

**VALUE ADDED SERVICES POLICY REFORM IN CHINA: LESSONS FOR --
AND FROM -- THE U.S. IN MANAGING AN EVOLVING MARKET**

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Abstract

During the past year, China's Value Added Services ("VAS") industry has experienced large scale administrative reform, in which, based on the complaints of hundreds of customers about misleading practices, unfair pricing, inappropriate content and illegal behavior, many companies received administrative punishment from the Ministry of Information Industries ("MII"), acting as telecommunications supervisor, and had their contracts terminated by the basic telecommunications carriers. These corrective actions have, for a time, re-normalized the market; however, the VAS regulatory framework, and especially its shortcomings, has attracted widespread attention. This has led to the need for the development of a new policy better suited to changing circumstances and the evolving marketplace. With respect to such a policy, China and the U.S. can learn from each other. The key questions addressed by this paper in this regard are set forth below.

China's VAS existing regulatory policy is actually a dual structure, in which the MII is only the nominal regulator and the basic telecommunications operators (equivalent to the U.S. incumbent local exchange carriers) have *de facto* both business and supervisory authority. The MII is limited both by the absence of an effective supervisory

mechanism and by the absence of an unambiguous and explicit regulatory authority. This causes difficulties in the operation of the regulatory mechanism as well as with the healthy functioning of competition and collaboration in the VAS market.

Under Chinese law, the basic telecom carriers are supposed to be equal partners with VAS providers, but in the business reality, they have so much power as to be able to make the rules and punish or control VAS providers at their pleasure and for their benefit. This paper shows the likely failure of the current regulatory framework in the context of the evolving Chinese VAS market.

Using the existing situation as a foundation for seeking a new policy, this paper surveys the overall regulatory environment and VAS market in China, and how it is adapting (or not) to new services, especially those offered over broadband/Internet networks. The relationship between VAS providers and regulation is critically analyzed. The example of the U.S. will be presented by way of comparison, with an emphasis on strengths and weaknesses, challenges, and options. The comparison will make use of an integrative framework that considers the forces of policy, technology and markets. In addition, the notion of industry self-regulation is considered.

This paper addresses several important policy issues: the recognition of challenges of the evolving VAS market; the role of regulation in relation to VAS; the role of, and potential for, industry self-regulation; the relationship of carriers to regulators regarding VAS; the balance of power between VAS services and carriers; the future health of the Chinese VAS industry, and its importance as a model outside the U.S. In conclusion, recommendations are made for a modern approach to regulation of VAS in China, and a parallel is drawn with the debate over “Network Neutrality” in the U.S. which suggests that the U.S. could learn from the Chinese experience.

1.0 INTRODUCTION

1.1 The VAS Challenge to China and the U.S.

China and the U.S. are both dealing with the emergence of Value Added Services (“VAS”) as the primary source of both revenues and profitability in the telecommunications value chain. Traditional carriers are determined to capture some of this value, as the margins of their traditional transmission businesses erode. This manifests itself in China in the struggle over the dominance of national operators over third-party VAS providers, and in the U.S., as the debate referred to as “Network Neutrality,” *i.e.*, whether or not U.S. dominant incumbent carriers can share (directly or indirectly) in third-party VAS revenues.

This paper primarily reviews the status of that discussion in China with respect to the market and regulation. At present, the VAS market in China is in disarray, with minimal regulation, which has resulted in a variety of consumer abuses, and in the

effective regulation of VAS entities being shifted largely to the carriers, which are also in many cases their competitors. The telecommunications value chain is shifting and shortening in favor of the carriers, while regulators assess how to restore a proper balance. Reference is then made to the situation in the U.S., and comparisons are drawn, with recommendations.

1.2 Definition of “Value Added Services

In its simplest and broadest terms, a “value-added service” is a telecommunications industry term for non-core services or, in short, all services beyond the standard voice call service offering (“basic service”). On a conceptual level, value-added services *add value* to the standard service offering. In that respect, they are innumerable, from text messaging to television to location-based services, with new ones being added everyday. VAS are coming to overwhelm traditional voice telephony. VAS typically show the following characteristics:

- Not a form of basic service but rather adds value to the total service offering
- Stand alone in terms of profitability and/or stimulate incremental demand for core service(s)
- Can sometimes stand alone operationally
- Do not cannibalize basic service unless clearly favorable
- Can be an add-on to basic service, and as such, may be sold at a premium price
- May provide operational and/or administrative synergies between or among other services – not merely for diversification

(MobileIn, 2007)

VAS also have a certain time dimension associated with them; a value-added service today can become a basic service when it becomes sufficiently commonplace and widely deployed such that it no longer provide substantive differentiation on a relative basis, *i.e.*, the great majority of users have it.

1.3 Relationship to other Services

There are two types of VAS. The first type includes those value-added services that stand alone from an operational perspective. These types of services need not be coupled with other services, but they can be. Many non-voice services fall into this category. They are often provided as an optional service along with voice services, but they could be offered and used by themselves without the voice service. For example, SMS could be offered and used as a service without voice calling.

The second are those services that do not stand-alone. Instead, this category adds value to existing services. While it seems implicit in the definition of value-added, this is an important principle that makes value-added services stand apart from other services. (http://www.mobilein.com/what_is_a_VAS.htm/)

2.0 VAS IN CHINA

2.1 China's Market Opening Under the WTO

In most developed countries, the VAS market is already open, and regulatory bodies exercise relatively relaxed management of value-added services. In general, operators can, subject to certain conditions, obtain a license from regulatory agencies to develop a service. This liberal approach provides a favorable environment for the development of VAS. In addition to a relaxed regulatory environment, related policies and laws of many countries provides for a fair competitive environment for the VAS market.

