Status Quo, Problems and Improvement in Telecom Regulation in China

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Abstract: The article plans to present an analysis on the regulation authority, structure of markets, interconnection, services price, service quality and universal service of telecom regulations, thus to analyze the status quo and existing problems of telecom regulation in China, and to puts forward opinions to improve future regulation.

Keywords: Telecom regulation, regulation authority, structure of markets, interconnection, services price, service quality and universal service.

1. GENERAL INTRODUCTION OF TELECOM REGULATION

In the 90’s of 20th century, new pattern of telecom industry, the break of monopoly, encouragement of competition and market-orientated came into being, and meanwhile, the number of telecom supervision authorities of varied nations has increased from 14 to over 130. The reformative practices of regulation in varied nations certified, for the telecom industry, characterized by the inimitable technological and economic natures, the pushing of industrial competition and the strengthening of regulation rested content with each other during the transferring period from monopoly to competition. The latest researches of economists in regulated economy, Jean-Jacques Laffont and Jean Thaler indicated that the web-based telecom competition could reach competition balance under effective regulation, under which the maximal web value and social welfare can be realized.

At present, due to the difference in the development levels and steps of telecom industry in varied nations, telecom regulation authorities tend to be diversified. From the perspective of development trend and effectiveness of regulation, respectively and particularly emphasized regulation carried out by independent telecom regulation and competitive regulation authorities have become the mainstream. Under such pattern, the telecom regulation authority is mainly responsible for the market regulation and behavior regulation; market regulation covers regulation to licence (market admission), services price (business fees) regulation, resource management (wireless frequency, telecom resource), and standard management (transmission and terminal technological standard etc); behavior regulation covers interconnection and service quality etc. Responsibilities of competitive regulation mainly lie in the prevention of outrageous monopoly that exceeds normal competition and enterprises combination.
Regulation, from the implementation perspectives, can be classified into legislative, administrative and civil management level. Legislative level refers to the legislation authority formulates related laws, regulation as well as general rules for telecom competition. Administrative level refers to the governmental authority settle all problems in the competition and development through varied practices and compelling measures, so as to build up and protect effective and fair competitive order, which constitutes the main part of telecom regulation. Civil level refers to the enterprises or organizations, as the agents, assist the government and independent regulation authority to practice the management. From the perspective of time, it can be classified into pre-regulation and post-regulation. Pre-regulation refers to the services price of the telecom company must get the approval of the regulation authority before the practice, or the regulation authority must present the fees requirement in advance (such as the regulation to upper limits, regulation to just pay rate or direct design to the fees etc), while post-regulation refers to the regulation authority carries out the regulation after the telecom company is involved into the anti-competition fees, rather than putting forward no requirements in advance. With the establishment of complete and effective competition, regulation tends to be transferred from the pre-regulation to post-regulation, which can reduce the unnecessary regulation and bring forward market functions to full extent.

The procedure of telecom regulation should accord to varied laws and precedent of different nations, but the basic rules that current and effective regulation should obey are the same: (1) regulation authority should be independent, (2) regulation policy should be just, (3) regulation procedure should be transparent, (4) regulation team should be professional, and (5) the regulation should be effective.

The detailed tasks of the telecom regulation can be classified into two perspectives: regulation to market order and regulation to enterprise behavior. Regulation to market order includes: (1) regulation to market admission (regulation to licence), (2) regulation to services price, (3) regulation to telecom resources (regulation to frequency resources, regulation to number as well as regulation to secondary planet channels). While regulation to enterprise behavior includes: (1) regulation to interconnection, (2) regulation to service quality, (3) regulation to universal service, and (4) regulation to net security.

2. STATUS QUO OF TELECOM REGULATION DEVELOPMENT IN CHINA

Telecom market developed from the end of last century has achieved primary results on the establishment of regulation system, improvement of interconnection, decrease of telecom fee, improvement of service quality as well as the provision of universal service:

2.1. System and authority for telecom regulation have been steadily improved, and regulation range has been basically designed.

