

Pakistan Telecommunication Authority



Annual Report 2008

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Abbreviations

3G	3rd Generation	NGN	Next Generation Networks
AJK	Azad Jamu & Kashmir	NOCs	Non Objection Certificates
AMPS	Advanced Mobile Phone System	NTC	National Telecommunication Corporation
APC	Access Promotion Contribution	NUST	National University of Science & Technology
APT	Asia Pacific Telecommunity	OFAN	Optic Fiber Access Network
ARPU	Average Gross Revenue Per User	PC	Personal Computer
ASR	Approved Settlement Rate	PCOs	Public Call Offices
CDMA	Code Division Multiple Access	PRS	Premium Rate Services
CED	Central Excise Duty	PSDN	Public Switch Data Network
CMOs	Cellular Mobile Operators	PTA	Pakistan Telecommunication Authority
CMPak	China Mobile Pakistan	PTCL	Pakistan Telecommunication Company Limited
CNIC	Computerized National Identity Card	PTML	Pakistan Telecom Mobile Limited
CoE	Centre of Excellence	QoS	Quality of Service
CPD	Consumer Protection Directorate	RFID	Radio Frequency Identification
CPP	Card Pay Phone	S&D	Strategy & Development
CVALS	Class Value Added License Service	SCO	Special Communication Organization
DCNS	Data Communication Network Services	SIM	Subscriber Identity Module
DSL	Digital Subscriber Line	SMP	Significant Market Power
DWDM	Dense Wavelet Division Multiplexing	SMS	Short Messaging Service
EDGE	Enhanced Data for GSM Evolution	TAR	Total Accounting Rate
FED	Federal Excise Duty	TDD	Time Division Duplexing
FTTH	Fiber to the Home	UAN	Universal Access Number
FWT	Fixed Wireless Terminal	UET	University of Engineering & Technology
GDP	Gross Domestic Product	USF	Universal Services Fund
GMDSS	Global Maritime Distress Safety System	VAS	Value Added Services
GMPCS	Global Mobile Personal Communication Systems	VoIP	Voice over Internet Protocol
GOP	Government of Pakistan	WCDMA	Wideband Code Division Multiple Access
GSM	Global System for Mobile Communications	WiMax	Worldwide Interoperability for Microwave Access
GST	General Sales Tax	WLL	Wireless Local Loop
IMEI	International Mobile Equipment Identity		
IP	Internet Protocol		
IPv6	Internet Protocol Version 6		
ISP	Internet Service Provider		
IT	Information Technology		
IT & T	Information Technology & Telecommunication		
ITU	International Telecommunication Union		
LDI	Long Distance & International		
LL	Local Loop		
LRIC	Long Run Incremental		
LUMS	Lahore University of Management Sciences		
MIC	Millicom International Cellular		
MNP	Mobile Number portability		
MoIT	Ministry of Information Technology		
MoU	Memorandum of Understanding		
MPLS	Multi-Protocol Label Switching		
MSC	Mobile Switching Centre		
MVNO	Mobile Virtual Network Operators		

Chairman Note

It is indeed my pleasure to present to you the Pakistan Telecom Authority Annual Report 2007-08. The report covers overall performance of the telecom sector during 2007-08 and all the important regulatory activities performed by the Authority.



Joining the Office of Chairman Pakistan Telecom Authority imparted great challenges on me. However having an edge of being part of the Authority in the capacity of member (technical), I remained confident, while taking actions both internally at PTA and for the sector, to take the Pakistan telecom sector to new heights.

The Pakistan Telecom sector after enjoying phenomenal growth in last couple of years, has now become more stable. The growth patterns have now started adjusting under the stress of acute competition, however, the growth has been positive in almost each facet of telecom sector. After focusing on introduction and commencement of new services and technologies, the Authority is marching in search of new vistas of innovation and growth. New set of challenges ahead of us include proliferation of broadband in the country, consumer's protection and continuous flow of foreign direct investment in the sector. In this regard we have taken number of initiatives. First of all for more efficient and effective working of the Authority a major restructuring has been done which would result in increasing the efficiency of Authority and will help in bringing more professionalism for PTA employees. Similarly in order to address the growing number of complaints and grievances of telecom consumers and to protect them from exploitation by operators, a Consumer Protection Directorate has been setup in the Authority. To take care of upcoming telecom challenges in the local market PTA Think Tank is now in place which would assist the Authority to prepare it for future challenges. PTA is taking a lot of initiatives for the broadband technology to flourish in the country. PTA is also taking care of gray traffic menace with newly acquired technical facility.

