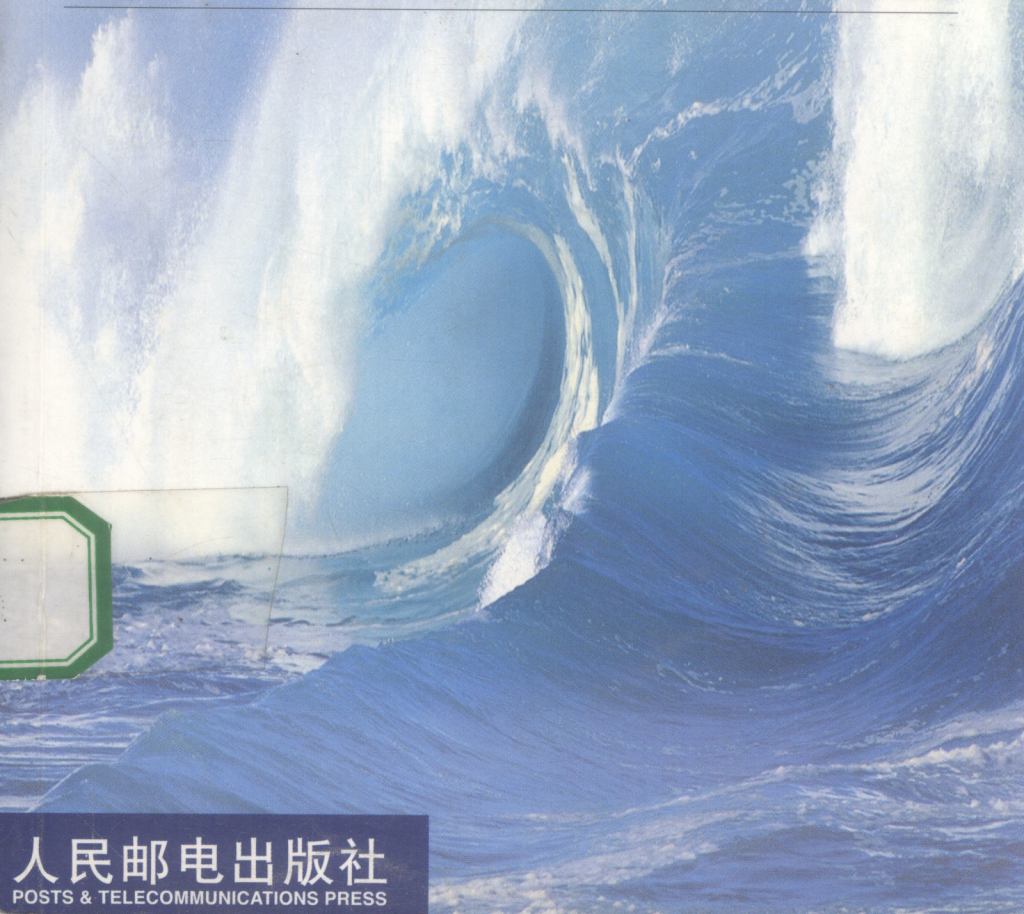


Editor-in-Chief

Wu Ji Chuan

**OBSERVATIONS AND
REFLECTIONS
ON THE
CURRENT GLOBAL
TELECOMS INDUSTRY**



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RESUME

Wu Jichuan, Minister of Information Industry

Born in September, 1937 in Changning, Hunan Province of China, began his career in 1959 after graduation from the Department of Wireline Communications of the Beijing University of Posts and Telecommunications (BUPT) and joined the Communist Party of China in 1960. Successive posts once assumed include: Deputy Director General of the Material Bureau of the MPT. Deputy Director General of the Planning Bureau of the MPT, Vice Minister of the Ministry of Posts and Telecommunications (MPT), Deputy Secretary of the CPC Committee of Henan Province, Minister and Secretary of the Leading CPC Group of the MPT and an alternate member of the 14th Central Committee of the CPC. Currently Minister and Secretary of the Leading CPC Group of the Ministry of Information Industry and a member of the 15th Central Committee of the CPC.