In March 1998, according to the reformative proposal of the State Department approved by the 9th People’s Congress, the established Ministry of Information Industry (MII) worked as the chief department of telecom, responsible for the supervision and management of the national telecom industry, and the provincial (municipalities and cities under direct control) authority to monitor the telecom industries of its governed areas. The Chinese Association of Communication Enterprise (CACE) established in 2001 is regarded the civil administrative
department to link the government and the industry, industry and users as well as the interior departments of the industry. In 2003, 5 national basic telecom operators formally established SASAC (State Assets Supervision and Administration of the State Council), which uniformly exerts the function of the state investor and the supervision function as the state investor. In the early 2004, Tietong, through “respective operation of public and particular webs”, became the central state-owned enterprise that directly managed SASAC. After the practice of the state-property management, the SASAC mainly practiced the function such as the investment and financing of the state-owned telecom enterprises and the guarantee and increase of the state-owned property value, which resulted in the change of the MII responsibility. It will become the mutual and professional regulation authority of all telecom industries, responsible for the supervision of telecom markets. Meanwhile, *Opinion of Strengthening the Monitoring to Telecom Market to Future Extent* was released in 2003, and in the same year, new Law Telecom was drafted out, in which contents related to the National Regulation Authority (NRA) were added. After being approved, it will back up the legal position of telecom regulator. In addition, in the same year, the implementation of the *Law of Administrative Admission* also included the governmental administrative function and detailed regulated behaviors into the legal supervision. All these practices will pave the way for the establishment of a more stable environment for the development of telecom industry, and prescript the coverage for the regulation authority.

### 2.2. Telecom market is largely opened, and competitive pattern is fundamentally formed.

Through a series of hot reforms, such as post sub-operation to the establishment of China Unicom to the separation of China Mobile to the establishment of China Satcom, as well as to the horizontal separation of China Telecom to reconstruction of China Netcom and to the recent reform of China Tietong, diversified market competitive structure of telecom markets has been primarily formed. At present, the competition between large companies in telecom industry tends to be transparent. In local telephone perspective, there is the competition between China Telecom, China Netcom, China Union and China Tietong, though the latter two are not strong enough. In mobile perspective, there is the competition between China Mobile and China Union, and in long-distance telephone-call field (including IP phone-call), there is the competition between China Telecom, China Netcom, China Union, China Mobile and China Tietong. Meanwhile, Chinese telecom markets are opening basic telecom businesses step by step and wholly opening value-added telecom services.

### 2.3. Interconnection of telecom is basically realized.

As it is put in Rules of Telecom, interconnection refers to the establishment of effective communication between telecom nets, so as to enable one telecom user to communication with another or enable one to use varied telecom services of the other. As a result, there is no difference between the business inter-communication and the Internet from the essence. Their common resistances lie in the competitor with advantageous position or able to avoid the connection to the potential competitor through passive methods “connection without communications” when there is incomplete competition pattern, so as to protect its market interests. But by the end of Mar. 2001, varied above-mentioned public webs and some of the professional webs have been basically connected with each other through the effective work of the telecom regulation authority.
2.4. Regulation to services price and service quality of telecom industry obtained outstanding achievement.

Due to the existence of main influence in basic telecom business scope, price cannot be adjusted through market system. As a result, services price have become the hot issue in telecom regulations. At present, prices of telecom industry are designed by the State Development Planning Commission and the Ministry of Information Industry. From the general perspective, recent years see the decrease of the price in telecom industry, which favors the majority of the consumers. Meanwhile, with the prick-up of the competition of telecom industry, service quality of the telecom industry was greatly improved.

2.5. Some of the universal service problems were settled.

At present, the focus of universal service in telecom industry is to generally introduce the voice system in 13% of non-telecom villages. Consequently, “Assignment parts by parts” of phone application in each village is carried out in current rural areas. Such method is easy to be practiced, and phones can be generally introduced in each village.

3. EXISTING PROBLEMS OF TELECOM REGULATION IN CHINA

When evaluating the achievement obtained in telecom industry, we should also keep an eye on the following existing problems:

3.1. Regulation authority has faint responsibility purview, multiple objectives and simple measures, plus imbalanced information markets, which result in the passivity and inefficiency.

