Telecommnication Services Industry Open Environment and Access Policy of China

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Abstract: The telecom industry of China is facing a shortage of innovation and the rapid decline of value-added services is declining rapidly in a sort of embarrassing situation. In order to ensure the healthy and orderly development of the Information Communication Technology (ICT) industry of China, liberalization of the telecommunication industry is imperative. From the development process of telecommunication industry of countries all over the world, It is apparent that the countries with more mature information and communication industries have experienced a change from government monopoly to market liberalization, within their own regulatory policies. This paper find out the problems faced by China's telecommunications industry, and give some approaches to reform.

1 INTRODUCTION

Currently, the global information and communication industry is ushering in a new wave of innovation. The pace of innovation and technology integration is accelerating rapidly. As such, the traditional telecom industry is facing a key transition from IT to DT. The telecom industry of China is facing a shortage of innovation and the rapid decline of value-added services is declining rapidly in a sort of embarrassing situation. In the development process of China's telecom industry during the last 20 years, the inherent contradiction between regulatory policies and industry development has not been resolved. (Cisco, 2012)This created a situation with limited incentives and high barriers to entry, causing the industry to be unable to nurture variety in the telecommunication ecosystem and resulting in further decrease of innovation and vitality. At the same time, Internet companies, such as Baidu, Tencent and Alibaba, are occupying the traditional value-added telecom services market quickly and further accelerating the reconstruction of China's telecom ecosystem. In order to ensure the healthy and orderly development of the Information Communication Technology (ICT) industry of China, liberalization of the telecommunication industry is imperative.

2 THE PROCESS OF OPENING THE TELECOMMUNICATIONS INDUSTRY ABROAD

2.1 The process of opening the telecommunications industry in France

The initial stage of the opening (1991-1997)
France Telecom industry realized separation between government and enterprises in 1991, Subsequently, in 1993, France Telecom was introduced joint-stock reform, The new Telecommunications Act of 1996 provides for the state-owned France Telecom's capital controls cannot be less than 51%, This means that France Telecom opening with state-controlled. Establishment of an independent telecommunications regulatory institution in 1997, At the same time, France Telecom established ‘Atlas’, ‘Global one’ with Germany and the United States respectively. In November, 23.2% of the

341

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capital of France Telecom listed in Paris and New York, the rest is held by French nation.

Completely open stage (1998-2002)

France telecom services market is completely opened in January 1998. In June, the French have 16 operator companies. France Telecom focused on the development of overseas business in this period. In 2000, the French telecommunications market growth is slow. The total debt of the biggest France Telecom operator reached 69.7 billion euros in 2002. Government abolished "the state must hold more than 50% of France Telecom shares" which was enacted in 1990. France Telecom has taken the pace of transformation, enacting 'FT Ambition2005' strategy at the end of 2002.

Strategic transformation stage（2005-2013）

In 2005, France Telecom began to transform the Group in the world of mobile, broadband, convergence services and business services to an unified brand "Orange", cancelled two well-known brands -----the original Equant (the global integrated communications strategy operators) and Wanadoo (data network operators) . Next strategy and the business transformation achieved significant success, Release Orange 2012 plan to simplify the customer experience, realize the integration that "content can be everywhere" (three-screen integration: television, computers, mobile phones). By the end of 2005 to 2006, France Telecom offers a series of new services for home and business users. New services and network business reassembled according to user needs, break the characteristics of the network technology features design by traditional operators according to the network telecommunication business.

2.2 The process of opening the telecommunications industry of British

Reforming of the British telecommunications industry can be divided into three stages.the initial stage of the reforming (1980-1983).

The early 1980s, the British postal and telecommunications unified by the British Post Office monopoly, Cable & Wireless (C & W) operate overseas telecommunications services generally. In 1981, the British government adopted the "British Telecommunications Act" which will separate the postal services and telecommunications services, established British Telecom (BT) and the Royal Mail Company (Royal Mail) respectively. In November 1981, C & W began to be privatized remould by the British Government, Mercury Communications was established by C & W of shares control. In 1982, Mercury Communications was given telecom licenses by the government, was allowed to set up a second fixed telecommunications network. Mercury Communications began to compete with BT in the UK. (Wheatley, 1986).

