

Local Loop & Value Added Services

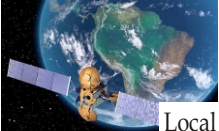
Government of Pakistan opened its Local Loop telephony segment in 2003 along with liberalization of cellular mobile telephony. PTA issued 84 licenses to Thirty Seven (37) operators for FLL along-with Ninety Three (93) WLL licenses to Sixteen (16) operators for Fourteen (14) telecom regions. PTA issued Local loop licenses in two categories one for fixed line and the other for Wireless Local loop (WLL) telephony. However the growth of Local Loop segment remained stagnant due to one or the other reason. This slow growth of local loop sector also proved to be hurdle for the growth of broadband and other value added services in Pakistan.

Fixedline Services

Fixed line services growth has declined in the World because of the availability of wireless networks which are easy to deploy and very cost effective compare to the fixed line networks. Further, wireless based services enabled the customers to avail more innovative services as compare to fixed line. In line with the world trend, Fixed line telephony in Pakistan has also shown negative growth though wireless segment has shown positive growth. PTCL has still monopoly over fixed line services though many operators got license for fixed line telephony in the deregulation process of the sector. Currently, 4 major Local Fixed Loop operators are providing the local loop services within their license areas. Nayatel and World Call are two major operators who have laid fiber to capture niche market segments. These operators are planning to further offer bundled broadband, IPTV and voice services.

FLL Subscribers & Teledensity

Even after lapse of Five (5) years of deregulation in the fixed line, PTCL still has monopoly over fixed line services in Pakistan and



it has share more than 97% subscribers of fixed line. However, the fixed line subscribers are continuously declining mainly due to popularity of wireless based services. PTCL fixedline subscribers in the year 2007-08 declined by about 8% and reached to 4.3 million as compared to 4.8 million in 2006-07. In the year 2007-08, PTCL lost over 402,656 subscribers. New Local Loop operators also could not add substantial figures on their networks. Nayatel is

providing service in Islamabad region and it has total of 16,500 subscribers at the end of 2007-08 with an addition of 5,500 in last year. One can expect that with the commencement of more LL operators in Karachi and Rawalpindi this gloomy picture will get better.

The above mentioned declining trend resulted in a continued declining fixed line teledensity chart hitting 2.7% mark at the end of 2007-08 showing decline of about 0.34 percentage from pervious year. Improvement in WLL teledensity seems to fill the gap of decline in FLL where operators are adding subscribers at a better pace.

PTCL is still maintaining its virtual monopoly in fixed line segment with almost 97% of the total market

share and customer base of 4.3 million subscribers. Followed by NTC with approximately 0.1 million subscribers. Worldcall, Brain, Union Comm, Nayatel and Brain account for total of no more than 38,878 connections. All FLL companies including PTCL & NTC maintained their market share in the reported year. However, a drop of 0.6 percentage point was witnessed in the share of PTCL in total FLL market.

Figure - 29
Fixed Line Subscribers

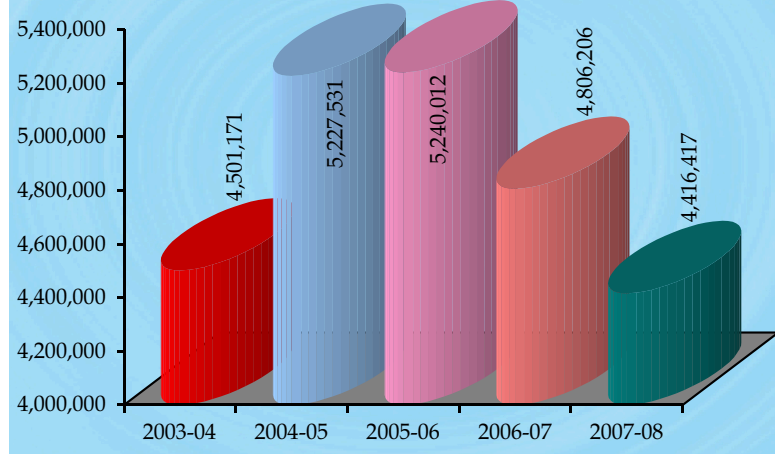
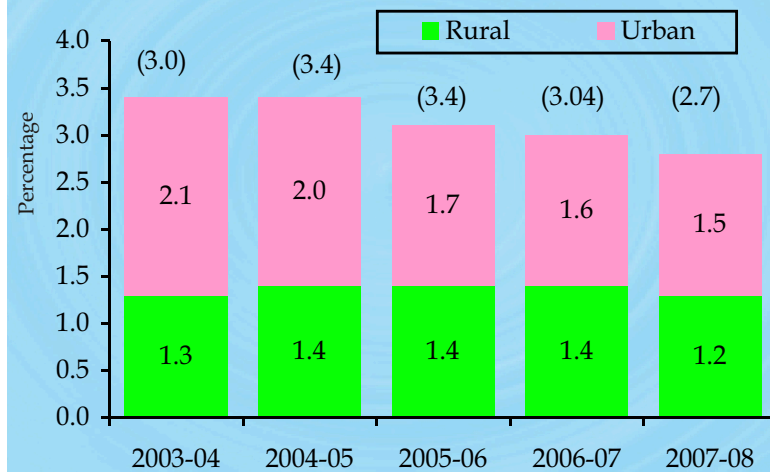