In the practice, regulation “trap” and “captive” are always seen, the purview of regulation is faint and “exceeding regulation” & “failure of regulation” exist at the same time. In addition, the regulation objectives are overloaded, which interferes with each other and seriously influences the key task of the regulation, lowering down the efficiency. Furthermore, measures to realize objective are simple, which takes administrative coordination as the principal but lack of encouragement. Meanwhile, breaches in the telecom markets can only be corrected one by one after demonstration meetings are held afterwards. Such regulation is not only passive, but also hard to exert long-term function.

3.2. Effective telecom market for competition has not formed.

In 1940, J.M.Clark published “About the Concept of Workable Competition” on American Economic Remarks, bringing forward the concept of workable competition. He thought competition could be regarded as effective when market competition was with energy and the scaled economy could be utilized. In this way, the universally seen competition could be separated from the monopoly. At present, through the separation of traditional carriers, the introduction of new competitors as well as the reconstruction of state-owned enterprises, telecom operators have formed the “5+1” pattern. But the analysis of the varied carriers on the proportion of the basic telecom business indicated that in telephone market, China Telecom and China Netcom practiced monopoly on varied regions in southern & northern China. While in mobile market, China Mobile took the leading role, and China Unicom only occupied 20% of the market. In a word, when appreciating the reform of telecom market, we
should also keep an eye on the fact that there is room for the effective competition, and market for the complete competition has not formed yet.

3.3. Sticking problems in the interconnection, and room is left for the proper interconnection system.

The essence of interconnection lies in the economic interests, and the regulation of interconnection is the best method to protect the vested interest of monopoly, as well as a necessary measure for the government to stipulate telecom market. Webs built with the support of nationally made regulations aid the carriers to adopt passive measures, such as “connect with obstacles” or “link with obstacles” due to the lack of current market competition and the lack of supervision methods. At present, the fundamental measure to settle the problem is to rely on the regulation authority to design a set of proper regulation system that takes interconnection as settlement system, and according to the principle of market deal, look for the interest balance point for distribution and realize it with economic methods.

3.4. Price competition tends to be disorder, while complaints of service are increasing.

Regulation to telecom business fees sticks to an encouragement system with low efficiency, and the publicly known disadvantages include: unable to provide encouragement for high efficiency, bad for the adjustment of fee structure and contradiction to the introduced telecom competition. Even worse is that the thought on short-term interest turns the normal price competition into disordered and jumbled price wars, which distorts the normal market competition. At the mean time, lack of respect to the acknowledgement rights, selection rights and the fair deal rights pushes some of the “overlord terms” as the hot issue for complaints and results in bad social influence.

3.5. Fund raise system of the universal service, which mainly adopts cross-subsidy, can hardly resume.

In the whole development process of our communication industry, cross-subsidy in the long run has been the main fund resource to realize the universal service of telecom industry. During the highly monopolized period, cross-subsidy was workable and this problem did not come to the surface. But in the competing markets, as newly entered ones have the so-called “looting behavior”, and the profit of original operator is relatively decreased, the directly bestowed allowance is decreased, and the conflicts of cross-subsidy are increasingly sharp.

4. OPINIONS FOR THE IMPROVEMENT OF TELECOM REGULATION IN CHINA

Speak to the problems in the reform of the telecom regulations, the authority should affirm the achievement and direction of reform, consider the causes to the problems, actively introduce internationally mature theories and experiences for regulations and bring forward the opinions for the improvement.

4.1. Build up wise and explanatory regulation concept, improve regulation environment, and establish regulation structure that is up to the international one.
Problems such as faint regulation purview, multiple objectives, simple method and passive condition are resulted not only from objective factors such as the lack of regulation factors (finance, material and human resources), but also from competitive structure factors from the telecom markets, as well as whether the administrative function of the government can be collocated properly. However, the most important cause is the lack of wise and explanatory regulation concepts. As a result, to cater for the special requirement of our telecom industry and markets, it calls for the immediate establishment and gradually improved theory system and policy structure of telecom regulations with Chinese characteristics. At the same time, laws and regulations that govern the opening of telecom markets, supervision of telecom market as well as the credibility of telecom enterprises should be designed as soon as possible. The regulation authority should try to meet the requirements of the WTO, adjust the domestic regulation policy and procedure, and establish a set of telecom regulation structure with standard content, just procedure, clear responsibilities, which is up to the international standard as soon as possible within our limited wholly-opened transferring period.

