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Jian Jin  
JiNan University Guang Zhou

Xiang Zhou  
JiNan University Guang Zhou

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The strategy and policy of the development of China telecommunications industry

Jian Jin XiangKui Zhou
(Information Industry Research Department of JiNan University GuangZhou)

Abstract: Countering to national conditions of China, the paper puts forward the strategic objectives of the development of China telecommunications information industry: Up to 2030, telephone popularization rate will reach about 40 every 100 persons, telecommunications infrastructure will be relatively developed and telecommunications technology will be mature, high-tech telecommunications equipments will have international competitive ability, new telecommunications business will popularize gradually. To ensure the realization of the objectives, it points out the basic principles, strategic thoughts and concrete measures of the development strategy of telecommunications. At last, specific policies that government should formulate are clarified.

1 Strategic thoughts on the development of China telecommunications information industry

It is undoubtedly of important guidance effect to the whole telecommunications industry of our country as well as to the whole national economy working out grand transient century telecommunications strategy. It will promote the adjusting and upgrading of industry structure, accelerate the industrialization process and lead us to economic and social informanization of our country.

1.1 The strategic objectives of telecommunications industry of China facing 21st century

Up to 2030, a modern telecommunications network of great scale, high efficiency that satisfy the needs of a middle-developed country, composed of lines of high capacity and super speed, computers, database and all kinds of electronic information products will be constructed and finished, forming unified administrative organizations of high efficiency and perfect telecommunications law and regulation system.

Concrete strategy steps and main contents are:

1.1.1 Up to 2000, total amounts of telephone will reach 65 million, telephone popularization rate will reach 5 to 6 every 100 persons. The optical fibre of high speed telecommunications network will be erected to roadside in big cities. Digital moving telecommunications network covering the whole country and satellite telecommunications network covering large and middle cities will be built up. From 2000 to 2030, telecommunications ability will be tripled. Total amounts of telephone will reach 0.8 billion, telephone popularization rate will reach 40 every 100 persons or so. Telecommunications infrastructure will be relatively perfect. Optical fibre will enter into building. Satellite telecommunications network will cover cities above county grade. Moving telecommunications network will be relatively developed. Moving telephone will account about 15 percent on total telecommunications buisiness.

1.1.2 Telecommunications technology will be relatively mature. A strong fundation of basic technology as micro-electronic technology, photon technology, computer and software technology etc will take shape. Photon telecommunications and B-ISDN will be put into practical use. Perfecting telecommunications equipment technology of personalization, digitalization and intelligent. Realizing developed telecommunications technology industrialization and having international competitive ability.

1.1.3 High-tech telecommunications equipment will take shape of production ability in scale. Despite using optical-fibre telecommunications satellite, digital moving telecommunications equipment, facsimile equipment widely, we should also trace world trend actively, develop prospecting telecommunications products of international advanced level.
1.4 Up to 2000, new telecommunications business such as electric mail-box, digital telecommunications, video picture-text, electronic information business, acoustic and video frequency business, users facsimile, TV conference etc will be popularized gradually. From 2000 to 2030, multi-media computer will get into half households providing users with two-way information communicating services on sound, digital and picture merging into an organic whole.

1.2 The fundamental principle of China telecommunications development strategy

planning as a whole, integral coordinating, breaking through at focal point, unified developing. Telecommunications possesses characteristics of working on whole course and network which needs to take advantages of macro-control functions of government and mechanical effects of market. Under the prerequisite of planning as a whole, giving free rein to the activeness to all sides, developing coordinately. On the fundation of carrying out services for general people, we promote telecommunications construction at regions of important strategic significance with emphasis through which bring along all-round soaring of telecommunications.

1.3 The strategic thoughts of China telecommunications development

Accelerating telecommunications constructions on areas along the coast, rivers and boundaries who have urgent demand on telecommunications. Adopting the principles of high-tech, high starting point on developed districts, realizing automatation, intelligent, personalization of telecommunications. From which we push on to middle and west part, realize comprehensive development. We also should enforce the construction of long-distance core line transmission network and of local network.