Figure - 30
Fixed line Teledensity





While looking at the provincial situation, all the new operators in addition to incumbents PTCL and NTC are providing services in Punjab and so it has maximum share in fixed line segment with over 57% of total market share. Baluchistan share has remain the same in the year 2007-08 On the other hand, NWFP has lost share in fixed line stands at 11% in the year 2007-08 it was 13% in 2006-07. Main reason attributed to drop in the share of NWFP in total FLL market is law and order situation in the province. In terms of teledensity, province of Sindh has maintained its fixed

Table - 15
Company wise Total Fixed line Connections (2008)

	Punjab	Sindh	NWFP	Balochistan	Total
PTCL	2,427,042	1,234,328	495,136	117,042	4,273,548
NTC	63,599	26,802	9,969	3,621	103,991
WorlCall	1,681	9,821			11,502
Brain	7,376				7,376
Uninon Comm.	3,500				3,500
Nayatel	16,500				16,500
Total	2,519,698	1,270,951	505,105	120,663	4,416,417

Figure - 31
Company-wise Share in LL Subscribers

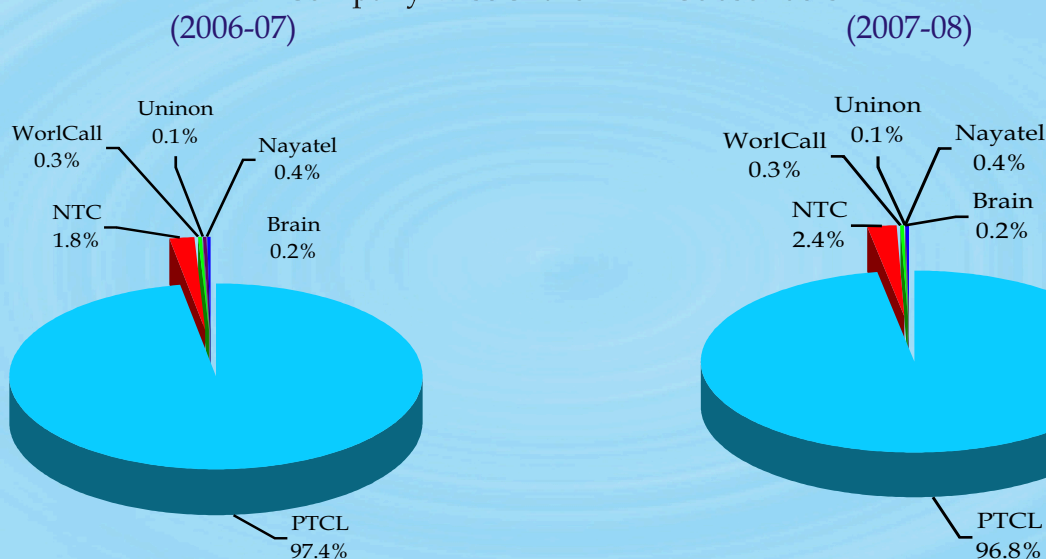
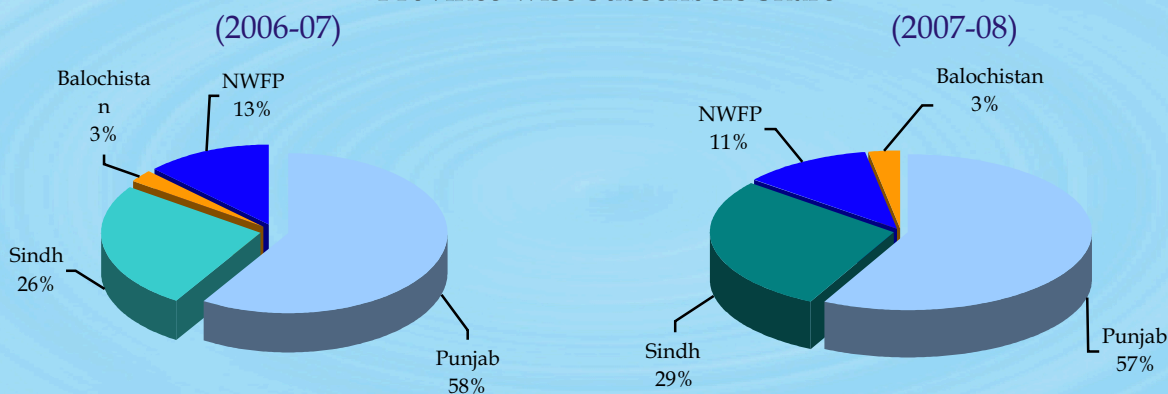
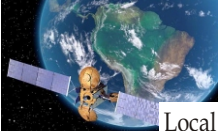