4.2. Adjust the constitution of the principal for competition, and push the establishment of effective competition.

Under the precondition of primarily establishing the competition pattern for telecom markets, with the purpose of encouraging effective competition, re-shape the chief competition system. With an eye on the imbalance competition in current telephone and mobile phone markets, add carriers for basic telecom business through increasingly equipping the current operators with the licenses for whole business scopes in telecom fields, which enables a certain number of principals to participate the competition and bring the markets into full practice.

4.3. Make full use a more scientific and flexible regulation measure to push the interconnection.

Different causes and contents of regulation require varied regulation measures to realize the final objectives. Currently the most outstanding interconnection problem lies in the imbalance between both regulation parties on the obtained information, which requires the regulatory authority to adopt more advanced technology and requirement, cost with measurable design or real time data collection system, etc., to overcome the disadvantages. Secondly, the current inter-connection mainly relies on the administrative forces for maintenance, while is short of the just and proper settlement measures for internet, which calls for the regulatory authority to turn the fee-based to the internationally adopted cost-based settlement among telecom operators as soon as possible.

4.4. Renovate regulation method on services price, improve supervision on quality of service.

According to the new economic theory on regulation, when the competition of telecom markets, the increasing business and the daily-developed technologies turn to be more furious, the relationship between the regulatory authority and carriers becomes more imbalanced, under such case, development on fees tends to be obvious, which is designing the relationship between the regulatory authority and carriers as a kind of consigning or agency, under which
the regulatory authority can realize the regulation objectives when designing the regulation system consistent to encouragement. That means to realize the efficiency and just under the balance of income and payout. Furthermore, speak to the current regulations that are based on the services price, it is a good trial to apply varied levels of cost division system on the base of the Price Cap system, as the Price Cap guarantees the profit, while the carriers have more powerful intention to decrease the cost, and the additional cost division system enables the consumers to share parts of the profits brought by the decrease of cost. The Price Cap was primarily called in Britain as “RPI—X”, in this way, the carriers’ rights to add the value was regulated into a set of certain indexes, which was lower by X% if compared with the increase of particular price index (such as retail price index). X% explained the decrease of practical price due to the development of technology & science in certain time. And within 4 to 5 years, the price would be kept stable, and within this period, the carrier would fully bear the cost. If the carriers could provide multiple services, the Price Cap system should refer to the average maximal regulated price designed for multiple carriers. That is to say if the operator can provide n kinds of services, and the price is pi (pi guarantees the maximal social welfare and the profit of the company), i=1,2…n respectively, there should be an average maximal regulated price to such operator p, and p rests content with

$$\sum w_ip_i \leq p$$

w_i is the rights value of business i. As it is the average of multiple businesses price, then the carrier is more flexible to select price structure and adjust varied cost.

When updating the regulation to fees, regulatory authority should continue practicing the regulations to govern the service quality and complaints of telecom users, publicizing the service quality of main telecom companies on fixed time and fully exerting its function as supervisor. In should also speed up the standard management on the service quality, support agent organizations such as associations of telecom users, actively push standard management on service contracts, draft policies related to mobile operator numbers and users’ numbers.

4.5. Adopt fund system for universal service ASAP.

Considering the disadvantages of cross-subsidy as well as its negative impact on efficiency and just competition, we should introduce the successful experiences from foreign countries, design fund compensation system for universal service ASAP, publicize the leading enterprises involved in the telecom services, so as to encourage their initials to shoulder the universal service, or introduce competition through bidding. In addition, scientifically measure and publicize the average cost of varied telecom services, design proper compensation range, establish agencies to govern the collection, payout and settlement of the fund.

REFERENCES


