

Regulating the transition of Pakistan's telecom sector

by Shahzada Alam Malik, Chairman, Pakistan Telecom Authority

The telecommunications sector liberalisation, conducted by the Pakistan Telecom Authority, multiplied the country's communications. Pakistan's teledensity, now 21.6 per cent, was 2.8 per cent at yearend 2000. Pakistan now has 27 million mobile subscribers, 5.3 million working fixed-line connections, 2.1 million Internet subscribers and 10 million Internet users. Foreign investment in telecommunications of US\$1 billion, 28 per cent of Pakistan's total, and per capita income growth from US\$579 in 2003 to US\$736 today, attest to the success of the government's programme.



Shahzada Alam Malik is the Chairman of the Pakistan Telecom Authority (PTA). He has also served as the Chairman of the Islamic Republic of Pakistan's Frequency Allocation Board, as the Chairman of the Special Communication Organization (SCO), as a Member of the Technical Pakistan Telecom Authority (PTA), a Member of the Pakistan Electronic Media Regulatory Authority (PEMRA), a Member of the Executive Board, Pakistan Telecommunication Company Limited, as Additional Secretary Ministry of Defence, and as the Signal-Office-In-Chief of the Pakistan Army. Mr Shahzada Alam Malik was elected President of the Asia-Pacific Telecommunity during the 10th Session of the General Assembly in November 2005. He has represented the Government of Pakistan at various international telecom forums and contributed in ITU Council Sessions, World Telecom Development Conference (WTDC), World Radiocommunication Conference (WRC), Plenipotentiary Conference-2002, World Summit on Information Society (WSIS) and the Global Symposium for Regulator (GSR) including APT, SAFIR, SAARC and ICC.

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Information and communication technologies, ICTs have profoundly influenced how the world functions and interacts, and will continue to do so in times to come. At one time, television, telephone or telegraph were the only ways to communicate, but today cell phones, laptops and the Internet have revolutionized the way the world communicates. Rapid improvements in ICTs have transformed social and economic structures across the globe. Technology has transformed the socio-economic setup of many developing countries and has improved both economic growth and consumer social well-being.

Traditionally, in most countries, communications were controlled by special, monopolistic and self-regulating government agencies. This institutional and legal framework shielded the communication services from competitive forces. Because of the scale of the sector, it was thought that one operator, the government, could provide communications services most efficiently. In addition, because of its strategic importance, governments have always been reluctant to leave communications to the market.

During the 1980's the need for reform became evident in developed countries due to the increase in demand and technological innovations. Developing countries were faced with huge unmet demand for telephones, limited infrastructure, poor service and limited coverage. The outright failure of the public sector to improve communications services forced governments throughout the world to disengage from managing industrial, commercial, and infrastructure activities. Countries such as Hong Kong, Korea and Singapore, which experienced significant development in the last decades, have used telecommunications as a key part of their economic development strategy. Malaysia has placed the same emphasis on ICT investment. Research throughout the world has shown that investment in telecom infrastructure has a cumulative effect on the social and economic uplift of a country.

A government department owned and ran Pakistan's communication sector until quite recently, accounting, in good part, for the slow penetration of information and communication technolo-

gies in Pakistan. The government finally was impelled to liberalise the sector to meet the communication needs of Pakistani consumers, the high unmet demand, the technology explosion and pressures from across the globe. Hence, the Government of Pakistan made telecom and IT a priority and has greatly increased the annual budget in this area since the year 2000.

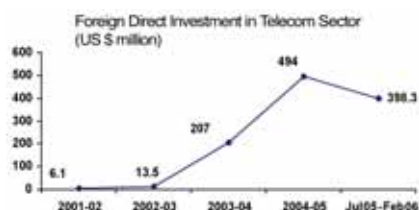
With the dawn of the new century, pursuant to commitments to the World Trade Organization, Pakistan's government took the initiative to deregulate and liberalize its telecom market. All segments of the telecom sector are now open for private entry, including fixed line, mobile and value added services. To this end, the Government of Pakistan announced deregulation policies for both fixed line and cellular telephony, and made the Pakistan Telecom Authority, PTA, the regulator of the telecom sector. The PTA is responsible for the award of licences and the implementation of, and adherence to, the government's policies. The PTA's road map for liberalization called for auctioning mobile licences through open bidding.

Two companies were awarded the licences having bid an auction-winning US\$291 million each. The auction was conducted in an entirely transparent manner that was widely acknowledged and appreciated. Similarly, the PTA auctioned the spectrum and awarded WLL, *wireless local loop licences*, fixed local loop licences and licences for international services in Pakistan. Today, there is competition in every telecom service in Pakistan, including fixed telephony, mobile cellular, payphones, Internet and other value added services.