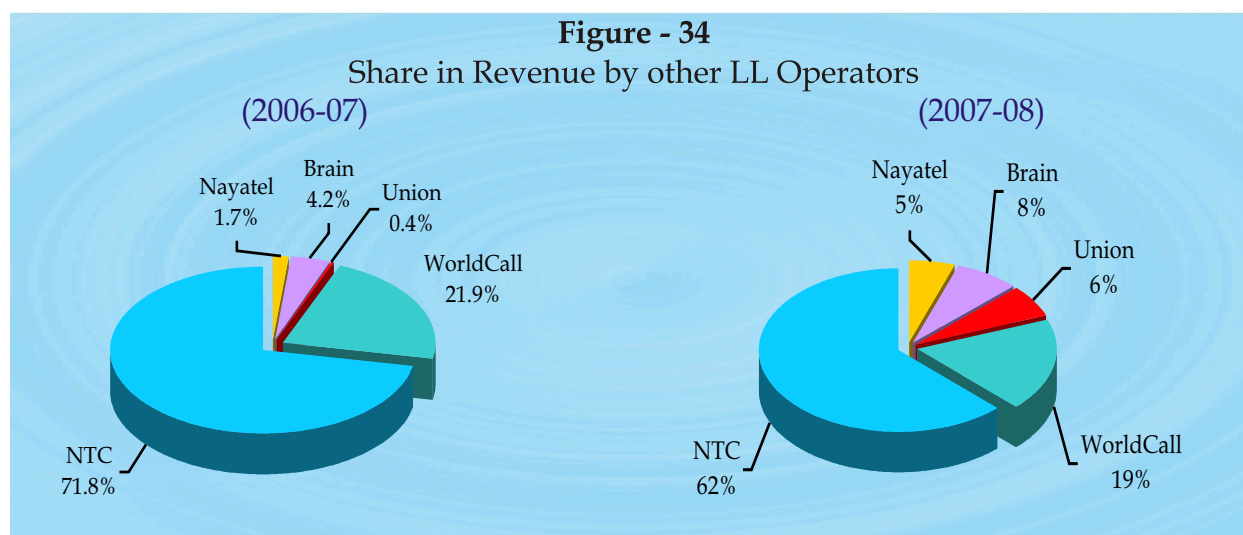
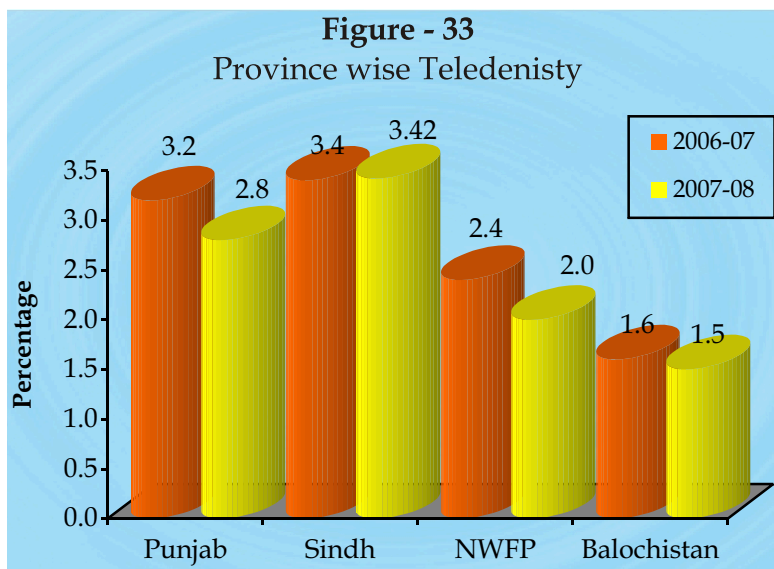
Figure - 32
Province-wise Subscribers Share