With new regulatory structure in place and defined future goals of the Authority, I hope PTA will be able to take telecom sector to new avenues of innovation and growth.


Dr. Mohammed Yaseen
Chairman

Executive Summary

After experiencing phenomenal growth for last couple of years, the Pakistan telecom sector enjoyed yet another year of positive but slow growth. With ever increasing teledensity and more and more satisfied telecom consumers, this year the sector growth moved towards stability and witnessed the settling down of erratic growth pattern of earlier years.

The Pakistan economy although passed through one of the difficult year after so many years of increasing growth rates close to 7% per annum. The economy registered growth rate of 5.8% this year as against the target of 7.2%. In relation to the slow economic growth the telecom indicators both financial and other also exhibited slow growth trends. Teledensity in the country reached 58.8% showing a growth rate of 30.6%. The telecom sector contribution to national coffer which is mainly in the form of taxes and duties reached Rs. 111.7 billion this year. The total tax collection from telecom sector was Rs. 111.7 billion which was almost Rs. 100 billion last year. This rise is mainly because of GST which increased from Rs. 36 billion in 2006-07 to Rs. 44 billion in 2007-08. Similarly Activation Tax also showed an increase of about 11% this year. Although the volume of General Sales Tax collection grew this year however its growth in relation to previous year declined from 18% to 17% during the reported year. Telecom imports declined marginally and stood at US\$ 1.33 billion, whereas in order to discourage the imported handsets the government imposed duty of Rs. 500 per mobile handset along with regulatory duty of 50%. PTA always ensured an investor friendly environment and this year sector had a total of US\$ 3.1 billion investments, of which more than US\$ 2 billion was made by mobile operators. As for the Foreign Direct Investment (FDI), the telecom sector become second to financial sector as major FDI recipient with a sum of US\$ 1.4 billion in 2007-08. Although telecom revenue growth was 18% this year as against 21% in 2006-07, the revenues of mobile segment grew from 48% in 2006-07 to 37% in the reported year.

On the regulatory front, PTA continued its efforts towards further growth of the sector while introducing new regulatory measures and strengthening the present regulatory setup in the Authority. In this way the Authority maintained the level playing field for all the operators and a conducive investor friendly environment prevailed, where much satisfied telecom customers have been enjoying large number of telecom and related services. Number of important regulatory initiatives were taken during the year. With the new leadership in the Authority, major restructuring of PTA was done in consultation with senior management with an objective to improve the efficiency of the organization. Similarly, to improve the functioning of the regulator in order to deal with future challenges a think tank has been created in the Authority. This think tank would be focal thinking machinery of the Authority on policies, technical and development aspects and other important issues pertaining to the telecom sector. In pursuance of its objective of protecting the telecom consumers the Authority has taken a major initiative of setting up Consumer Protection Directorate (CPD). The directorate is mandated towards

evolving institutionalized consumer grievances redressal mechanism for the speedy resolution of telecom consumers' issues and complaints. PTA decided to set up a joint system for monitoring and reconciliation of international telephony traffic along with the LDI operators, in this regard all the ground work including regulations have been finalized. The Authority is now very focused on proliferation of broadband and related technologies. In this regard as a first step Chairman PTA has been highlighting ways to facilitate deployment of broadband technologies, optimize timely spectrum availability and harmonization of regional practices and standards. The Authority also worked in number of areas including verification of Mobile and WLL Subscribers antecedents, deployment of online verification system and verification of WLL subscribers, in collaboration with law enforcement agencies, MOIT&T and NADRA, to curb illegal businesses in telecom sector. So far, over 10 million, SIMs have been closed down which could not be verified. Similarly, PTA took number of initiatives for further curbing handset theft and provided online access to get UAN and Toll Free numbers. In addition to Rabta Ghar, Universal Service Fund has started awarding contracts to service providers in rural areas to improve telecommunication facilities in far flung areas of the country.