There have been dramatic growth shifts seen in the telecom indicators since liberalization. Pakistan's teledensity has improved many fold in the past two to three years. Currently the total teledensity in Pakistan is over 21.6 per cent, compared to just 2.8 per cent at the end of 2000. The total number of mobile subscribers in Pakistan has reached 27 million, and mobile density has hit 17.76 per cent, far surpassing the fixed line teledensity, which is 3.41 per cent with a total of 5.3 million working connections. WLL subscribers are also on the rise, and now total more than 649,385. Similarly value added services, payphones and Internet usage are all on the rise. There are 286,370 PCOs, *Public Call Offices* working across Pakistan, and more than 2.1 million registered Internet subscribers with an estimated ten million Internet users.

Similarly, Pakistan Telecommunication Company Limited, the incumbent operator, has also laid down 9855km in fibre optic networks across Pakistan and two international submarine cables SEMEWE 3 and SEMEWE 4. In addition, Trans World Associates, a private company, has laid submarine cable for international connectivity to Pakistan that will soon be operational. The infrastructure demand, however, is still high despite the fact that some of the LDI, *international long distance*, operators are laying their own fibre optic cable across Pakistan.

The liberalization and deregulation of the telecom sector throughout the world has turned out to be very positive. In Pakistan, there are many areas where, as a result, the economic indicators have substantially improved



Year	Fixed line Density	WLL Density	Mobile Density	Total Teledensity
2002	2.49	-	0.52	3.66
2003	2.70	-	1.16	4.31
2004	2.95	-	3.29	6.25
2005	3.43	0.17	8.30	12.76
2006	3.41	0.42	17.76	21.59

and changed the social setup of many urban and rural areas. Foreign direct investment, *FDI*, entering Pakistan has greatly increased since the telecommunications sector's deregulation of and the auction of mobile cellular licences.

FDI exceeded US\$1 billion between June 2004 and December 2005; this is equivalent to 28 per cent of Pakistan's total FDI. Similarly, telecom's share of Pakistan's total GDP has also improved tremendously; while a few years back it accounted for less than 1 per cent of Pakistan's GDP, today it stands at around 1.9 per cent and is expected to climb to 3 per cent within the next two years.

The increased economic activity has also increased the per capita income of the population at a faster pace over the past few years. Today, the country's per capita income stands at US\$ 736; it was only US\$ 579 in 2003. The telecommunications sector has been an important contributing factor towards this growth.

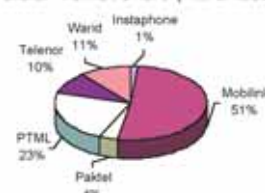
The employment generated by the growth of telecommunications is quite significant; in just two years, the telecom sector has created approximately 300,000 jobs. This growth in telecommunications has also generated a good number of jobs in related industries including information technology - IT. The growth of the telecom sector has also increased the government's revenue from licence fees, royalties, the auctions of spectrum and sales and activation taxes. The government collected more than Rs.44 billion from the telecom sector between June 2004 and Dec 2005.

The development of the telecommunications industry and the growth of the mobile sector have brought a number of social benefits to the people of Pakistan. Although these benefits are spread over both the urban and rural populations, the social returns in rural regions are greater than those that have occurred in the urban segments of the society. Mobile communications have greatly improved the flow of information to areas that previously had no telecom access. Quickly, and with little investment, communications between the rural population and the

rest of the country - with others from outside their communities, businessmen, tradesmen, doctors, teachers and police - have improved immeasurably.

Because of this growth in telecommunications, medical advice is now available even in remote areas, indirectly increasing the life expectancy of those living in rural communities. Mobile phones also allow farmers to check current market prices are before they set out to the market to sell their crops. The mobile phones now available in rural areas that have little, if any, fixed line availability, are also improving the quantity, quality and timeliness of information available to would-be migrants to urban centres, or even overseas. Mobiles phones are saving time and introducing efficiencies in local businesses, especially in terms of dealing with unexpected events.

Cellular Market Share (March 2006)



Given the previously mentioned state of communication facilities now available to the common man, it can be said that personalized communication facilities are now available to a larger segment of the population than ever before. Information anytime, anywhere, anything has become the norm, especially in urban areas of the country. Despite today's telecom and ICT revolution, there is still a large gap between those who have access to these technologies, and can use them, and those who do not. Even with the growth and development recently seen in the telecommunication sector, a digital divide still exists in Pakistan and, of course, the world. This obliges the governments, private sector, operators and global organizations - all the stakeholders - to work in a coordinated manner to reduce the digital divide. This requires building the infrastructure for, and fostering the use of, information and communications technology both globally and regionally, and expanding access to these services and technologies in remote and underserved regions. ■