line teledensity which stands at 3.42% in 2007-08. Province of Punjab has lost about 0.6 percentage points density in last one year while NWFP has lost 0.4 percentage points teledensity in last one year.

While looking at the financial health of the local loop industry, PTCL holds more than 95% share in total revenues of the industry though its revenues are declining continuously. It appears that new players are gaining momentum and started to improve the revenue situation in last two years. All local loop operators except PTCL, NTC and World Call have improved their revenue by about 14% in the year 2007-08 compare to the previous year. Share of NTC in total revenue declined significantly and reached to 62% in 2007-08 compared to 72% in the year 2006-07. World Call has also lost its share by about 3% in the year 2007-08.



Wireless Local Loop (WLL)

WLL technology has been introduced in Pakistan in 2003 where number of licenses has been issued to various operators for different regions to provide telephony services based on wireless based networks. Approximately 70% of Pakistan total population lives in rural area which presents huge opportunity for growth of WLL service because demand for telephony in the country has surged unprecedented. Regulator is confident that WLL is emerging as a success story in Pakistan and it

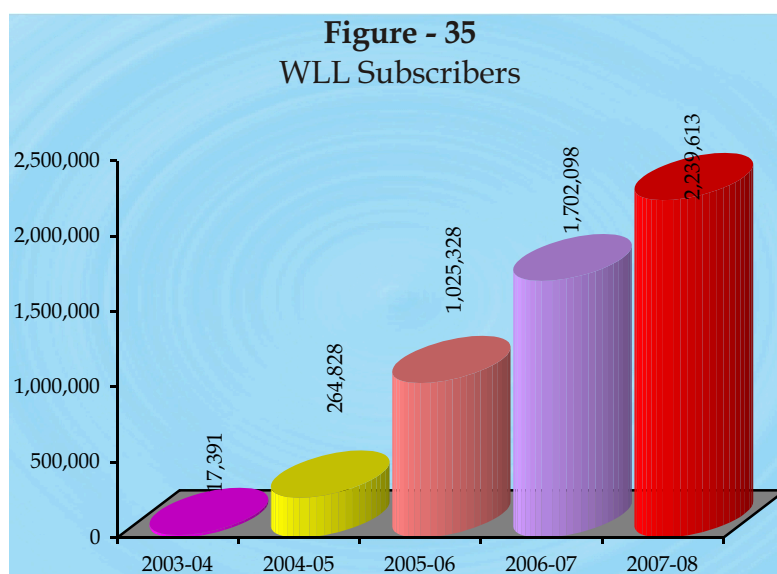


will help to bridge the digital divide in Pakistan. WLL service will enable Pakistan to bridge the communication gap by using cost-effective, easy-to-deploy WLL systems in its rural areas.