Duopoly competition period (1983-1991)

In 1983, officially, the British government allows only BT and Mercury Communications to build and operate rigid network and basic telecommunications services. Since then, the British telecommunications industry began a "duopoly" period of the telecommunications industry. In 1985, Cellnet and Racal-Vodafone was given a cellular mobile network operating license. The British telecommunications industry began a "duopoly" period of the mobile telecommunications industry. In 1987, the value-added data services (VADS) and international leased circuits resale business is open. Simple Resale voice services has been approved in 1989.

Perfect Competition Period (1991-present)

In 1991, the British government enacted the "Competition and Choice. "Duopoly" situation is officially over. Since then, the British domestic telecommunications market has been opened aborad. 1992-1995, 75 among 86 regional cable television network with the right to operate independently, began to operate telephone services. Since 2001, telecommunications companies are allowed to operate radio and television service all across the country. In 1993, the government began issuing public telecommunications company operating license (PTO) (More than 16 companies have issued to the national or regional license) (Tang Shoulian, 2001). The United Kingdom achieved separation of network and service through the establishment of Openreach to manage the local access lines of its parent company British Telecom (BT), which marks the end of BT's monopoly over local lines.

2.3 The process of opening the telecommunications industry of Singapore

Opening of the Singapore telecommunications industry can be divided into three stages:

Stage One：

- former Telecommunications Authority Singapore (TAS) was split into TAS, SingTel and Singapore Post.
- SingTel was privatized as an independent listed company

342

Telecommnication Services Industry Open Environment and Access Policy of China

Stage two：

- In 2000, telecommunications liberalization was completed 15 years ahead of time.
- Singapore's telecommunications market has formed operating pattern with a three major operators as well as dozens of new service operators.

Stage three:

- Singapore Telecommunications was completely open to receiving direct or indirect assets of foreign companies to reach the stage of full liberalization.
- The common feature of open foreign telecommunications

From the development process of telecommunication industry of countries all over the world, It is apparent that the countries with more mature information and communication industries have experienced a change from government monopoly to market liberalization, within their own regulatory policies. For example, while reducing entry requirements, the US utilizes its governance structure advantages to establish an effective supervision system. On one hand, the United States amended the Telecommunications Act in 1996 and 2003, which marks the beginning of full competition and liberalization.On the other hand, the regulatory system trinity of the US Federal Communications Commission (FCC), state Public Utilities Commissions and the judicial system makes regulatory matters and responsibility clear, strengthening regulatory power effectively. (Chen,1985) The UK telecommunication industry realized the liberalization "soft landing" through a two-stage reform strategy. In the first stage, the United Kingdom realizes the privatization of the telecommunication industry business through shareholding system reform, easing regulation, concession bidding, contracting, removing some telecommunication services license requirements and other measures. In the second stage, the United Kingdom achieved separation of network and service through the establishment of Openreach to manage the local access lines of its parent company British Telecom (BT), which marks the end of BT's monopoly over local lines. In 1991 France implemented the separation of government and industry, then issued the new Telecommunication Act, established independent regulatory agencies, and accelerated the privatization process of state-owned telecommunication companies to achieve the full liberalization of the French telecommunication industry in 1998. Singapore liberalized the telecommunication industry at an accelerated pace by splitting up telecommunication regulatory agencies, and lifting regulations banning private and foreign capital. However, after liberalization, while enjoying healthy development, most countries have continually faced vicious competition, new monopolies, national information security risks and other issues(Fink, 2002).

3 CHINA'S TELECOM REFORM PROCESS

Unlike other countries, the liberalization of China's telecom industry has gone through three stages. The first stage was complete monopoly. During 1984 to 1992, China's telecom industry was under a planned economy, financial resource allocation was of secondary importance, and the Ministry of Posts and Telecommunications was both the service operator and the regulatory agency, resulting in strict entry requirements and high consumer costs. Second was the limited competition stage (Lam, 2008). Since 1993, China has taken a series of measures in industry management. Firstly, China's telecom industry realized separation between government and enterprises, and the Ministry of Information Industry (later the Ministry of Industry and Information Technology) was set up to manage the telecommunication industry. Secondly, in order to strengthen regulations, China amended Telecommunication Management Regulations and Telecommunication Business Classifications multiple times, streamlining the approval process, reducing the entry threshold gradually(Yu, 2004). Business entities have been split and merged multiple times, maintaining the telecommunication industry in a competitive state. The last stage is an increased degree of liberalization. With the release of the 2015 version of the Telecommunication Business Classification, China's telecommunication industry will be further liberalized, and virtual operators and other emerging companies will grow rapidly.

