sales and marketing strategies

Steps have been taken to establish a marketing management system with strong planning capabilities and responsive to market changes. The Company pursues its sales and marketing activities through market survey, market segmentation, market positioning, marketing planning, pricing, profit and loss analysis, branding, sales and marketing channel, customer relationship management, and customer services to improve the Company’s market competitiveness.

The Company capitalizes on the advantages of an integrated telecommunications operator, and applies different sales and marketing strategies for different market segments. The Company offers different services at different regions to different customer groups by ways of different bundles of services in accordance with market demand. Sales for cellular, international and domestic long distance, data, Internet and paging services are conducted on an integrated basis. The Company is already offering services in bundles such as “Liang Wang Tong” as a bundle of cellular and paging services, “Yi Ji Liang Wang” as a bundle of cellular and IP telephony, as well as bundling of cellular, “193” long distance service, and “165” Internet service.

3. Brand building strategies

The Company continues to build a brand image as an integrated telecommunications operator. The Company considers that brand name is the most valuable intangible asset of the Company. By building the awareness, recognition, and loyalty of the brand name among its customers, the Company can increase the demand of its services and uplift its enterprise value. The integrity and consistency of the Company’s brand name and profile is maintained through

consolidation of its brand and central coordination in management, planning and implementation. The advantages of the Company’s integrated telecommunications operation will be facilitated and optimized accordingly.

4. Customer services

A lot of emphasis has been put to customer service, and substantial investment has been made in the customer service system. The “1001” customer service system which unified the access number and standard of customer service across the country is now in full operation. The system coordinates customer service on a central and unified basis, offering services including handling customer enquiry, bill enquiry, complaints, sales, payment reminder and emergency services. The Company also implements an Enquiry Accountability System and standard procedures for the effective handling of enquiries to ensure that all customer enquiries will be answered within a specified period of time. Customer satisfaction is thus enhanced, and the quality of the Company’s customer service program is improved. The Company also introduced the “one-stop” solution for sales and payment to ensure that customers enjoy unrivalled convenience and quality services.

5. Sales channel

The Company has established a nationwide sales network, which comprises sales outlets, agents, distributors, joint sales outlets, direct sales team and agents for major customers. The Company markets its products and services to the mass market through its own sales outlets, together with agents, distributors and joint sales outlets. Customers will benefit from the extensive coverage of the Company's sales channel, which in turn will increase the penetration of the Company's services. With regard to corporate customers, the Company adopts a two-prong strategy through its direct sales team and agents to conduct sales on a one-to-one basis to increase penetration. The Company has also established a direct sales and customer service team targeting high usage corporate customers.

In February 2001, Unicom Group entered into a strategic cooperation agreement with China Post, allowing it to leverage on China Post's nationwide outlets network to market the Company's services as well as allowing China Post to collect fees from customers on the Company's behalf.

The Company has established a nationwide sale and marketing network. As of 31 December, 2001, the Company has over 3500 sales outlets, and a total of over 37000 agencies and distributors. Of which, over 9000 sales outlets were under the joint-venture with China Post.

IV. TARIFF

1. Tariff strategies

As a newly emerged telecommunications operator, the Company has always complied with various tariff and regulatory policies as promulgated by the relevant government regulatory authorities in the PRC. The Company has always been cautious towards its preferential tariff treatment given by the government regulatory authorities in the PRC. The Company still insists that in order to satisfy the diverse needs of customers, increase market share and improve the Company's competitiveness, the Company should offer secure and reliable communication services, enhance customer services quality, and introduce innovative services. Increasing profitability is the ultimate objective of the Company's tariff strategies. The Company's preferential tariff treatment given by the government

regulatory authorities in the PRC should not be interpreted as a major competitive advantage of the Company.

2. Tariff adjustment

The Company adjusted its tariff with regard to the international and domestic long distance business, leased line, and data in accordance with the relevant government regulatory authorities in the PRC, subject to the approval of the relevant government regulatory authorities, with effect from midnight on 21 February 2001.

On 30 June 2001, the Company received a notice from the relevant government regulatory authorities in the PRC, requiring the company to cancel the connection fee for cellular services and other surcharges for government funds imposed on telecommunications services, with effect from 1 July 2001.