Observing the rules of telecommunications industry development

(Introduction)

By Wu Jichuan

The global telecommunications industry has undergone dramatic changes since the 1980s. These changes have been driven by globalization and by the revolution in information technology. A wave of development and reform has swept around the globe, making telecommunications the fastest-growing industry in the world and the one with the most significant potential. China's telecoms industry has grown quickly in the wake of the global trend and as a result of China's own reforms and of its open door policy. In a supportive regulatory environment, and with technological innovation and the enthusiasm and support of various sections of society, as well as the creativity and concerted efforts of the participants in the industry, the now-burgeoning telecoms industry in China, characterized by advanced technology, full range of services, nationwide coverage and global reach, has been built from scratch within little more than a decade. Other countries took decades, if not nearly a century, to achieve the same level of sophistication in their telecoms industries. Today, hundreds of millions of Chinese households have telephones, and mobile phones allow instant communication – any time, anywhere. The Internet too has become an increasingly important part of Chinese people's lives. Such groundbreaking changes were unimaginable twenty years ago.

Since 2001, the global telecoms industry has experienced tremendous upheaval, going from a period of high-speed growth to one of continuous decline. The setback was unprecedented. China's telecoms industry, however, stands in stark contrast to current market trends by overcoming all kinds of difficulties. Industry reforms have provided an environment conducive to developing the telecoms industry, which in turn has propelled forward industry reforms and intensified restructuring. Despite the many issues that remain to be addressed in the reform process, the rapid momentum of development is being maintained.

This phenomenon has attracted wide attention from within China and abroad and has given rise to important questions. Why has the telecoms industry taken such a steep plunge following more than 10 years of rapid development? Will this giant industry that previously outperformed other industries in the capital markets regain its luster? What has shielded China from the turmoil and upheaval of the market? In a highly complex environment, how can China's telecoms industry maintain, in the long term, the momentum that it has built up? These questions deserve careful contemplation as they are critical to the future development of the telecoms industry.

I

Currently, the global telecoms industry is facing its most arduous challenges since the revolution in information technology. As a result of the cumulative effects of numerous contradictory factors, the telecoms industry has slid to the bottom of the hill after many years of rapid growth. As a result of overexpansion, excessive competition, overinvestment, the bidding for 3G licenses, and other issues, many telecoms companies, even the most prominent multinational companies in the most developed countries, have suffered from a decline in efficiency, operating losses, plummeting share prices and wave after wave of layoffs. Statistics show that in the past two years, the market capitalization of the telecoms industry in the U.S. has shrunk by nearly USD2.0 trillion. Some large-scale European telecoms companies are facing significant losses. According to a ranking of the global information industry in 2001 by <Business Week>, nine out of the top 10 loss-generating companies were telecoms operators – and the tenth one was a telecoms equipment manufacturer. Many large corporations have gone bankrupt. Five out of 29 U.S. telecoms companies filed for bankruptcy. In the wake of the bankruptcy filing of Global Crossing, WorldCom, the second largest long-distance communications company in the U.S., is on the verge of collapse, having accumulated enormous losses and having become embroiled in financial scandals. This earthquake in the telecoms industry has sent shock waves that have affected the manufacturing and financial sectors by weakening investors' confidence, which in turn has hindered global economic growth.