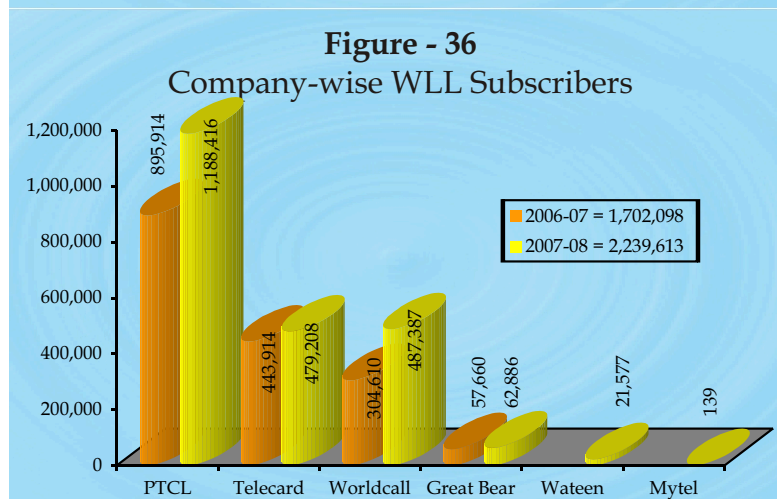
So far, PTA has granted permission to commence the WLL service in Pakistan to eleven (11) WLL operators however, Nine (9) operators are operational and providing WLL service in different telecom regions of Pakistan. PTCL has covered all the telecom regions at much faster pace. They are coming up with new technology in 3.5GHz that will break the digital divide in Pakistan. Likewise, World Call, Telecard and Wateen Telecom are also progressing tremendously. Wateen telecom has signed an agreement with DHA where Wateen on behalf of DHA WLL, will provide real time broadband services to customers in Lahore.

Subscription Growth

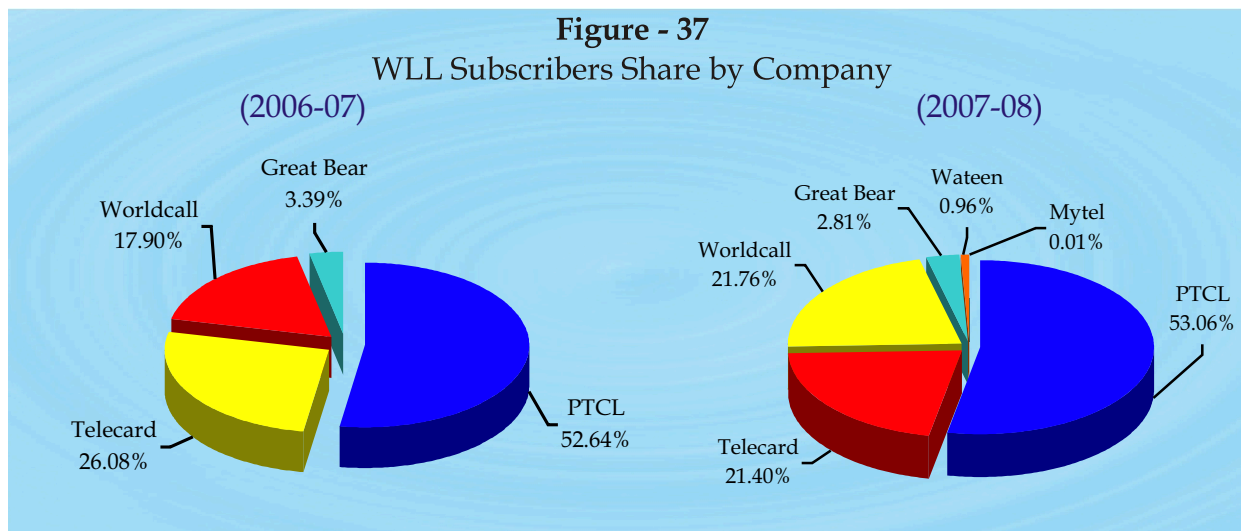
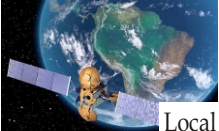
WLL subscribers are growing exponentially since the launch service in Pakistan in 2003-04. In the year 2007-08, WLL total subscribers reached to 2.2 million with an addition of 537,515 subscribers in fiscal year 2007-08. However, the growth of WLL subscribers in the year 2007-08 was recorded at 32% where it was 66% in previous year.



PTCL has over 1,188,416 subscribers in the year 2007-08 while rest all operators have also added subscribers to their WLL networks. PTCL WLL subscribers grew by 32.6% while growth for Worldcall and Telecard positively recorded 60% and 8% respectively. Similarly, Great Bear also report 9% growth in 2007-08. Wateen and Mytel have started services in the