1.4 To ensure the realization of the goal, it is necessary for China to take a series of strategic measures.

1.4.1 Accelerating public telecommunications construction, promoting the development of telecommunications service industry

Public telecommunications network bears more than 80 percent of the amounts of information circulation of our country. To realize the goal of telephone popularization rate of 40 every 100 person in 2030, we should expand the scale of telecommunications network, excavate telecommunications network potenitailities.

As a value realizing way of constructing telecommunications network, telecommunications information service should open up new business energetically.

1.4.2 Opening up high-tech telecommunications industry districts, raising technology developing level and equipment production ability

Telecommunications belongs to capital concentrated industry, countering to the situation of small scale, decomposing of technology research and equipment production of our country at present, it's urgent to put together the inputs of capital, talents, open up several high-tech telecommunications districts backing on colleges and research organizations, and so realizing an organic whole of education, research production, heightening technology developing ability rapidly, accelerating the speed of merchandization on achievements of science and technology, giving play to scale production benefits.

1.4.3 Reclaiming channels of collecting funds widely, raising telecommunications funds in many ways

We may consider adopting share system to collect funds from society on non-telephone business; taking advantages of exportation credits actively; permitting foreign funds possess certain portion on non-basic business; managing on debt barely. P&T ministry can take the lead to circulate funds of provices and cities with tearing and borrowing through making use of space and time gaps of investment.

1.4.4 Giving play to the effect of market mechanism, enhancing vitality of telecommunications enterprises

Despite using a series of preferential policy to encourage enterprises to be engaged in telecommunications construction actively, we should also give free rein to the effect of market mechanism, encourage enterprises to grow up in competition, strengthen strength through coalition, annexation and renovation from which to become the main force in telecommunications construction of our country.

1.4.5 Exploiting resource of manpower, accelerating the cultivation of technological talents of speciality and administrative talents of telecommunications

Telecommunications information industry occupies an important strategic place on economic development of our country. It is necessary to input a
large number of talents of high quality as developing telecommunications precedently. Now a manpower resources exploiting plan should be worked out first. Despite taking advantages of institutions of higher learning, we can also take the channel of allying telecommunications enterprises with colleges to run a school. To adapt the changing of each passing day of telecommunications, it needs not only to input numbers of new force, but also to retrain workers at their posts.

2 The reasonable policy choice of the development of China telecommunications information industry

Viewing the history of the development of countries all over the world on telecommunications information industry, every government tries their best to support it. At present, the glitl tense trend of informanization gives new opportunity to telecommunications information industry. The "National Information Infrastructure" plan brought out by America first raised the upsurge of information infrastructure construction worldwide. At the same time, every country revises law and regulation of telecommunications to adapt new situations. China not only shoulders the tasks of renovation and expanding the backward telecommunications infrastructure, but also keeps up with the development of world telecommunications. It is high time to formulate proper policy.

2.1 Speeding up the steps of reform and open, creating good external conditions for the development of telecommunications

Resuming the reform of economic system, speeding up the reform of political system, expanding open to outside, strengthening cooperation with foreign countries, speeding up the standard construction of commodity, capital, technology and information market, enforcing the functions of macro -control, reducing administrative interference, giving the information enterprises the right of acting on their own and market freedom. All of these will create good external conditions for the development of telecommunications.

2.2 State planning as a whole, constructing jointly and mobilizing the initiattiveness of all sides fully

The slogan put forward by ITU is "one world, one network". China need not only encourage and guide the investment of enterprises and folks, attract foreign funds to promote the construction of telecommunications infrastructure, but also carry out principles of "planning as a whole, being responsible by different levels, combinating by departments and localities, constructing jointly". When emphasizing giving play to the initattiveness of all sides, we should consider the speciality of working on the whole network jointly of telecommunications. So long as the state stands on a vantage point and have farsighted view, can it ensure to get along well with the connection and management of all kinds of telecommunications appliances, to low the cost of network constructing and operating and to realize reasonable resources distribution and making full use.

2.3 Reforming the existing management system of telecommunications

The organization reform of P&T ministry makes it become an independent management department of P&T truly, sets up the authority of P&T ministry as the sole formulator, planner and legislator on telecommunications policy. Any telecommunications managing department should obey her command and join competition according to the whole plan.