Since China's opening of its value-added telecommunications service market in 1993, following its entry into the WTO, the VAS market has steadily grown in scale and scope of services. Among current VAS, information services occupy the leading position. With the value-added telecommunications market gradually opening up, investment in value-added telecommunications has diversified, major applications have continuously expanded, and the market has attracted a large number of domestic state-owned and private enterprises, as well as foreign investors. ("Promote", 2005)

2.2 The Importance of Value Added Services in China

In recent years, the role of value-added services has become increasingly important to basic operators (mobile and wireline), carrying with it a transformational goal for them to move from being a communications service provider to becoming an integrated information service provider. ("Leader", 2007)

China's Academy of Telecommunications Information's research reports that from 2002 to 2006, China's value-added telecom services market maintained over 30% annual growth. Since the beginning of 2005, operating income exceeded 100 billion Yuan, and in 2006 about 150 billion Yuan. According to some forecasts, in 2007 China's value-added telecom services market will maintain its forward momentum, but the growth rate will slow down. By the end of 2007, China's value-added telecommunications services market is expected to be close to 200 billion Yuan. ("Leader", 2007)

With respect to the largest mobile operator, in August, 2007 China Mobile Ltd. reported a 25% rise in its first-half net profit, driven by growth in revenue from value-added services and an increase in subscribers. China Mobile said net profit jumped to 37.9 billion yuan (\$5 billion) from 30.2 billion yuan a year earlier, while revenue rose 22% to 166.6 billion yuan from 136.98 billion yuan. Revenue from China Mobile's value-added business grew 36% to 41.92 billion yuan in the first half. Value-added services include mobile music, news and information services and the company's instant-messaging service. It accounted for 25% of the company's total revenue, 2.6 percentage points higher than in the year-earlier period. (Luk, 2007)

At the end of June, China Mobile's subscribers -- including prepaid and contract users -- totaled 332.4 million, up from 274 million a year earlier. Average revenue per user per month was flat at 88 yuan. (Luk, 2007) Revenues from China's use of text messaging, ring-tones, music downloads and games is projected to grow almost 50 percent in the next three years, generating US\$11.5bn by 2010. (Burns, 2007)

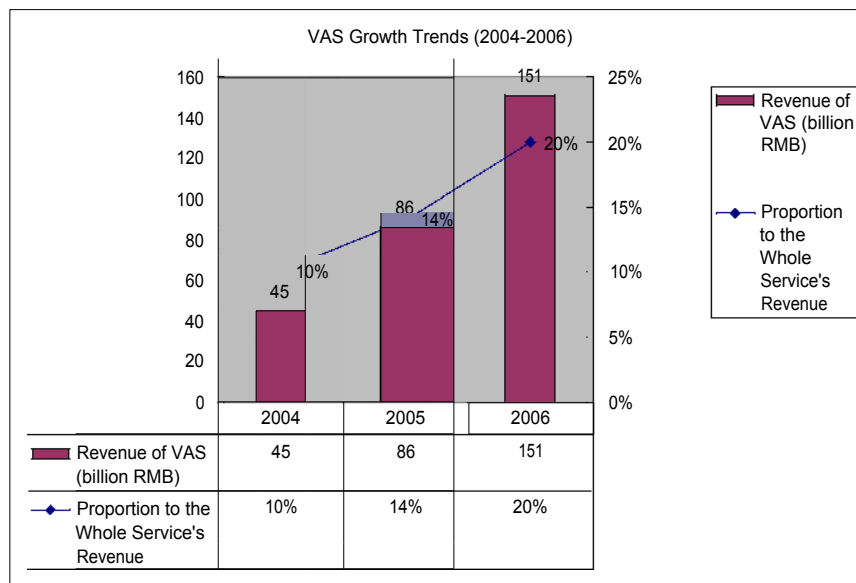


Figure 1. Value Added Service Growth Trends (2004-2006)

(Cheng, 2006)

The characteristics of the regional imbalance in VAS development have determined that the government guidance will be needed in this regard in the future. It is understood that Beijing, Guangdong and Shanghai, three main cities of the country, have around 50% of the value-added telecommunications service operators in the country. More than 81.8% of trans-regional mobile information service providers are in Beijing, Guangdong and Shanghai, while less than 3.9% are in 10 western provinces. Western China's value-added service income is less than one tenth of the national average income. This reflects the relations between economic development and the entire value-added telecom industry, and also shows that the western provinces which are pending development are a huge potential market. In the process of enterprise restructuring and the development of value-added services, the government needs to give more attention to enterprises in the western region and adopt specific policies to guide them. (Wu, 2007)

2.3 Key Enablers of Value Added Services and Stand-Alone Services

VAS can be applications, services, products, information, or various hybrids. They can, in many cases, be distinguished from the platforms on which they are delivered. Some services are so robust that they can be considered a business in themselves, such as

VoIP and IPTV. Ironically, traditional voice-only service may someday become just one more value-added service riding on a broadband platform. And delivery of audio and video over the Internet may substitute for, and in some cases replace, traditional broadcast and multi-channel video (cable, satellite, IPTV) services. Currently, VAS offered over mobile platforms are dominant in China, and they can only be expected to expand into additional areas as China implements a 3G mobile platform.

2.3.1 Mobile Services

Currently, among wireless value-added services and fixed value-added services, the most popular service is SMS. In addition, picture and ring tone download and mobile games are increasingly popular. However, for these value-added services, no matter how good the product is, it has a life cycle, and continued development focuses on personalized information and entertainment products.

Currently, mobile value-added service revenue is the primary source of China's various types of VAS revenue. According to the forecast of the Academy of Telecommunications Information, in 2007 mobile value-added service revenues will reach about 88 billion Yuan; SMS for a period of time will be the main source; MMS and WAP are showing development trends; and the future market potential of mobile music, cell phone games, mobile newspapers and mobile phone payments is favorable. In the first quarter of 2007, the key players in the value chain of mobile value-added services, service providers, continued to "downsize". ("Leader", 2007) This is the result of measures taken to regulate the mobile value-added services market (discussed further below).

