South Korea

The telecommunications industry will be one of the driving forces behind South Korea’s economic growth in the 21st century. As of October 2003, 92% of Korean households had telephone services, 70% of the total population had subscribed to wireless telephone services, and the broadband internet penetration rate was ranked first in the world with more than 10 million households signed up for broadband. By 2007, it is expected that the number of telephone subscribers will reach about 24.48 million, wireless telephone subscribers 39.16 million and broadband internet subscribers 13.5 million. The increase in the telecommunications business has had a significant impact on other industries. An example of the impact is that the manufacturing of semiconductors, TFT-LCD, handsets, set-top boxes and other telecom-related devices in 2002 accounted for about 15% of GDP.

The telecommunications industry is facing significant challenges. Korea Telecom (KT), the largest telecoms company in Korea, was fully privatized in May 2002 when the Korean government sold its entire 28.36% stake. (Competition among private telecoms companies is full swing and will likely become more intense as the legislature and the regulatory agencies come up with more telecoms-related laws and regulations that will encourage greater competition. And, driven by improvements in telecoms-related technology and the emergence of new markets combining fixed-line and wireless, voice and data, and broadcasting and communications in the near future, the legislature, the regulatory bodies and practitioners are holding discussions to find ways to keep up with technological developments.

Policy Makers and Regulators

The Ministry of Information and Communications (MIC) is the government agency principally responsible for overseeing telecommunications and information
policy issues and charged with regulating the telecoms industry. The MIC works to promote competition in the market and to enhance fair competition. The MIC oversees permits, licences and registration and is the most influential regulatory agency in this area.

The Korea Communications Commission (KCC) is a sub-agency of the MIC established pursuant to Article 37 of the *Framework Act on Telecommunications*. The KCC is charged with deliberating on issues concerning fair competition and consumer protection in telecommunications services and arbitrating disputes among business operators and between users and operators.

**Major Laws and Regulations**

There are four major laws governing the telecommunications industry in South Korea. The *Telecommunications Business Act* (TBA) governs operations, regulations, user protection and other related matters in the telecommunications business. The *Framework Act on Telecommunications* provides the general legal framework for the provision and operation of telecommunications services in Korea. The *Radio Waves Act* governs effective management of radio wave resources. And the *Act on Promotion of Information and Communications Network Utilization and Information Protection, Etc.*, aims to promote utilization of information and communications networks, protect the personal information of users, and build a sound information and network environment.

Of these laws, the TBA contains the basic set of rules for regulating the telecoms market and telecoms business operators, and will be discussed in more detail below.

**Current Status of the Telecoms Market**

**Types of Businesses**

Under the TBA, a telecoms business operator is defined as “a person who provides telecommunications services by obtaining a licence, registering or reporting under this Act”. The business is divided into three different categories: (i) basic telecoms; (ii) specially-designated telecoms; and (iii) value-added telecoms.
Basic telecoms business operators provide basic services such as local, long-distance and international telephony, leased lines, IMT 2000, mobile telephony, TRS, and radio paging by establishing their own telecoms circuits and facilities. Specially designated telecoms business operators provide basic telecoms services by leasing line facilities or by constructing telecoms facilities in a particular location. Specially-designated telecom services are further divided into (i) resale of basic telecoms service by owning switching equipment such as voice resale, internet phone, and call-back services, (ii) resale of basic telecoms services without owning switching equipment such as call convergence, re-billing service, and wireless resale services, and (iii) premise-specific telecoms services undertaken by installing facilities. Value-added telecoms business operators provide telecoms services other than basic services by leasing telecoms line facilities. Value-added telecoms services include a wide range of services such as data network services, online information (e.g., PC communications, online game and hosting services and internet access), and e-commerce services (e.g., cybermalls, online reservations and credit card information searches).