General telecommunications bureau will be renovated to enterprises or state -owned public service department completely. Provincial bureaus also need to reform accordingly, implementing the seperation of governement and enterprises, reinforcing functions respectively. So to meet the demand of market economy and be favorable to the healthy development of telecommunications.

2.4 Perfecting telecommunications legislation

It is urgent to strengthen legislation in order to keep the order of market competition and supervise the activities of enterprises, accelerate the law -making and perfecting of telecommunications information service management and telecommunications network management, especially to issue "Telecommunications Law" of China.

The authority and effectiveness of laws and regulations formulated by P & T ministry, the seriousness of carrying out laws must be ensured. According to situations, we should perfect laws and regulations continuously and so to form a perfect law and regulation system of telecommunications.

2.5 Promoting the electronic industry

With the focus on the fundation of
6 Information industry newspaper JAN – DEC 1994
7 Computer worldly FEB 1995

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<tr>
<td>switchboard capacity</td>
<td>174.5</td>
<td>1940</td>
<td>2561.9</td>
<td>6.01 billion</td>
<td>6.01 billion</td>
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<tr>
<td>long-distance circuit</td>
<td>1.9</td>
<td>15.2</td>
<td>42</td>
<td>0.041 billion</td>
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<tr>
<td>telephone popularisation rate</td>
<td>0.4</td>
<td>1.29</td>
<td>2.2</td>
<td>2 persons</td>
<td>2 persons</td>
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List 1: switchboard capacity, long-distance circuit, telephone popularisation rate of important years

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<tr>
<td>total investment</td>
<td>4.14</td>
<td>9.16</td>
<td>69.84</td>
<td>161.48</td>
<td>404.16</td>
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<td>national budget</td>
<td>3.72</td>
<td>3.65</td>
<td>4.76</td>
<td>4.76</td>
<td>6.60</td>
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<tr>
<td>%</td>
<td>90</td>
<td>39</td>
<td>8</td>
<td>3</td>
<td>2</td>
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<tr>
<td>domestic loan</td>
<td>0.01</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
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<tr>
<td>%</td>
<td>0.4</td>
<td>0.7</td>
<td>0.7</td>
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<tr>
<td>foreign funds</td>
<td>0.04</td>
<td>0.10</td>
<td>0.21</td>
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<tr>
<td>%</td>
<td>0.6</td>
<td>17</td>
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<td>self-raising</td>
<td>0.41</td>
<td>5.45</td>
<td>40.17</td>
<td>172.07</td>
<td>998.33</td>
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<tr>
<td>%</td>
<td>10</td>
<td>60</td>
<td>67</td>
<td>76</td>
<td>74</td>
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List 2: the proportion of main sides on P&T investment in important years (100 million Yuan)

References:
1 World Telecommunications 1994
2 On the information industry economics Jian Jin
3 Quantity economy and technology economy research JAN 1995
4 Information technology and economy JAN – DEC 1994
5 Information world JUN – DEC 1994

micro-electronic and on the main body of telecommunications equipment and computer, we should strengthen the exploiting system integration and computer, trace the development trend of overseas information technology, adjust industrial structure of electronic industry in time in order to provide modern technological equipment for economy development and telecommunications network.

2.6 Regulating telecommunications fees timely and construct reasonable price system

As for telecommunications fees, we should not only think about the initiative of telecommunications enterprises and the bearing ability of users, but also think about regulating properly in accordance with different situation to accelerate the development of telecommunications. In short, we should care of both contemporary profit and long-term goal.

In addition, we should also construct reasonable and adjustable price standard and price system through repeated practice.

2.7 Several technological policy problem
2.7.1 Sticking to high starting point, giving play to the superiority of starting later, developing and using new technology actively. At the same time, we should set out from practice and appropriate to the situation.

2.7.2 Speeding up the construction of supporting network, improving the liability and giving full play to the function of network.

2.7.3 Doing well to the type selection of telecommunications equipment from ensuring the unity and high efficiency of telecommunications network.

2.7.4 To make it be more convenient to the exploiting, importation and management of telecommunications equipment and technology, we should make state standard of new technology, new system and new appliance, laws and regulations concern.