Mobile Cellular segment remained engine of growth of the telecom sector in particular and the economy in general with its social and economic benefits spreading across the country. Pakistan mobile market has remained one of the fastest growing mobile markets among the emerging markets. This year a total of over 25 million subscribers were added to the total subscriber base of 62.9 taking it to a total of 88.0 million at the end of 2007-08. Today almost 91% of the total population of Pakistan is covered with mobile networks. All operators are expanding their networks and up till 2007-08 almost 9,369 cities/towns/villages have mobile networks by one or all operators. During the reported year, Telenor emerged as fastest growing mobile operator which added almost 7.4 million subscribers to its network in 2007-08. However, Mobilink remained market leader with almost 35% of total market share in terms of subscribers. CMPak performance remained outstanding wherein it added 2.9 million subscribers in first year of its operations. In 2007-08 revenues of mobile sector grew by 37% and reached Rs. 182 billion which were Rs 133 billion in 2006-07. However, the average revenue per user depicted another year of declining growth trend and today the industry ARPU stands at US\$ 3.1. Mobile segment remained one of the major contributors of national exchequer and contributed almost Rs. 82 billion in the form of GST/Activation/Withholding taxes. According to BMI an independent telecom analysis company, mobile subscribers in Pakistan would reach 135 million in 2012 with average growth rate of around 20% to 25%.

During the reported year the Carrier Services Providers rapidly rolled out their networks across the country and total point of presence grew by 40% amounting to almost 178 in total. The revenues of new LDI operators showed a growth of 42% where the total revenues of the LDI segment reached Rs. 21.9 billion. The revenues of incumbent PTCL are continuously declining where as companies like LinkDirect and Wateen are making good profits. Reliance of LDI operators on PTCL for backbone connectivity is reducing everyday whereas injection of FDI by foreign companies in local LDI operators is enabling these operators to invest more in network expansion. Worldcall received US\$ 200 million from Omantel and Buraq Telecom received US\$

220 million from QTel after sharing some of their shares to them. Total investment made by LDI segment in 2007-08 is US\$ 390 million. International outgoing traffic grew by 31% where almost 1.2 billion minutes were terminated to their respective networks. International incoming traffic grew by 163%. The Authority has taken measure to safeguard interest of new LDI operators and make it mandatory for interconnection and lease of media from PTCL.

The fixed line segment of telecom sector after deregulation could not improve much due to availability of alternative services including mobile and WLL. For yet another year the fixed line teledensity dropped and reached 2.7% during 2007-08, losing both on urban and rural side. PTCL maintained its SMP position and subscriber share remain same, however NTC improved its share and now maintain 2.4% of total market. Total fixedline subscribers at the end of 2007-08 stand at 4.4 million. Wireless Local Loop (WLL) showed a positive growth trend though but the growth rate was as low as 32% in 2007-08 which was almost 66% in 2006-07. Today total WLL subscribers are 2.23 million with WLL teledensity standing at 1.4%. The total payphones in the country at the end of 2007-08 reached 449,121 showing a growth rate of 16%. There are currently 59% payphones working on WLL technology whereas 27% are fixed and only 14% are mobile PCOs.

Broadband proliferation in the country has been very slow during all these years and this segment of telecom sector is still in its infancy stage. Total number of broadband subscribers in Pakistan are approximately 170,000 whereas the segment experienced a growth rate of almost 160% in one year. The costs which are one of the deterrent in broadband growth have been drastically reduced from US\$ 55 to US\$ 16 for a 512 kbps unlimited DSL connection. It is estimated that there will be 5 million broadband subscribers in Pakistan by 2010.

PTA has been working rigorously for liberalization of telecom sector of AJK and NA. In this regard licensing of mobile operators for AJK and NA was done last year whereas in the reporting year licensing of LDI and LL operators was made. Similarly CMPak was also awarded license to operate mobile services in AJK and NA during this year. Today total teledensity in AJK and NA is almost 33% of which mobile teledensity is leading with 30%. Total mobile subscribers in AJK and NA reached 1.61 million showing a growth rate of 77%. SCO the incumbent operator in AJK and NA has total subscriber base of 264,787 of which 126,000 are cellular subscribers. SCO is still maintaining its monopoly in fixed line which would finish once the newly licensed companies would start their services in the area.

Telecom sector of Pakistan continued to grow positively during 2007-08, however the pace of growth was not fast. Since the liberalization has been completed and most of the segments of the sector have competition in some form, therefore it can be said that market is now moving towards maturity. Similarly internal and external factors including political and economic situation of the country also played a major role in current growth trends. With the new Government in place and extensive work on regulatory measure taken by PTA for future would result in improved growth patterns of the sector.