4 PROBLEMS FACED BY CHINA

4.1 Policy issues

4.1.1 The main investment failed to diversify

Telecommunications services related to national sovereignty and security. It must be controlled by the State-owned. This not only limit the liberalization of the telecommunications services market, but also

343

lead to the problem of incentive incompatibility among layers of shareholders, management and employees.

4.1.2 The evaluation of telecommunications services

In DT era, the evaluation of telecommunications services by the Government consider the business benefits of the industry rather than social benefits. Li Keqiang mentioned Internet plus for 8 times in his Report on the Work of the Government 2016. which indicates that China's economic development need the Internet's role in the real economy to improve social productivity, during a long period of time from the Thirteenth Five-Year Plan till the future. However, China's telecommunications services have not met the needs of the times DT, The specific performance is to evaluate the business benefits, ignoring the multiplier effect that the communications industry as a national economic infrastructure sectors. It has not been recognized generally by society that Basic telecommunications industry service has brought social benefits, accelerated development of the Internet and increased in employment, The social consequences of managing defects make the corporate execution layer to pursue short-term benefits. In the meantime, it leads to the problems of capacity decline in enterprise innovation and the outflow of talent. Besides, communications enterprise cause the destruction of industrial ecology through reverse auction during equipment procurement which get profits from the upstream equipment manufacturers only for the sake of short-term enterprises benefits.

4.2 Business issues

4.2.1 Incentive incompatibility

Incentive incompatibility between the client (SASAC and the user) and agents. Lack of effective incentive and restraint mechanisms. There is a contradiction in the principal target, not only requires operators to keep state-owned assets growth but also required to reduce prices as well as to speed up. This is a paradox for agents.

The principal assess agents based on KPI. By consider KPI evaluation indicators and their promotion, In the final product market, agents prefer to use the method which are more familiar, simple, and effective, and which can maximize short-term benefits of enterprises with competitive prices, rather than to meet the long-term needs of wider industry market. Agents as a rational man, in this situation, is likely to choose inaction or finding another job. This means that operators will face a serious brain drain, which directly affects the development of operators

4.2.2 Competitive capacity

Although external competition between operators is highly competitive, mechanism of competition does not transfer to the enterprise to form effective competitive capacity. Superficially , Competition is fierce between operator. Operators did not create an effective Encouragement and Restriction mechanism of competition inside.operators enterprise's internal incentives have a series of problems, such as Salary system leads to a serious brain drain, Constraint mechanisms leading employees' rent-seeking or inaction,Internal processes complex and fixed mechanism which is difficult to respond quickly to customer needs and market changes. Operators can not deal with the impact from Internet companies effectively.

5. APPROACHES TO REFORM

5.1 Networks and services are separated as soon as possible

With the application and development of the Internet Web1.0 and Web2.0 technology, Network Services is showing features as 'decentralized, autonomous, platform'. This feature results directly in tendency that telecommunications business and network services are to be separated. Solve the problem of information security and network development, access and deregulation, state-owned enterprises benefit the public benefits, which has been exist on the Chinese telecommunications industry reform and opening up the strategic issues

5.2 Three network integration

Accelerate the process of three network integration, To break the limit between telecommunications networks, computer networks and cable television networks, these three categories of companies were allowed to enter each other's market mutually. Conversion of funds between the three networks, the industrial structure is adjusted. Development of the telecommunications industry has been further promoted.

344

Telecommnication Services Industry Open Environment and Access Policy of China

5.3 Policy Adjustment

Not too much government intervention in the market.Government's assessment of economic performance combined with assessment of both KPI assessment and social performance; Design a new system makes the government, consumers, businesses incentive compatibility.

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345