The current depression in the telecoms industry has a distinctive back-

ground. In recent years, global economic development has slowed down and today remains weak, especially in the aftermath of the September 11 attack, which further debilitated the U.S. economy and accelerated its recession. For the first time since 1975, the big three economies, those of the U.S., Japan and the EU, have all experienced economic recession at the same time, and this has had a huge impact on the global economy. While the Internet and the network economy were rapidly taking off, highly speculative and extremely risky market behavior was spinning out of control; in particular, from 1998 to 2000, the huge dot-com bubble resulted in overconfidence in the prospects for multimedia businesses and in inaccurate predictions of the prospects of the broadband network market. The result was a serious mismatch between demand expectation and the market reality. This contributed directly to senseless investment and overexpansion. In the process of introducing competition and liberating the telecoms market, failure to observe general rules and maintain the necessary regulatory controls resulted in errors of industry policy, and a lack of effective guidance on and scrutiny of the dot-com industry also contributed to the setback in the development of the telecoms industry. In addition, the weaknesses in the corporate governance system cannot be overlooked. In particular, the copious use of stock options encouraged managers to falsify accounting information and earnings numbers, as well as inflate their stock price projections, in order to maximize and protect their own interests. Worse still, by taking advantage of loopholes in the independent auditing and accounting system, some major accounting firms acted wrongfully in collaboration with the telecoms companies, and this resulted in the creation of the most shocking financial scandal in recent years. Such behavior further accelerated the recession in the telecoms industry and has led to a widespread crisis of credibility.

Problems in the global telecoms industry must be dealt with appropriately. First, it is critical to understand that the telecoms industry, as a core industry, remains a pillar supporting economic growth. The telecoms industry must continue to move forward after its painful lessons and the bursting of the bubble. At the same time, it is also important to note the severity of the problems that the industry has encountered. It has suffered more serious losses than other industries, making it the hardest hit "victim" of the economic recession. The decline in the telecoms industry has created an impact so widespread that it affects not only the industry itself, but also the manufacturing industry, the fi-

nancial industry, the capital markets and even the development of the overall economy. It is an important factor contributing to the economic slowdown and the ongoing recession. The implications of the setback experienced by the telecoms industry are profound. Not only does it involve technical issues, market conditions and competition issues at the industry level, it also concerns thought-provoking matters such as economic discipline, economic models and the regulatory system at a deeper level. The problems facing the telecoms industry also serve as warning signs that companies should not violate objective economic rules. Any country or any industry that does not respect objective rules will be punished. The painful experiences of the telecoms industry serve as valuable lessons to society. We must learn from these lessons, put what we have learned into the specific context of China and seek to be inspired by the positive implications achieved through continuous introspection.

II

At the end of the 20th century, the heyday of the overheated dot-com economy and of the grossly inflated and overvalued telecoms industry coincided with the intensifying structural reform of the telecoms industry of China that aimed to eliminate monopolies and to introduce full competition. In the face of such a complicated domestic and international picture, we firmly adhered to the principles and policies promulgated by the Central Committee of CPC and the State Council by adopting sensible and pragmatic approaches toward a series of material issues that concerned the overall scheme of our industry development. We were successful in sustaining the active and steady growth of our telecoms industry.

■ In promoting the development of IT in China, we have always taken care to formulate our plans in the context of China's specific needs. Given the impact of the IT bubble both at home and elsewhere, rather than losing our equilibrium and being swept away by a wave of speculation and risk-taking, we have, using the government's overall guidelines, carefully clarified all ambiguities and misconceptions that the media and the public might have about our IT development. Although we were not immune from the impact of the bursting of the dot-com bubble, the damage was, to a large extent, far less serious when compared with the damage elsewhere thanks to the clear guidelines laid down by

our central government. These guidelines allowed our telecoms industry and IT development to survive this crisis and remain healthy.