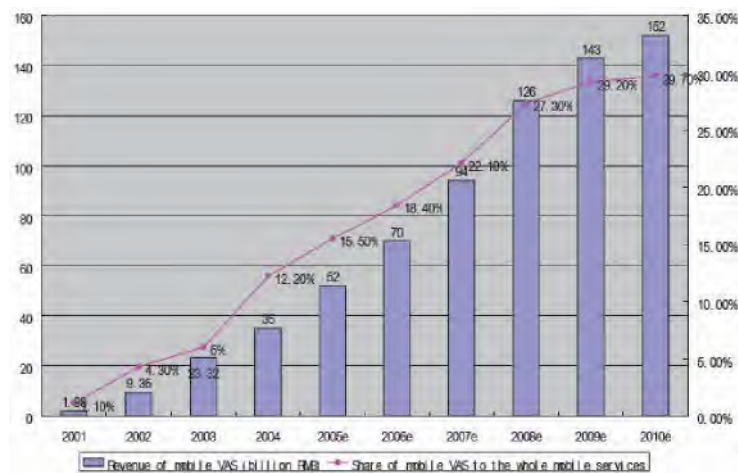
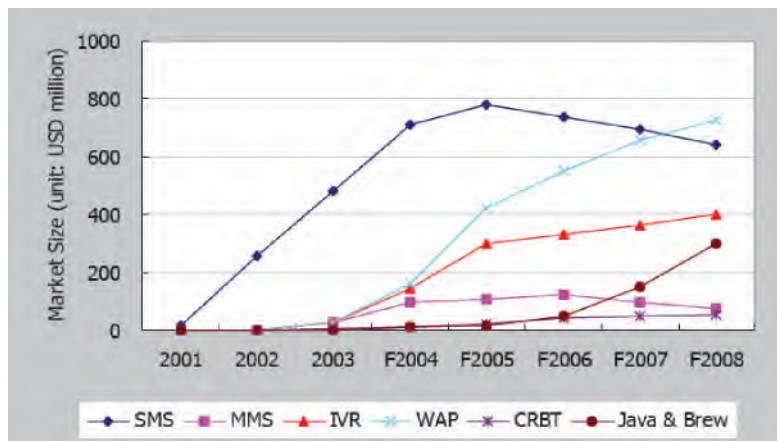


Figure 2. The Mobile VAS Market in China
Source: VASC report 2005

(Cheng, 2006)

Media are becoming an important direction of growth for mobile VAS. Along with newspapers, radio, television, and the Internet, cell phones appear ready to become the fifth medium, based on the richness of mobile value-added applications. (“Leader”, 2007) China Mobile, for example, is promoting a range of media-based mobile value-added services, such as mobile news, mobile magazines, mobile phone literature, mobile advertising, and so on. Rich content is a major feature of mobile value-added applications. Such applications focus on content, or on interactions, such as music, video, cartoons, entertainment information, and chatting with friends. Another notable feature of mobile value-added applications is the large-scale of some of them. China's mobile communication subscribers exceed 500 million and all these customers are potential users of mobile value-added services, while the penetration rate of mobile value-added service is only about 30%, so there is a great potential for development. (“Leader”, 2007)

The success of mobile VAS depends on three key elements. First, interaction, to attract users; second, a unique attribute that traditional service has not provided; and third, some objective value or benefit for users. Interactive applications of mobile value-added services currently include services with interaction between machine and man, such as WAP, information push applications, the BBS, ring tones and other customized applications, and service with interaction between persons, such as SMS, online games, instant messaging, blogs, and podcasting applications. Mobile, with its attributes of anywhere at any moment, positioning, portability and functional integration with the terminal, has some significant advantages compared to traditional service. (“Leader”, 2007)



(Note: SP revenues exclude P2P messaging and operator transport fees.)

Figure 3. Service Provider MVAS Revenue Forecast by Product Line 2001-2008
Source: Norson

2.3.2 Broadband Capability and the Internet

In the future, the popularity of broadband access and continuous development of core technology will provide a powerful market force for delivering streaming media

services, and will be widely used in all aspects of Internet information services, such as Internet multimedia news releases, online broadcasting, online advertising, e-commerce, video-on-demand, tele-education, tele-medicine, video conferences, and so on. (Wu, 2007)

2.3.3 VoIP and IPTV

Two significant value-added applications which so resemble traditional applications they are typically addressed as “stand alone” services are Voice Over Internet Protocol (VoIP) and Internet Protocol TV (IPTV). The former refers to voice-only applications which ride on top of a broadband Internet connection, creating a potential substitute for traditional voice telephony. The most visible forms of this service are offered by third-party entities not associated with traditional carriers, although there is no technical reason traditional carriers could not offer a similar service. IPTV is primarily known as a video service offered by incumbent landline carriers to compete in the multi-channel video arena, using their own copper and/or fiber optic lines for broadband delivery. This is a proprietary service, owned and managed by the carrier on a basis similar to cable and satellite TV, and is not open to third parties. However, given the rapid growth of access to video (TV shows, movies and user-created content) directly over the Internet (wired and mobile), the economic model of IPTV could come under some stress.

2.3.4 Content and Applications

Future value-added service areas will be from where “Copyright is the king” or “king content”. Information products with copyrights are increasing in importance, and show a high profit potential. The traditional music industry, the publishing industry, film and TV industries are very likely to become the next wave of mainstream content providers. (“Promote”, 2005)

2.3.5 Videogames/Virtual Worlds

On-line videogames and virtual worlds are extremely popular in Asia, even more so than in the U.S., are services that have seen very strong growth in Korea and Japan. As China’s 3G network becomes established, it is expected that there will be a similar interest, and videogames/virtual worlds will be a substantial driver of traffic and usage. These are, in most cases, the products of non-carrier third parties (although in the U.S., some traditional carriers such as Verizon have expressed an interest in making inroads into that business as well)

2.3.6 Location Based Services

As terrestrial networks, particularly mobile networks, become integrated with GPS technologies, there is expected to be a surge of interest in GPS enabled location-based services for any number of commercial and personal applications.

2.3.7 Emerging Services

In the coming years, as wireline and mobile broadband become more ubiquitous, there are expected to be a number of additional services, such as multimedia messaging, videophone, interactive voice response, person-to-machine, machine-to-machine, streaming media, etc. It is important to the future of the incumbent carriers to be in a position to be able to offer, to have some control over, and to be able to profit from, these services.

3.0 THE VAS VALUE CHAIN AND THE ROLE OF INCUMBENTS

3.1 Incumbents Use of Leverage

As value-added businesses increase, multiply and diversify, the traditional telecommunications value chain has undergone a gradual change to the vertical, with links in the value chain having extensions up and/or downstream. In this process, the boundaries between the upper and lower areas become blurred, and competition among enterprises becomes more complex, with various cross-pool chains, forming a complex ecology.

