From 1991 on, the telecommunications in Vietnam have made miraculous progress, from obsolete links that largely served governmental bodies to a network that ranked 46 among 202 countries and served over 17 million subscribers. In the years 1995-2004 the number of subscribers rose by 34% and subscription by 20% a year. Development of the network has been affected by the following factors:

a. Policies: After many phases of the reform, policies on this sector are more open. All social classes are encouraged to take part in supplying telecommunications services. Foreign investors could establish their own companies or take up to 49% of the equity capital of local companies supplying mobile phone services. By the end of 2007, joint ventures in the telephone service where foreign investors hold up to 49% of the equity capital could be established. Services suppliers can decide their fees and subscription within the price floor and ceiling set by the Ministry of Post and Telecommunications. for telephone as a utility service, all companies are under obligation to supply it. The infrastructure will be shared by all players in return for a fee set by authorities. Generally, policies on this sector tend to reduce monopoly and encourage fair competition.

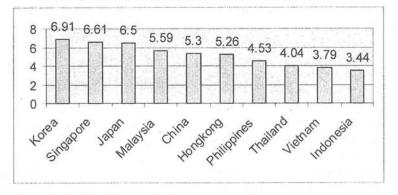
b. Investment potentials: Investment in this sector in recent years equals 4% - 5% of the annually gross investment. Some 50% of it comes from the State because of limits on this sector; 15% from foreign sector and 35% from private one. Foreign investors usually engage in production of devices and equipment. Right policies could mobilize larger sources of finance in the future.

c. Structure of products:

Factors Affecting the Development of Local Telecommunications

by MEcon. TRẦN ĐĂNG KHOA

Chart 1: Human resource index of some Asian countries.



According to data provided by the VNPT, ITU and WB, the total sales of telecoms in the years 1995-2004 came mainly from the supply of basic services. The telephone service accounted for some 80% of the sales while production of equipment brought about less than 10%, lower than the receipt from other value- added services. Until these valueadded recently, services have become more popular because many game shows interact with players by telephone lines. The production of equipment meets only 30% of the market demand and the rest depend on imported one. Thus, the structure of products services is not reasonable enough.

d. Human resource: The telecoms sector, for a long time, has been a government monopoly and considered as a supply service with the result that its human resource wasn't developed well. Many laborers couldn't cope with technological changes. Only 10% -15% of laborers who have just graduated

from universities have sufficient knowledge of technology and foreign language. Productivity of this sector is of the lowest level among ASEAN countries. According to the ITU, devices there were 83 US\$25,750 for a laborer in this sector in Vietnam in 2000, which made it rank seventh among ASEAN countries. The report on human resource index established by the Political and Economic Risk Consultancy Ltd be comparing indicators of quality of education service, availability of skilled laborers and teachers, and expertise in hi-tech and foreign language shows that in 2001, Vietnam was one of the poorest among 10 surveyed countries (see Chart 1)

e. Natural resources: With a territory that runs over 2,000 km in length and a lot of forests and mountains, Vietnam meets with difficulties in building and operating a nationwide telecoms network. The network and its equipment and devices are vulnerable to a hot and

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damp weather along with thunderstorms and floods that occur every year. The telecoms companies, however, can easily build its network after obtaining licenses because all territory is under the State control.

f. Technology: Telecoms industry is one of sectors that keep pace with neighboring countries in terms of technology. From 2004 on, new technologies have been introduced to Vietnam, such as CDMA, WiFi, WiMAX, etc. However, these technologies are imported ones and as a result, the related companies have to rely on foreign partners. The R&D activities have been carried out poorly and couldn't produce intended results.

g. Market potentials: Vietnam with a population of over 80 million citizens is a potential market for telecoms services although the personal income is still low (some US\$640 a year). In 10 years from 1995 to 2004, the number of telephone rose by 13 times and reached some 10 million telephones, which included Vietnam in the group of countries that gain the highest growth rate for this sector. By December 2005, Vietnam had 15,380,000 telephones and this figure rose to 16,540,000 in February 2006 (there are 19.2 telephones per 100 people on average).

According to data provided by the VNPT, the total sales of the telecoms sector in 2004 was some VND32,500 billion equaling 4.5% of the GDP. In 2005 this figure was 39,300 billion according to a rough estimate. The average growth rate of the sales in 1995-2005 was 20% a year.

From the past data we can draw some predictions of the future development of the telecoms service.

According to our prediction,

Table 1: Prediction of developments of the telecoms in 2006-2020

Indicator	Sales (VND billion)	As % of the GDP	Telephones	Fixed phones	Mobile phones	Phones per 100 people
2006	43,932	4,88%	20,903,842	7,092,274	13,811,568	25
2007	49,035	5.07%	28,411,613	8,010,449	20,041,164	3.3
2008	54,651	5.26%	38,615,857	8,673,302	29,942,555	45
2009	60,829	5.46%	52,485,031	8,778,992	43,706,040	60
2010	67,622	5.65%	71,335,423	7,841,795	63,493,628	80
2011	75,086	5.84%	82,035,736	4,314,290	77,721,446	91
2012	83,284	6,03%	94,341,097	()	94,341,097	104
2013	92,283	6.23%	108,492,261	()	108,492, 261	118
2014	102,157	6.24%	124,766,101	-	124,766,101	134
2015	112,985	6,61%	143,481,016	8	143,481,016	152
2016	124,856	6.80%	157,829,117	-	157,829,117	165
2017	137,864	7.00%	173,612,029		173,612,029	175
2018	152,113	7.19%	190,973,232		190,973,232	195
2019	167,713	7.38%	210,070,555		210,070,555	212
2020	184,789	7.57%	231,077,611		231,077,611	230



there will be some 231,077,611 telephones in Vietnam by 2020 and all of them are mobile ones and the fixed line phones are to be removed by 2012; and there are some 230 phones per 100 people. These are promising figures for the telecoms. As for players, there are six suppliers now and the VNPT control some 84% of the market share and Viettel 15%. Other players – SPT, EVN Telecom, Hanoi Telecom – are trying their best to expand their shares.

These analyses show that the

recent development of the telecoms service, especially in the past two years, is encouraging. Its growth rate is high and new technologies have been introduced to Vietnam, which allows more options for customers. Serious shortcomings, however, still exist and require strong measures to ensure sustainable development, such as the shortage of skilled laborers, poor R&D activities, unreasonable structure of telecoms products, and failure to attract investment from the foreign and private sectors