- In terms of regulatory control, we emphasize implementing restructuring in order to serve the best interests of our country and in accordance with the characteristics of the telecoms industry. Despite pressure from different sections of society demanding that regulatory controls be relaxed or even annulled altogether, and that the accountability system and reporting line of the telecoms industry be changed, we maintained our stance and built a regulatory system with Chinese characteristics for the telecoms industry. We are determined to execute institutional reform in a pragmatic manner and to set up regulatory bodies both at the ministerial level and at the provincial level. A regulatory system is progressively taking shape – one that is centralized as well as being compatible with a market economy and the characteristics of the telecoms industry. We expect that this regulatory system will facilitate the creation of an environment that is even more conducive to the development of the industry.
- In reforming the telecoms industry, we focus on promoting growth by introducing restructuring programs and competition. During the restructuring process, we will learn from the experiences of developed countries. However, we do not simply copy an approach mechanically without considering China's specific needs. Rather, we drive our strategic restructuring progress in a systematic and organized manner. In order to devise an effective competitive framework, rather than simply promote “complete liberalization”, we will learn from the painful experiences of other countries and avoid the pitfalls that entrapped them when introducing effective competition, while at the same time keeping competition in check to avoid an excess of it. We aim to improve our overall core competitiveness.
- As for the 3G and multimedia broadband communications, again, we do not lose our poise just because everyone at home or abroad is raving about them. In response to demands from the local press to follow the example of overseas countries and launch 3G auctions at “stratospheric” prices, we have laid out the following principles: (1) we will observe the latest developments closely, (2) we will begin by launching pilot programs, (3) we will nurture the market, and (4) we will continue to support the industry. By adhering to these principles, we will make prudent decisions, and maintain a pragmatic and scientific stance to prevent bubbles. While some areas may seem to be glutted with broadband

capacity, this is only a localized issue. The majority of the system is ring-fenced against the problem. The pricking of the IT bubble that had resulted from the 3G fad and broadband fever played a critical role in the decline of the telecoms industry in many countries. China, however, was able to effectively avoid the same problem. This shows that the telecoms industry in China is maturing in the market economy environment, and that it has been able to respond to complex issues and to identify solutions that can lead to a promising future.

■ On the network infrastructure front, we are strongly and explicitly against duplication and overbuilding. As operators have begun to construct their own networks and systems following the introduction of competition into our market, it is not uncommon to find two switching towers standing adjacent to each other, or fiber optic lines constructed for the same routes. As our government has implemented a number of measures to tighten control and regulation, we have managed to smother the problem to a certain extent. The key issue is how we are going to avoid unnecessary and duplicative construction and the over-redundancy of network resources. We must optimize our allocation of resources, while at the same time effectively introducing competition as we take the development of our telecoms industry to yet another level.

■ With regard to tariff reform and management issues, we will seek to balance the interests of our country, those of the operators and those of the consumers by identifying and addressing any issues that cause conflict. The state of the contentious discussion within society about tariff reform and adjustment is an accurate barometer that indicates the level of conflicts of interests and complications as reforms and restructuring progress. Following the leadership and guidance of the central government, we solicited a wide range of ideas and formulated a proposal that aims to balance interests of all stakeholders. The structural change to our telecom tariff system has essentially been completed. As a next step, we are going to further refine the structure in order to perfect the tariff system to allow it to become truly in line with the market economy system.

■ With respect to China's commitment to open its telecoms market to foreign investors after its entry into the WTO, the fundamental principle is that our sovereignty, national security and interests are the top priority. While we must fulfill our commitment to open the telecoms market, we must never forget that our national interests are of paramount importance, and that we must tighten our regulatory controls when necessary. In particular, we insisted that for any

basic telecoms services, the majority stake must be owned by a Chinese entity, and that any international telecoms services must be handled by an international gateway approved by a telecommunications administrative department of the government. We will continue to uphold this principle so as to safeguard China's political interests, economic interests and national security.