The current VAS value chain is extremely fragile. Basic telecom operators, with control of the underlying distribution facilities, are able to control the entire chain, facilitated by the lack of a transparent regulatory regime and an open competitive environment. (“Promote”, 2007) Basic operators can suppress the entry of VAS operators to avoid competition. The introduction of new services is slowed by the lack of cooperation by service providers from the operators and even terminal manufacturers. Because competition is not able to fully operate in this market, and driven by transition pressures, basic services operators have started expansion up the value chain, further strengthening their control of strategic services, which has diminished the enthusiasm of service providers for innovation, resulting in the functional decline of value chain. Under these circumstances, under intense pressure, and driven by economic interests, some value-added enterprises have exhibited rule-breaking behavior. **By doing so, the offenders have impaired both long-term development and the interests of legitimate enterprises, affecting the VAS industry’s healthy growth.**

As China's VAS market has developed rapidly, governmental regulatory departments, basic and value-added operators have made a lot of progress, but there are still problems, among them service homogenization competition. Although there are more than 10,000 VAS providers, the differences between most of them, especially those offering SMS (over 60% of all mobile VAS revenue), is small. (Wu, 2007) The market space for operators offering other services is limited, and full of difficulties.

Since basic telecom service operators are able to vertically control value-added service operators, they effectively have monopoly status. Meanwhile, these same basic operators take part in offering VAS, taking advantage of the use of their resources for unfair competition, which permits them to engage in what is perceived to be a certain

degree of abuse of market power. This directly impacts the normal market order of value-added telecommunications services. (“Promote”, 2005)

By and large, China’s governmental authorities have not directly intervened in value-added telecommunications in the daily conduct of operations, so the basic telecom operators have been acting in the *de facto* role of manager of value-added service providers, and directly control their survival. It has been suggested that in order to realize fair competition between value-added enterprises and basic telecom operators, and to prevent basic telecom operators from squeezing out the value-added enterprises, it will require standardizing the market behavior of the basic operators. (“Promote”, 2005)

Since China's value-added service operators mostly deploy their businesses based on a particular infrastructure operator's network, the infrastructure operator's management of the service provider is very important. (“Promote”, 2005) During the preceding year, all the basic operators strengthened their management of service providers. For example, in February, Chongqing Telecom under the China Telecom Group punished a group of offending service providers, which set a precedent for other branches. Chongqing Telecom's penalties involved a total of 11 service providers, with up to a maximum fine of 50,000 Yuan.

Operators of VAS services are dependent on telecommunications operators who wish to assume the role of integrated information services providers. Currently, China's telecom operators are actively exploring this area, seeking opportunities for new development directions and strategy issues. Through the telecom operators' constant exploration, innovation and the constant introduction of new services, value-added services' role for basic telecom operators has become more visible. As mobile value-added services move to become China's telecom carriers' market leader, their development has attracted much attention. Value-added telecom service's role has become increasingly important for the basic operators. In 2006, basic operator's value-added service revenue exceeded 100 billion Yuan. It is expected to exceed 150 billion Yuan in 2007.

3.2 Foreign Investment in VAS

Foreign-funded enterprises entering the Chinese market are concentrated in the area of value-added services and the mobile Internet field. According to China's WTO commitment, value-added services open to foreign companies are:

- Electronic mail
- Voice mail
- On-line information and database retrieval
- Electronic data interchange
- Enhanced/Value-added facsimile services (including store and forward, store and retrieve)
- Code and protocol conversion
- On-line information and/or data processing (including transaction processing)

There have been continuing objections from some in the U.S. community that China has not fully lived up to the letter and spirit of its agreement, and has in some cases even taken steps backwards with respect to foreign investment in VAS (U.S. Council, 2007)

3.2.1 From value added services: emerging partnerships

Foreign enterprises wishing to enter the VAS market in China must do so with a Chinese partner. There are administrative regulations for foreign enterprises investing in telecom enterprises. According to Regulation 333 of the State Council, there are two steps to invest in telecom service in China:

Step 1. The foreign company must obtain an approval as a foreign investment company

Step 2. (Only after step 1) The primary local partner can apply for the license (Note: The lower bound of the register capital and the upper bound of the shares of foreign companies are specified in this regulation)

3.3 Industry Associations

In other countries, in the area of value-added telecom services, there are many spontaneously formed trade associations, such as Internet Industry associations and SMS industry associations. Such trade associations play the role of promoting and supporting regulation in many aspects, *e.g.*, offering guidelines to standardize VAS operators' market behavior, providing timely feedback on the development of industry trends, and addressing users' problems. In the value-added business, due to governmental restraint on regulation, industry trade associations are needed to play a greater role, to promote the establishment of enterprise self-discipline and to fully mobilize the effective resources and energies of enterprises.

In recent years, various domestic associations related to value-added services have developed in China, and most provinces and cities have similar associations. For example, Heilongjiang has established the "telecommunications information services Committee of Internet Association of Heilongjiang Province", which consists of more than 150 telecom business units within the province. The more than 150 members have signed a "self-discipline common agreement of telecommunications information service enterprises in the province". This indicates that telecommunications information services, such as SMS, will operate under the conditions of the group's common self-discipline. The industry associations are expected to play an active role, and work together with the government to maintain the value-added services market in good order.

3.4 Services Integration

Integrated wireline/mobile services can best meet users' needs for high quality communications and applications. Currently, most telecommunications users enjoy both

mobile and fixed services, but each type has some deficiencies and limitations. Users want to avoid these limitations, and integrated services will integrate the two networks' advantages, with the ability to provide users a single, more comprehensive and efficient telecommunications service. In China, integrated services are still in its infancy. As technology advances and future 3G services become available, there more integrated services will be emerging. (IDC, 2006)

More importantly, basic services operators are optimistic about integrated services, and want to promote their development. For basic operators, providing VAS brings not only revenue, but a preferred position with respect to offering integrated information services. ("Promote", 2005) As the proportion of revenue income of value-added telecom services to basic operators has risen, its position has become increasingly important. Second, the voice-income ratio has been shrinking, and "voice" appears on its way to becoming a "value-added" service in a future integrated information service system. Since the most profitable service models of some Internet and mobile value-added service are relatively mature, or show potential for further development, infrastructure operators are working to increase service development and marketing efforts for these operations. As they do so, operators are gradually strengthening their control of the value-added services industry chain.

Currently, with the trend towards integration of the communications industry and the media industry, operators and the media are all moving in the direction of restructuring to become VAS service providers, and as this occurs, the survival space for independent third-party VAS providers is becoming compressed. On one hand, a service provider can be sustained only when it maintains the core competitiveness necessary for its survival in technology, content, and channels. On the other hand, government departments need to take full account of current industry restructuring trends, planning ahead of the industry chain, to coordinate development. Attention needs to be paid to the operators' position of strength in the industrial chain and the VAS enterprises' disadvantages. Guidance and norms need to be provided and carried out in a timely way, so as to promote the health of the whole industry along with its orderly development.