Under the TBA, different requirements are applicable for approval, registration or reporting, limits on foreign ownership, mandatory contributions, and general terms and conditions for the services. For example, anyone intending to provide basic telecoms services must meet certain criteria and obtain a licence from the MIC. Also, no foreign company is allowed to apply for a basic telecoms business operator licence and there is a foreign equity limit of 49% for a basic telecoms business operator licence. However, anyone intending to provide value-added telecoms services in Korea only has to meet certain criteria and file a report with the MIC. An individual as well as a corporation may provide services, and a foreign corporation may also provide services by establishing a branch office in Korea. There is no foreign equity limit on a value-added telecoms business operator. As for specially designated telecoms services, anyone intending to provide such services is required to meet certain criteria and register as a specially-designated telecoms business operator with the MIC. Only domestic companies are allowed to register as specially designated telecoms business operators (i.e., foreign companies intending to register as specially-designated telecom business operators need to establish a Korean subsidiary or a joint venture with a Korean party), but there is no foreign equity limit. Further, all basic and specially-designated telecoms business operators that meet certain conditions must contribute to the Informatization Promotion Fund; the requirement does not apply to value-added telecoms business operators.
Market Breakdown by Category

Korea’s telecoms business is divided into specific categories in terms of the telecoms law and various policies are in place to promote competition in each of the categories.

Basic Telecoms Service

Local and Long-distance Services and Leased-line Services

KT leads the local phone market with a market share of 97.7% with Hanaro Telecom accounting for the rest of the market. In the domestic long-distance market, although there are several players including KT, Dacom, Onse Telecom, and Hanaro Telecom (which began the service in 2003), KT has the lead with 85% of the market.

Basic telecoms business operators such as KT, Dacom and Onse Telecom (with an aggregate market share of about 80%) and specially designated telecom business operators (with an aggregate market share of about 20%) compete in the international phone services market. Unlike the domestic phone services market where KT’s domination is obvious, KT’s market share is relatively smaller in the international market with 57.6% followed by Dacom’s 35% share.

Although there are 17 companies currently providing leased-line services in Korea, the major players are KT (66%), Dacom (9%) and Powercomm (10.5%). Dacom, which is owned by LG, acquired Powercomm at the end of 2002, and both Dacom and Powercomm are hence under the umbrella of LG. Foreign telecoms players such as Reach and Global Crossing in a joint venture form have entered the leased-line services market since 2001.

Wireless Services

Various services fall under the wireless category such as wireless mobile phones, TRS, radio paging, etc. Wireless mobile services are by far the most common type of service in this category, accounting for 99% of the market.
SK Telecom, KTF and LG Telecom compete fiercely in this area. SK Telecom leads the market with more than 18 million subscribers (54.3% of the total market of 33 million) followed by KTF with about 10 million subscribers (31.4%) and LG Telecom with roughly 4.7 million subscribers (14.3%).

As the wireless mobile services market in Korea is saturated and expansion of business by attracting new subscribers is difficult, most wireless carriers are focused on keeping the customers they have and increasing sales to individual customers. With mobile number portability and the 010 number pool being enforced starting January 2004, mobile phone subscribers can keep their telephone numbers when switching providers and can compare service quality and rates. Number portability is expected to be rolled out slowly, with porting from SK Telecom being offered from January 1 2004, from KTF beginning July 1 2004, and from LG Telecom from January 1 2005.

Specially-designated Services

Since their introduction in 1998, specially-designated telecoms services have been seen as increasing the business efficiency of carriers owning networks since they have been able to lease their existing lines, preventing unnecessary investment in highly concentrated area and as keeping prices competitive. As of February 2003, there were 358 specially designated telecoms business operators in the Korean telecoms market. In particular, international call resale business operators are in active competition with the basic telecoms business operators for international phone services, and revenues in the market continue to grow considerably.

In addition to the existing services, introduction of mobile resale and mobile virtual network operator (MVNO) services, which are viewed as both complementary and competitive to existing mobile wireless operators, and wireless VoIP service, which is expected to trigger a new phase of telecoms market growth, are being seriously considered and their introduction might be just around the corner.