Supportive and appropriate policies serve as strong driving forces as we move forward with our telecoms industry reform and development. Since the beginning of the structural reforms in 1998, in accordance with the centralized strategic planning of the State Council and the guidelines provided by the relevant Ministries and Commissions, we have successfully separated the governmental and corporate functions of telecoms entities and have spun off postal services from telecoms services. As a result, we have been able to eliminate monopolies and effectively introduce competition. The government has also introduced a series of rules and regulations, including *<Regulations on Telecommunications>*, *<Administrative Measures on Internet Information Services>* and *<Regulations Concerning the Administrative Procedures for Foreign-invested Telecom Companies>*. China has made tremendous progress in a matter of a little more than three years, whereas it took many developed countries seven or eight years to achieve the same level of progress. Effort on such a scale and at such a speed has never before been seen in the telecoms industry. Our telecoms industry has achieved substantial growth in terms of revenue, communications capacity, technology, subscriber base and quality of service. Furthermore, our network structure, business structure and market structure are constantly being improved as we move along. We now have a digital long-distance transmission network, local switches and a mobile communications network. We have achieved world-class levels of technology. With our unrelenting pursuit of new and improved technology and our development of new services, our productivity continues to increase. The total assets owned by the telecoms industry now amount to RMB1.0 trillion. Also encouraging is that our domestic telecoms companies are doing extremely well in the overseas capital market, having raised a total of USD20 billion in overseas listings. Of note is that, since 2001, our telecoms industry has maintained steady revenue growth of over 15%, twice the rate of domestic GDP growth, in contrast to the depressed environment of the industry in other countries. China currently has 380 million fixed line and mobile subscribers, the largest telephone subscriber

base in the world. For every 100 people in China there are 30.22 phones.

Why does China's telecoms industry enjoy better prospects? There are many reasons. China is a vast market whose potential remains largely untapped. As our economic growth continues to gain momentum, and as our level of IT development continues to advance, the Chinese people demand more and better IT services, and this becomes a strong driver for the growth of the telecoms industry. At the same time, because of our relatively low degree of economic globalization, our telecoms industry is not fully connected to the international capital market, and this allows us to escape the adverse effects of any changes to the international market landscape. Even if a problem does arise, we are able to respond to it immediately. It is noteworthy that the positive momentum of our industry growth is essentially built on the foundation of a prudent and pragmatic policy. Such an encouraging achievement requires tremendous effort. We must strengthen our own market by enhancing the regulatory framework, as well as by paying more attention to the existing problems in order to mitigate potential risks. Only by doing so can we preserve and then further improve the outlook for our industry.

III

Our telecoms industry has entered a new stage of development. In the face of new opportunities and challenges, we should be guided by the ideology of China-specific socialism, and draw on the experience gained both by domestic operators and by those in developed countries. To represent the development trend of productive forces, orientation of the advanced culture and basic interests of the general public, we will further familiarize ourselves with knowledge about the fundamentals of telecoms development.

To begin with, understanding the important role that the telecoms industry plays in the new era is crucial to achieving the above goals. First of all, the telecoms industry is a strategic industry that plays an important role in our economic and social development. It also contributes directly to the improvement of the economic structure, to the IT-led industrialization, and to the improvement in the living standards of our people. The 10th Five-Year Plan and the nation's mid- to long-term planning ending in the year 2010 expect to quadruple the growth of the information industry, and to use this momentum as

a driver to double the nation's GDP growth. As a crucial component of the information industry, the telecoms sector will undoubtedly play an increasingly important role in the evolution of modern economics and society. At the same time, the telecoms network serves as the central nervous system of the nation as it is intricately related to the political security, economic stability, national defense, and information security of the country. Hence, choosing the right path and direction for the development of the telecoms industry is crucial, not only for the industry itself, but also, in the broader picture, for the wellbeing of our society as a whole. Despite the heavy blows suffered by the global telecoms industry, we must ensure that the revolution in information technology continues. Increasingly, the use of information networks plays a critical part in the modern evolution of mankind, so much so that the telecoms industry is an important driver for global economic growth. The importance of the telecoms industry has not diminished, nor has its influence weakened. The telecoms industry once underpinned the ongoing growth of the global economy, and it will continue to overcome such problems as we may encounter so as to speed up the economic recovery and to promote further development. We should be absolutely confident about this.