Future VAS developments need to utilize the synergies of the whole industry chain. In that case, adopting a "win-win cooperation" model is very important. ("Promote", 2005) For example, the IPTV industry chain can be generally divided into three levels: programming (content), network operations, and equipment such as hardware and software. China's TV belongs to the sphere of influence of the broadcasting system (SARFT), while IP service are in the telecommunications field (MII). Regarding the broadcasting system and the telecommunications system based on the allocation of resources, each has its own advantages and disadvantages. The IPTV industry's development needs both the broadcasting and telecommunications system to interact. Both sides need to operate in each other's area of the industry in order to play an active supplementary role in promoting healthy and rapid development of the market.

Infrastructure operators are accelerating the transition towards becoming integrated information services operators. Experts generally agree that the trial of IPTV

by several major operators shows their confidence in the transition to "modern integrated information service providers", and such competition between traditional broadcasting systems and telecommunications operators speeds up the process of integration. It also means that Chinese operators of infrastructure services have conceptually broken from the past provision of channels through a single network to involvement in a variety of interactive services and the provision of content. The situation is well summarized by the following:

“China's National Development & Reform Commission (NDRC) believes that a fundamental restructuring of the nation's telecom industry is essential to promote the long-term growth of the country's fixed and wireless core communications networks. Because of this, the Chinese government is offering 3G licenses to the four state-owned telcos - China Mobile, China Unicom, China Telecom and China Netcom - as incentives if they are willing to accept reforms . . .”

"The NDRC and the Ministry of Information Industry (MII) want China Telecom and China Netcom to offer both fixed-line and wireless services so consumers will have more of a choice," said Kevin Wang, analyst with iSuppli's China Research service. "Government regulators recognize that Fixed-Mobile Convergence (FMC) based on Internet Protocol Multimedia Subsystems (IMSs) is the new trend in the telecom industry. Thus, they are willing to use 3G licenses in exchange for a fundamental change in China's telecom industry."

iSuppli believes that China's core fixed and wireless networks all are transitioning to Internet Protocol (IP)-based Next-Generation Networks (NGNs). Furthermore, increasing numbers of media gateways and servers will allow China's telecom networks to deploy advanced support services, video content distribution and online gaming. By offering this improved multimedia capacity, operators can more easily introduce new value-added services that in turn will generate more revenue for the state-operated companies. Mobile handsets in China also will have to incorporate more advanced multimedia capabilities and open operating systems.

iSuppli believes that a key revenue driver in China will come from the applications that will be enabled by 3G. Chinese consumers will be able to access the Internet, download music, stream Internet video, use mobile mailboxes, pay bills online and engage in mobile blogging and interactive 3D gaming-all through their mobile phones. This expansion of the value-added services to the telecom industry in China will infuse the country with new revenues coming from domestic consumers.

(“Government Drives”, 2007)

4.0 ABUSES IN CHINA’S VALUE ADDED SERVICES MARKET

In recent years, China's value-added telecommunications services market's prosperity and development have played an active role in meeting consumer demand and promoting the development of VAS industries, but there are still individual companies which deploy their business activities through false advertising, deception or untrue inducements, price fraud and other illegal means or methods, maliciously violating the rights and interests of consumers, and detrimental to the healthy development of the VAS industry. To address concerns of users, to safeguard consumer rights and interests, and to create a safe environment for the sustained development of VAS, the Ministry of Information Industries decided that, from June to December 2006, it would concentrate its efforts on the treatment of mobile VAS charges and fees.

The goal of was to crack down on price violations, to research and improve management measures, to enhance trust in the mobile information services market, to promote business practices according to law, to shape a long-term regulatory price supervisory mechanism, and to encourage enterprise self-discipline and social supervision. Its work has focused on the regulation of such abuses of consumers as false advertising, price fraud, deceit or forced consumption, and fee deductions, and on increasing the power of norms and enforcement in the SMS business, with a campaign using radio, television, newspapers, the Internet and other media.

A large number of illegal operations exist in the market. There are a number of operators which do not have a strong sense of operating according to the law, misleading consumers, and spreading harmful information. There has also been a lot of business done outside scope of, and in violation of the rules, such as price fraud and other problems, harming consumers. The MII issued annual rectification notices to 102 value-added telecom enterprises regarding the existence of such rule-breaking behaviors. (MII, "Rectification", 2006)

In 2005, in accordance with annual inspection arrangements on telecom operating licenses, the MII opened a review focused on business issues contrary to the interests of consumers. The 102 trans-regional value-added telecom enterprises, which were operating in 2005 with the above problems, were included in the second batch of rectification orders, ordering compliance with laws by a deadline; failure to comply by the deadline resulted in their operating licenses being withdrawn and cancelled. (MII, "Rectification", 2006) On May 23rd and 26th, 2006, the MII held separate thematic meetings with the leadership of the major basic telecom companies and provincial Communications Authorities, on standardizing fees, charges and behavior for mobile information services. ("Leader", 2007)

The activities were divided into five areas:

1. From June to August 2006, every Communications Authority was to ascertain the situation of all mobile information service enterprises and related basic telecommunications enterprises, and needed to self-check and self-correct;

2. From July to August 2006, the Telecom Regulatory Authority was to study and improve related policy measures and regulatory means, and the telecom enterprises needed to thoroughly implement the regulations, improve technology management tools, and smooth dispute resolution channels;

3. From September 2006 to November, all levels of telecommunications regulatory bodies needed to organize special inspections;

4. In December of 2006, there would be a brief summary;

5. From the beginning to the end, all elements needed to strengthen advocacy and flows through channels reporting on the events for users.