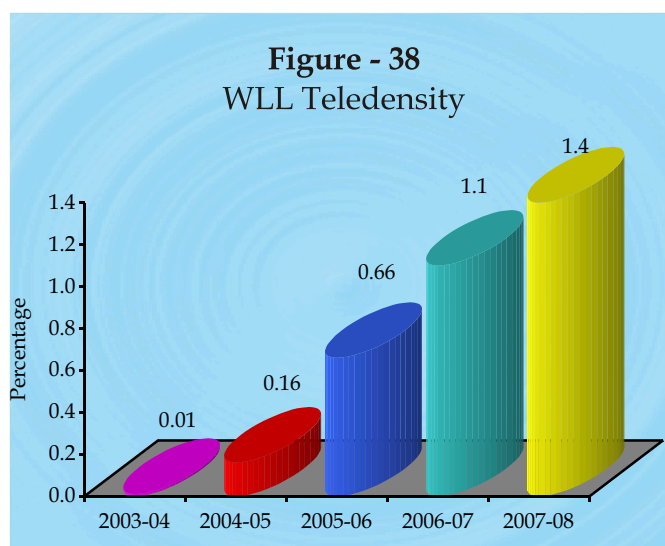


year 2007-08 and added 21,577 and 139 subscribers respectively in the year 2007-08. As for market share PTCL continued to lead the sector with subscribers base of 1,188,416 having share of more than 53% in total WLL subscribers at the end of fiscal year 2007-08.

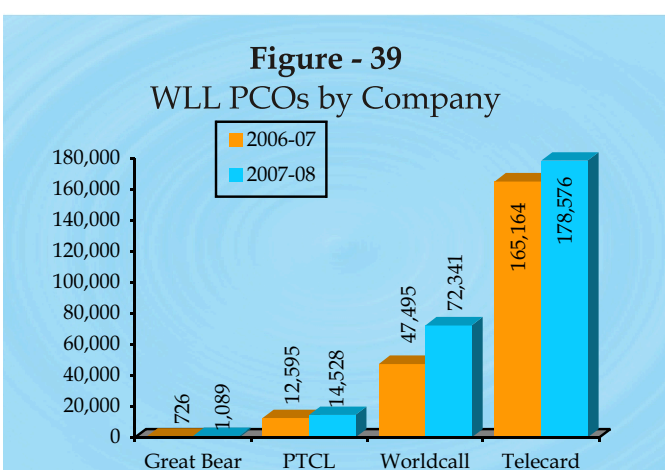


Penetration

WLL teledensity is increasing at fast pace and it is expected that its growth will improve further after new players start their service who got commencement certificate and are in the phase of initiating the service in near future. Currently the WLL teledensity has reached 1.4% compare to 1.1% in previous year. In the year 2007-08, WLL teledensity exhibits about 27% growth which is filling the gap of declining teledensity of fixedline sector in Pakistan.



Major card pay phone companies have shifted their Public Call Office business from fixedline to WLL service which is easy to deploy. Moreover, they do not have to share their PCO revenues with the incumbent PTCL whose infrastructure was being hired for fixed line PCOs by these companies perviously. Telecard is the pioneer of PCO business in Pakistan and still leading this segment in the industry. It has installed more than 178,576 PCOs all across the country on WLL network which is about 8% higher than the last year number. World



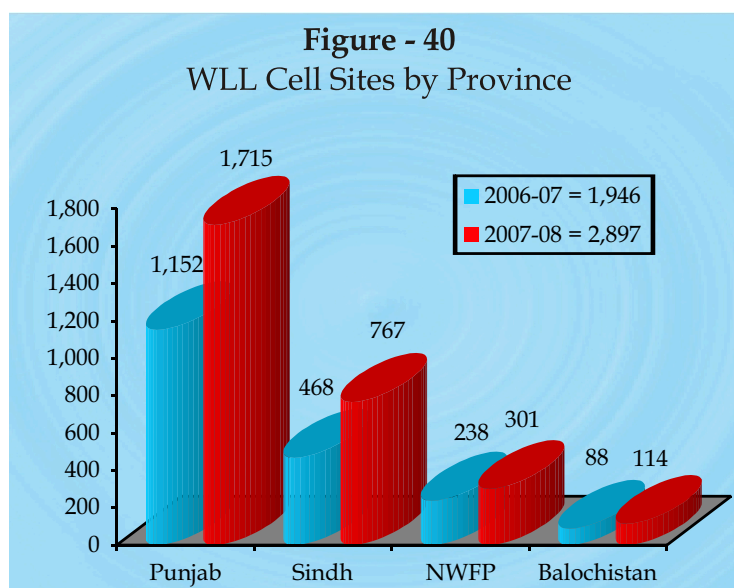


Call is another big player who installed 24,846 new PCOs on WLL network in the year 2007-08. World Call PCOs growth remained impressive and its PCOs grew by about 52% in the year 2007-08. The incumbent PTCL has also started its own PCOs and installed more than 14,528 PCOs so far on its WLL network. Great Bear International is providing service only in Rawalpindi region and its PCO number has declined from 726 in 2006-07 to 1089 in 2007-08.