Second, it is essential to understand the fundamental characteristics of and to grasp the tenets of telecoms development. When we look into the problems that the telecoms industry is now experiencing, we will readily understand that the root cause of them is that we are going against the basic rules of the industry. After more than a century of transformation, and after more than thirty years of revolutionary development in information technology, an immense change to the means and forms of communication has taken place. Today, communication is largely technology-based. However, this does not change the objectives of telecoms industry development, which is that it should be characterized by integrated networks and collaborative operation, and by economies of scale and service to the entire community. As a form of infrastructure, the basic function of the telecoms industry is to serve the economy and society, with an emphasis on the latter rather than on the former. By providing telecoms services, our industry helps to increase efficiency and thus lowers the cost of operating a society, ultimately achieving the objective of creating wealth to benefit that society. This is to say that the telecoms industry should not be a highly lucrative business, let alone a rapacious one. Rather, it should be an in-

dustry that consistently balances the interests of the society with those of the economy, as well as being an industry that provides superior service. This fundamental concept is particularly important if good judgment is to be exercised when the industry is involved with financial capital, or when problems inevitably arise. It is also important to note that as technology advances, forms of communication are diversifying. However, in the past, in the present and in the future, the voice communication was, is and will be the predominant form of communication. Data and video communications will certainly advance, but they can never usurp the unique status of voice communication, which is the most fundamental means of communication at work, in our daily lives and in our interaction with other people. This must be kept firmly in mind when conducting any technology research and when making any critical decision.

Third, we should adopt an objective stance on where our nation stands at this stage of our telecoms development. We are at the initial stage of our development of socialism, and this is the context in which our telecoms industry is being nurtured. Since the beginning of China's opening reforms, we have made substantial progress in developing this sector. Overall, however, an apparent gap exists between the service quality, the penetration rate, the core competency and the overall competitiveness of China's telecoms industry and those of advanced countries. We must intensify reforms and perfect the regulatory framework. In addition, we also must accumulate more hands-on experience, restructure corporations internally, realign the conceptual thinking of officials and key personnel, establish a management system, and perfect our operating mechanism through learning from past experiences. As a developing country, China has a relatively low level of economic and social development, and the consumption power of the Chinese people is still low. To increase our people's consumption will be an ongoing process. To a large extent, this will hold back the growth of our telecoms industry. In view of this, anything that we do, from searching for solutions to troubleshooting or decision-making, needs to be done from the perspective of a realization that our nation is at its initial stage of development. We need to enhance our sense of responsibility and urgency by grasping opportunities to expedite development. Yet at the same time we need to avoid over-aggressive behavior by adhering to our economic rules and adopting a pragmatic approach, and by maintaining an objective and sensible stance in overcoming the obstacles that will hinder our progress.

IV

If we are to acquaint ourselves better with our increasingly knowledge-based economy, we must clarify a number of interrelated strategic issues that concern the overall development path of our telecoms industry.

The first issue is the relationship between industrialization and IT development. China is now at a critical juncture in its industrial development, and at the same time is facing the wave of IT development that is sweeping the globe. Given this unusual state of development, China should not follow the footsteps of the developed countries that established their IT industries only after they had become completely industrialized. Instead, China, as a nascent industrialized nation, should embrace IT advancement and use it as a trellis to support industrialization and to achieve a great leap forward in productivity.

In terms of tangible assets, economic growth is the one thing that the survival and development of mankind relies upon. Much as IT may advance and improve the methods and efficiency for producing economic growth, it cannot replace economic growth in those terms itself. The extreme opinion that “the network economy” can “take the place of virtually everything, and change virtually everything” is at odds with the commonly-recognized economic rules. And the so-called “attention economy” and “eyeball economy” lack a physical constituent. Information advancement is not a river without an origin or a tree without a root. The biggest driver of IT development is the strong demand for information technology, products and networks from the traditional industries as they push forward with their vigorous restructuring and upgrades. This is how the information industry is related to traditional industrial development. IT development should be used to facilitate industrial development, rather than replace it. IT development should be used to transform traditional industrial development, rather than stifle it. Instead of merely talking about developing IT and speculating on it, we should focus on applications. When developing a network economy, it is one thing to establish a profit-generating model while it is another thing to give away a “free lunch”. To summarize the above, we now have four key words: “driver”, “transformation”, “application” and “return”. Much effort is still needed to further promote e-government, e-commerce and corporate IT development if we are to create a realistic and pragmatic market

for our telecoms network and business development. We do not want to build castles in the air and we do not want to develop our telecoms industry in a market that builds on bubbles and unrealistic overvaluation. Practical work for IT is very important, both to the telecoms industry and to the healthy growth of the entire national economy.