(MII, "Deployment", 2006)

These special activities set up a special events leading group, with the Ministry's leadership at the head, formed of related departments and bureaus in the Ministry, the Communication Enterprises Association, Internet Association, and some leadership of telecom infrastructure enterprises, and set up a working office taking charge of special activities. The Communications Authority and telecommunications enterprises are required to regularly report on progress. To assure violations will be punished in the future, enterprises will combine to promote good practices in the industry, to seek experience, and to lay the foundations to establish a long-term monitoring mechanism for telecommunications charges. (MII, "Deployment", 2006)

From August to September 2006, China Mobile, through its provincial branches, will send text messages to remind customers who have ordered SMS, MMS, and WAP portal type services, informing them of the service types and charges for the VAS services they have ordered. For customers of mobile value-added services who have not responded and confirmed the reminder messages, some of China Mobile's provincial branches have begun to terminate the charges of these users monthly fees. ("Notice", 2006)

In addition, the provincial branch of China Mobile will clean up WAP portals with no activity within four months, silent customers, and customized customers who downlink SMS not more than three messages per month. Other mobile operators may also release their response to the Ministry's. ("Notice", 2006)

5.0 CHINA'S VAS REGULATORY POLICIES

5.1 Role of the Ministry of Information Industries

While the value-added telecommunications market continues to develop, the government regulatory system has been initially established, led by the Ministry of Information Industries, taking "Telecommunications Regulations" as its legal basis. China's telecommunications regulatory regime is established on the basis of basic

telecommunication services as the main regulatory object. As the regulatory environment and targets change, future telecommunications regulation will get major changes, and industrial chain management and research have been put on the agenda. (Wu, 2007)

Starting in early 2004, the MII began to enhance its regulation of the VAS₁ market. In April 2004 and February 2005 it issued two special administrative treatments, and released "Telecommunication Services Rules" on March 13, 2005, to enact administrative orders on basic issues of telecommunication services. Prior to this, in 2001, 2002 and 2003, the MII had respectively established the "Notice System of Quality of Service of Telecommunication Business", "License system of telecommunication services operation", and "management system of telecommunications service codes".³ From 2005 onwards, the focus of VAS regulation has shifted to the service providers' qualifications and operations supervision, regarding which the MII mainly adopted annual inspections to eliminate unqualified service providers and made them take corrective measures. Meanwhile, the MII's administration of service quality gradually shifted to technical standards. An important initiative was in July 2006, when it released the "Notice of MII on adjustment and harmonization of short message services access code" to adjust and unify SMS and other services' access code. From the last half of 2006 into 2007, the MII also launched clean-up activities in the market, with a focus on enforcing the administrative laws, and regulating market order.⁴

The relevant administrative structure of the MII related to VAS includes:

Telecoms Administration Bureau of MII (and Local Telecoms Administration Bureau)

1. Development Planning Division

¹ Namely, "Announcement of MII on the issues of SMS" (MII [2004]381, released on April 15, 2004) and "the guiding opinion on the present hot questions of telecommunication services regulation" (MII[2005]54, released on February 8,2005). The former brings forward specific requirements on the following aspects: SMS market admittance, service promotion, subscriptions, service providing, subscription abortion, billing vitrification, management of customers' complaints, punishment on irregularities, etc. The latter mainly aims at the widely concerned problems of "inequity service agreement", "consuming trap", "cancellation of telecom card' balance" and put forward its opinions.

² MII order 36#, put in force on April 20, 2005. The "criterion" involves 8 adjuncts, which were separately specific requirements on the following services: Fixed lines' Local call and distant call service, Digital cell mobile service, Internet and other data services, Domestic IP phone service, Wireless paging service, Information service, Domestic VAST service, Domestic telecommunications infrastructure service.

³ "Notice System of Quality of Service of Telecommunication Business" was issued by MII on February 14,2001; "License system of telecommunication services operation (MII order 19# , issued on December 26, 2001 and put in force on January 1, 2002)" has 4 adjuncts "Use rules of telecommunication service license", "telecommunication service operators' Rights and obligations", "Specific rules", "license annual inspection note", and "management system of telecommunications service codes" (MII order 28#, put in force on March 1, 2003). What is noteworthy is that the latter two rules are for basic services.

⁴ Examples of MII's recent announcement on VAS regulation:

The notice released on the second list of "qualified" enterprises for annual (2006) inspection of operating license of trans-regional value-added telecommunications service (including 605 companies) (2007-08-15)

The Bulletin on the management of SP irregularities fees (2007 No. 2) (2007-08-08)

The notice released on the first list of "qualified" enterprises for annual (2006) inspection of operating license of trans-regional value-added telecommunications service (including 472 companies) (2007-08-06)

The Bulletin on the management of SP irregularities fees (2007 No. 1) (2007-05-21)

The notices of The Ministry of Information Industry on write-off license of trans-regional value-added telecommunications service of 18 companies (2007-04-13)

2. Network Communication Division
3. Interconnections Management Division
4. Market Management Division
5. Devices License Management Division
6. Quality supervision Division
7. Administrative Office

Overall Planning Department of MII

1. Foreign Economic and Trade Cooperation Division
2. Others

(Cheng, 2006)

5.2 The Current Situation in the VAS Market

In the near future, value-added telecom services will permeate all sectors of society and be integral to people's daily lives. They will also serve as an important tool to promote political, economic, social and cultural development. At present, VAS are mainly integrated with telecoms, media and other industries; in the future, VAS will ultimately be integrated with other services, opening up a vast ocean of information. Basic telecom operators are actively seeking the opportunity to develop their own VAS, while playing the role of integrated information service provider. ("Leader", 2007)

In connection with circuit rental fees for VAS providers, China is currently implementing a "government guidance price." China has twice lowered the circuit rental fees, and each time has seen a positive effect. Currently in the market, with independent price negotiations, prices are generally lower than the government guidance price. The access price is an important cost of the project for many value-added service providers. It is estimated to come to about 5% to 40% of their operating income. In certain service areas, access prices have become one of the most important factors used to squeeze the margins of other value-added services enterprises. Access networks are dominated by basic operators, so it is effectively a monopoly market. They have no incentive to take the initiative to reduce circuit charges. Therefore, the government should consider appropriately reducing access fees for VAS to improve market development. ("Promote", 2005)

One of the primary characteristics of integrated communication, which is different from traditional telecommunications, is the organic integration of transmission and content. The original "operator-users" service model has been broken, the industrial chain elongated, and content providers and system integrators have been introduced into the VAS industrial chain. However, to regulate the information and communications industry, one can not simply copy the original traditional telecommunications regulatory regime, and a new policy must be oriented both to the upstream and downstream production chain, including operators at the core, equipment manufacturing, and information services industry. While it is appropriate to support telecommunications

operators in transition, it is also necessary to protect VAS operators in downstream industries, to avoid having basic telecom companies squeeze the VAS industrial chain in the transformation process, impeding the entire information services industry from becoming bigger and stronger.