Value-added Services

As the scope of value-added telecoms services extends to a wide range of possibilities (being defined as all services other than basic telecoms services), there are plenty of value-added telecom business operators in Korea. As of March 2003 there
were 4,352, with the majority being business operators (1,491, representing 30.4%) focused on internet services. However, the major internet service providers (ISPs) in Korea, such as KT, Hanaro Telecom, Thrunet, Dreamline, Dacom and Onse Telecom are the basic telecoms business operators who own their own networks. As of October 2003, there were 11,147,754 internet subscribers in Korea. 49.8% (5,553,721) use KT, 24.5% (2,732,423) use Hanaro Telecom, 11.6% (1,293,527) use Thrunet, 1.4% (160,957) use Dreamline, 1.8% (201,374) use Dacom and 4.0% (447,208) use Onse Telecom.

In general, Korean ISPs provide two types of broadband internet services: xDSL using copper telephone lines or optical fibre and via cable modem using HFC (hybrid fibre coaxial) cable network. KT provides xDSL services via its existing copper telephone lines. Thrunet and Onse Telecom provide cable modem services by establishing their own, or leasing someone else’s, HFC networks, and Hanaro Telecom provides both xDSL and cable modem services. And, as mentioned above, Korea boasts the world’s highest broadband internet penetration rate with 21.3 subscribers per 100 inhabitants as of 2002.

In addition, the introduction of local loop unbundling in January 2001 (the implementation of which started from April 2002) is creating an environment where we are seeing the acceleration of competition in the broadband internet market. KT, whether it wants to or not, will have to share its local loop with other carriers.

Major Telecom-related Legal Issues

As discussed above, the MIC issued a set of guidelines on number portability that will be enforced starting January 1 2004. Mobile number portability, which is a required core competency that presents operational challenges for the wireless telecom carriers, is expected to eliminate lock-ins and facilitate competition. Other legislative and regulatory measures that are designed to facilitate competition in the telecom market include: (i) mandatory facility provision by dominant market players; (ii) implementation of interconnection services; and (iii) local loop unbundling.

Alleviating Limitations

A bill purporting to lift the restraints that may result from classifying a
corporation in which a foreign investor owns 15% or more, and is the largest shareholder, as a foreign corporation has been presented to the National Assembly. (This issue was recently highlighted, when an a foreign financial investment company acquired 14.99% shares in a corporation that is the largest shareholder of a major Korean telecoms provider.) The bill also introduces additional measures that aim to make the basic telecoms market more competitive and increase the MIC’s regulatory authority, although the likelihood of the bill being passed this year is uncertain.

Re-categorization

As the market continues to change and new services and technologies that blur existing boundaries in the classification of services are introduced, the need for re-examining the categorization of telecom services is growing. For example, there is an argument that internet services should be categorized as basic services, rather than as value-added telecoms businesses. Also, the integration of fixed-line and wireless services and the convergence of communications and broadcasting are expected to bring about major shifts in the how the telecoms industry is managed.

Under the TBA and related regulations, the dominant market player in the basic telecoms category is prohibited from selling products that combine fixed-line and wireless services. The prevailing view among commentators and market participants who advocate increased competition is that this restriction should be lifted.

The successful implementation of IMT-2000 services would play a significant role for the convergence of communications and broadcasting. There are some indications that there isn’t enough demand for applications exclusively designed for IMT-2000 and that the usage rate for second-generation services that have already started integrating third-generation technologies for IMT-2000 services (CDMA 2000 1x, CDMA 2000 1x EV-DO) is low. These factors may delay the digitization of broadcasting. However, ISPs and mobile carries have already made significant progress toward combining broadcasting and communication services. In view of the progress that has been made, streamlined laws and regulations are needed. In this regard, the launch of an integrated review committee (such as a broadcasting and communications committee) is being discussed and amendments of laws and regulations related to broadcasting and telecoms, such as the Broadcasting Act and the TBA, are expected to occur within a relatively short time.
Conclusion

Korea has seen remarkable improvements in the telecoms industry in the past two decades. Telecommunications have played a major role in shaping Korea’s economic and social development, and the market is expected to continue its rapid growth. As a new market emerges based on more advanced and complex technologies that exceed the scope of current laws and regulations, the need for legal reform for the telecoms industry is rising. As with the technological and business challenges that must be faced in the coming years, it is inevitable that Korean telecoms-related laws and regulations of will have to change to keep pace.