The second issue is the relationship between technology and the market. We readily understand that people are unrelenting in their pursuit of a better quality of life, and that as a result, there is always one technology breakthrough after another. However, new technology must be supported by a suitable market for its use and a solid business for it to operate in. Simply praising advanced technology does not create any value. Practicality is the key to technology advancement. At the same time, we should also be aware of the relationship between the use of new technology and lifecycles of businesses and the metamorphoses of businesses. Development is a continuous process. That applies to everything. Therefore, the development of new technologies and businesses cannot be isolated from the historical trend. They merely represent the extension and evolution of the traditional business. New businesses develop on the basis of traditional businesses, and new applications must build upon the foundations of existing networks.

As shown by the development of the telecoms industry at home and abroad, new technology, once taken out of the context of the market, cannot realize its full value. Having unrealistic goals and overbuilding only leads to the bursting of bubbles. The technological innovation of the Iridium satellite system was widely recognized, but the lack of a real market for it inevitably led to its fall. The timeline for the granting of 3G licenses, which represents the direction of our future development, has been pushed back yet again because the market is not mature enough. License auctions and the downturn in the IT market have further aggravated the depressed telecoms industry. Technology can be the primary productivity driver only when it works with the market, as evidenced by many real life examples. With the advent of the Internet and multimedia technology, the telecoms industry now faces an even more complicated environment than at the time when voice communication was the sole focus. As a result, in the process of advancing our network technology and upgrading the structure of our telecoms industry, we must seek to maximize the positive impact of technology on the development of the telecoms industry by setting out

market-oriented targets and using scientific thinking to formulate business plans and policies that address the real needs of society.

The third issue is the relationship between competition and regulation. When we look at competition, we must see it as intrinsic to the market economy. When we practice market economics, it is essential to introduce an effective competitive mechanism in order to inject vibrancy into corporations and to facilitate the efficient allocation of resources. The enduring monopolistic operation of our telecoms industry is no longer compatible with the market economy and no longer meets the needs of the continual developments in communications. The monopolistic nature of the market must be broken. In addition, any introduction of competition into the domestic market must serve the best interests of the nation. Telecommunications industry has a strong bearing on the national sovereignty and security, and will also exert a powerful influence on the country's economy. This is particularly true for China as the majority of our telecoms companies are state-owned. Therefore, it is especially important that competition be conducive to preserving and enhancing the value of our state-owned assets, and that it should help to maintain network and information security. In other words, competition should be used to strengthen, rather than weaken, the overall capabilities of our telecoms industry. We also must acknowledge the uniqueness of competition in the telecoms industry. An integrated network and collaborative operation and the economies of scale of the telecoms industry define a competitive landscape that is unique to the telecoms industry. Unlike the industrial or commercial sectors, the telecoms industry can only allow comparative competition rather than absolute competition, so it is an industry where competition must be kept under regulatory control. While we do not wish to encourage a monopolized market, we are against granting too many licenses. That would lead to excessive competition and a waste of the resources of our society.

Hence, we must aggressively strengthen regulatory control. Some say that government control is unnecessary after the telecoms market has been deregulated. This is a dangerous misunderstanding. Domestic and foreign experience shows that competition and regulatory control are not necessarily in conflict. Market competition is not deterred by necessary regulatory control. Appropriate regulations facilitate more effective competition rather than resulting in a waste of resources. Without rules a game cannot be played. To ease necessary