Now information services have increased the number of intermediate links. Only when operators (including virtual operators), terminal and other service providers are all in a position to share in the markets profits, can the value chain survive. Therefore, developing a policy to guide jointly developed downstream chains is another critical factor for successful communications regulatory restructuring. **Learning from international experience, combining communications industry conditions, regulatory coordination of industry downstream chains are needed to reach the multiple goals of coordinating the upstream and downstream industries interests of all parties, reducing the costs of new technologies of distribution, enhancing consumer welfare, and increasing the value of state-owned assets.**

So far, industry managers need to guide and regulate the vertical reconstruction of upstream and downstream industry chains led by telecommunications operators, to even-handedly promote the relationships between telecom operators and value-added telecommunications enterprises, particularly SMEs, and to enable harmonious and coordinated development.

The development of the Internet, broadband, and digital content industries makes the telecommunications industry chain even more extended, with more members joining the cooperative system, including applications, content providers, systems integrators, software developers, etc. Upstream and downstream industries must establish cooperative mechanisms to create win-win and multi win-win situations. Due to ever-more complicated, clustered and integrated telecommunications technologies, single enterprise innovations face many challenges of high risks and large investments. During corporate restructuring, in order to avoid risks, inter-enterprise cooperation becomes an effective development model. Encouraging cooperation, the government could lead, guide or sparkplug enterprises to promote various forms of cooperation, resource sharing, and complementary activities, to reduce enterprise transition risks. (Wu, 2007)

On April 25, 2007, an event called the 'EU-China VAS Seminar' was held. According to one report:

(1) The main reason why foreign VAS providers do not enter the market might actually not be MII regulations but rather operators' content policies - effectively acting as secondary regulators

(2) Another reason could be that foreign companies are largely risk-averse (especially when they are publicly listed) and do not want to face any political or business risk, especially when the limit between those two is not clear. Chinese companies and entrepreneurs do not deal with risk the same way.

As an add-on, the day before, at the Boao Forum for Asia, the Vice-Minister of MII reminded that 22,000 licenses for VAS had already been awarded and that the market was open to foreign players with up to 49% equity in VAS companies.

(Joffe, 2007)

5.3 Some Pending Challenges

Three major problems in China's current value-added telecommunications market have been pointed out by He, Xia. ("Experts Said", 2006) Considering the rapid growth of the market over a short time, market supervision is not sound enough, resulting in many problems which hinder the VAS market's continued and healthy development.

First, the legal system is deficient. China has not yet formulated a comprehensive policy for the regulation of information services and other value-added telecommunications services. Existing telecommunications laws revolve around traditional telecommunications services, without a target for value-added telecommunication services. The system lacks restrictions on operators entering the upstream markets, and supervision seems sometimes arbitrary. (Wu, 2007)

Second, there are too many operational similarities and not enough innovation. Although there are many VAS companies, they have not achieved much services differentiation.

Third, management departments at the Ministry and Provinces are faced with the following problems:

- The Ministry and the provinces are not in harmony regarding the supervision and the implementation of policies.
- The licensing system for value-added services is not appropriate to their operational characteristics and their need for the flexible and rapid responses.
- The statistical indicator system for value-added services is inadequate.
- The work of annual license checking takes too long, lacks standards and is cumbersome.

5.4 Observations on the need for cooperation

Companies in China's industrial chain of value-added telecommunications services have not achieved mature cooperation, communication channels are not smooth, cooperation between upstream and downstream enterprises is loose, standardization is lacking, inappropriate short-term behavior is relatively serious, and the degree of mutual reliance is relatively low, so it is difficult to form truly effective interest communities.

Value-added services need to address the risks in the next step in development of the market, take long-term healthy development as the goal, and take positive measures:

- accept social responsibility as a duty, and work to mold a healthy market environment;
- pay serious attention to intellectual property issues, and work to reduce abuse;
- actively research and explore a value chain cooperation model;
- establish service provider industry organizations to maintain common interests and enhance self-discipline;
- work to expand industry applications and tap rural information services demand;
- Strengthen cooperation and be pro-active in innovation.

To create a healthy development environment for VAS is a complex and difficult long-term project. The government needs to work hard and strengthen regulations to create a fair and effective competitive environment; to address the emergence of a large number of non-standardized-competitive behaviors; to protect the interests of consumers, and to improve the VAS legal system.

6.0 VAS IN THE U.S. AND “NET NEUTRALITY”

It is the authors’ intention to comment only briefly on the state of supervision (if any) of value added services in the U.S., just sufficiently to bring out the fact that China and the U.S., with all their differences, are wrestling with the same underlying core issue.

In the United States, “value added services” do not have a separate regulatory category under that name, but they are closely aligned with the term “information service,” a category created by the Federal Communications Commission and defined as:

The offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.

(47 USC Sec. 153(20), accessible on-line at http://www.law.cornell.edu/uscode/html/uscode47/usc_sec_47_00000153_----_000-.html)

The terms “enhanced services” and “IP-enabled services” are also used in describing segments of this category. There is a substantial literature discussing the history, evolution and meaning of these terms. Unlike China, the FCC does not require registration and licensing of value added service providers, nor does it concern itself (with a few exceptions) with the information content of the services. Also unlike China, the U.S. has an independent telecommunications regulator in the FCC, a fundamental telecommunications law, and a transparent and independent legal system.

However, with all of this, the U.S. policy regime has not yet adapted itself to the changes in the telecommunications value chain and the emergence of integrated communications facilities. The policy debate in the U.S. which addresses the relationship

between carriers and third-party service providers goes under the label of “Network Neutrality”. This is not yet another paper about “Network Neutrality”. It is sufficient for present purposes to note that the Network Neutrality debate is driven in large part, from the carriers’ point of view, by their desire and perhaps perceived necessity of capturing the value which is rapidly moving away from traditional services on their networks to value added services offered by unaffiliated third parties. The same business logic is at work in the U.S. as it is in China. Although the conventional answer would be, “The U.S. does not regulate value added services,” it is indeed grappling with the profound changes brought about by the growth and likely eventual dominance of VAS in the telecommunications arena.

7.0 RECOMMENDATIONS AND CONCLUSION

The U.S. and China have more in common than might be thought in dealing with value added services. Each is, in a way, a laboratory for the other. In China, the desire to regulate lightly (by Chinese standards) has run up against the monopoly power of incumbent national operators to operate as both manager and regulator of third-party value added service providers while at the same time they have a clear conflict of interest in desiring to capture those opportunities for themselves. This appears to have created competitive and market pressures which have driven some operators (and created opportunities for others) to take advantage of customers through shrewd, unethical and blatantly illegal practices.

In the U.S., incumbent wireline carriers, nearly desperate to extend themselves beyond their traditional voice services, have expressed a clear desire to be able to charge, and possibly to pick and choose, between third-party VAS carried over their networks, as well as offer their own services. The debate is greatly confused by traditional regulatory categories, arguments over “level playing fields”, equal access, and pending decisions about IP-enabled services, but at its core it is about the carrier’s ability to offer integrated services which extend up the value chain, or at least to capture some of the value which has moved away from them, and continues to do so. Their future depends on it.

The development of the value-added telecommunications services market in the U.S. has been very different from China’s, making it difficult to contrast directly based on traffic statistics, registered services, and supervisory policies and. But China can still learn from the overall telecommunications regulatory system in the U.S., adapting their proven and effective methods to China's supervision of value-added telecommunications service:

7.1 Recommendations for China

7.1.1 Update the current telecommunications services catalog to support new VAS

Most developed countries recognize many kinds of carriers and types of carriage. In the U.S., there are classifications such as: “common carriers”, “communication record carriers”, “local exchange carriers”, “connecting carriers”, and “incumbent local carriers”,

as well as a range of services such as "wholesale telecommunications service", "resale of telecommunications services", "telecommunications retail service", "telecommunications rental service".

This kind of classification of telecommunications services does not exist in China. China's telecom services mainly use the classification of basic telecommunications services and value-added telecommunication services, and this classification primarily emphasizes the technical characteristics of the service, paying no attention to principles of market competition, protection of user rights and promotion of diversified telecommunications services.

As mobile value-added services and Internet value-added service integration develop, the extension of short message service has also been increasing, such that it is no longer a simple SMS and MMS. New services, such as WAP, JAVA, mobile blogs, and cell phone television, are constantly emerging, which are already becoming popular applications of new technology. In the case of the emergence of a new service prior the advent of 3G, it is desirable to regulate the market conduct of its operations according to the characteristics of such a service, and the current directory is unable to adapt to new telecommunications value-added services development.

Resolving this looks forward to the draft "Telecommunications Act" being introduced as soon as possible. The "Telecommunications Act" is a programmatic legal document for the communications industry, which has been much delayed for various reasons after extensive discussion, consultation and revision. In the drafting process, scholars have put forward different views on the classification and regulation of value-added services. Some scholars have even suggested abolition the categories of "basic" and "value-added" telecommunications services. But in light of current market and regulatory conditions, the abolition of the classification of value-added telecommunications service in short-term has little likelihood. These issues need to be addressed and resolved by final decisions in the "Telecommunications Act". Now, when value-added services are flourishing and the problems are just emerging, is the most practical time to take effective regulatory measures.

7.1.2 Improve entry and exit permit mechanisms

In 2004, 20% of the telecom enterprises accounted for 80% of the market income, while in 2005, 10% of the enterprises accounted for nearly 80% of the market income. The degree of concentration of the industry is high and increasing. The number of service providers has reached the relative saturation point. Profit margins of enterprises in major provinces and cities are lower than 50%. However, the numbers of VAS permit applications maintains a high growth rate. There is no effective regulatory response. In order to assure a healthy and orderly and protect consumers, permits for such services should be issued, under a controlled process.

The permit inspection system, to assure quality, should require a quality guarantee deposit, collecting a sum when the permit is granted. At the stage of annual

inspections or spot checks, enterprises should be checked to see if they have fulfilled their service commitments. If not, there should be an appropriate levy on the performance bond, according to its terms. Such a service deposit system should actually enhance the enterprise market access threshold, particularly for small businesses, although it may cause some to delist. In light of this, there should be some flexibility for SME's, such as allowing SMEs to seek guarantees, or introducing measures for SMEs to provide credit support.

7.2 Some Thoughts for the U.S.: VAS and “Net Neutrality”

China is currently an example of what happens when “nature takes its course,” i.e., when dominant incumbents are allowed to act as managers and regulators of third-party VAS service providers. This is surely cautionary, and commends the idea of keeping an alert regulatory eye on incumbent behavior, as there is a built-in conflict of interest. At the same time, China appears to be taking the long view in recognizing that what is happening is a fundamental structural change which requires a different business model and a different regulatory formula going forward. VAS create a complex ecology in which incumbents are key players, and need to have meaningful participation. It is, in that view, unrealistic (and unproductive) to try to bottle them up and make “bright lines” between them and the VAS revenue streams; at the same time, it is undesirable to let them dominate the VAS market. These observations, overlaid on the “Net Neutrality” debate, would likely please no particular group, but the experience of China may offer a useful way of thinking about the issues. In this case, China may turn out to be ahead of the U.S. in finding realistic solutions.

CONCLUSION

The development of China's value-added telecommunications service has been rapid, and is expected to remain so for years. With the growth of the share of value-added telecom service revenue as a percent of the entire telecommunications industry revenue, VAS' role in national economic development, and in enhancing the lives of ordinary consumers is increasing, and VAS development deserves and will get more attention. In order to promote the healthy and rapid development of value-added telecommunications services, and safeguard the legitimate rights and interests of consumers, the regulatory authority has the responsibility to create a fair, just, and open environment.

Value-added telecom service regulation is a long-term development process, which can draw on foreign experience in telecommunications regulation and combine it with special domestic conditions to develop an operational policy and regulatory means with Chinese characteristics. With the introduction of the "Telecommunications Act", telecommunications regulation is likely to undergo significant changes. Therefore, the proposed VAS recommendations must view this trend from an overall perspective. We can see from history that there is always a specific historical context, and if the overall environment changes, the principles and specific measures must be correspondingly changed. From that perspective, we have tried to look at the dynamics of value-added

telecommunications service regulation, formulating recommendations to solve the problems we face going forward with appropriate and forward-looking measures.

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