Network Expansion

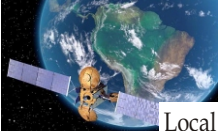
WLL companies are expanding the networks rapidly and installing cell sites all across the country. In the year 2007-08, WLL companies have erected over 951 cell sites and its growth reported over 49% in the year 2007-08 compare to previous year. Total cell sites have reached 2,897 in the year 2007-08 compare to 1,946 in the year 2006-07. Among the provinces, highest number of cell sites have been erected in the province of Punjab where all companies have installed over 563 new cell sites all across the province while second to Punjab was the province of Sindh where 299 new cell sites were erected during 2007-08.

Among operators, Worldcall has shown an impressive growth in installing cell sites who has added over 85 new cell sites in the year 2007-08 followed by telecard who added 12 new cell sites in the year 2007-08. Wateen and Mytel are new operators who have installed cell sites in 2007-08, Wateen installed 833 sites while My tell has installed only 2 new sites. Growth of new sites by PTCL seemed quite slow where it has added only 12 new cell sites during the whole year. Similarly 19 cell sites added by Telecard in 2007-08. With this addition of new cell sites, PTCL is still the largest WLL operator which owns 1,451 cell sites followed by Wateen telecom which owns 833 cell sites which it has installed in short span of time. Great Bear could not add any site in the current year.



Value Added Services

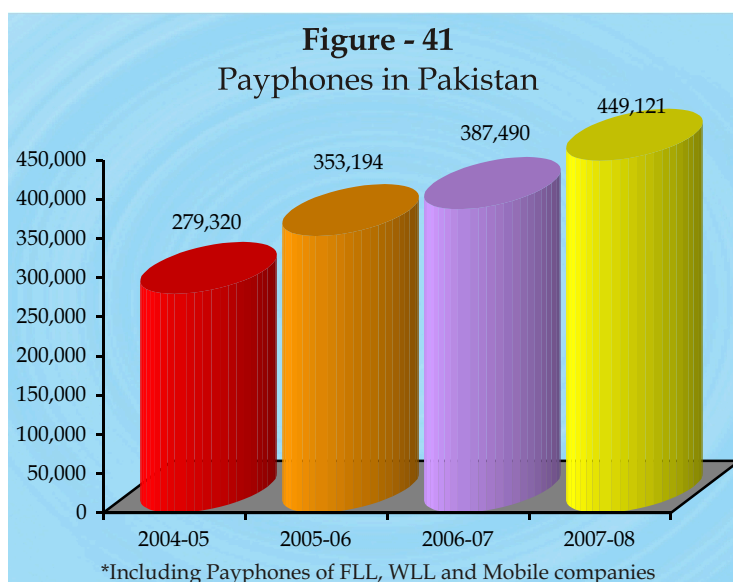
Value Added Services are considered to propel the growth of telecom sector of Pakistan in coming years where the growth in fixed line voice telephony has already slowed down. Value added Services in Pakistan were started by private sector in 1990 and PTA issued various licenses



including card payphone, Internet, Vehicle tracking system, Burglar alarm, video conferencing and many more. However, in the year 2006, PTA has lumped all these services into two main categories data and voice while categorising their services under registration or exempted from any license. In this regime, PTA issues Class Value Added Services (CVAS) license in these two categories along with one category that needs simple registration. New regime also allows conversion of old licenses in relevant category under new regime. In the year 2007-08, PTA received 56 applications for award of CVAS licenses out of which 46 licenses have been issued so far while remaining are referred back to applicants for submission of some information.

Card Payphones

World over the card payphone service is popular mostly with the tourist and persons who do not have access to telephone service at home, so is the case in Pakistan. Card payphone service was introduced in Pakistan in 1990 and it became very popular because of non availability of cellular mobile or fixed line services to the major portion of population in Pakistan. Its growth remained very impressive before deregulation and

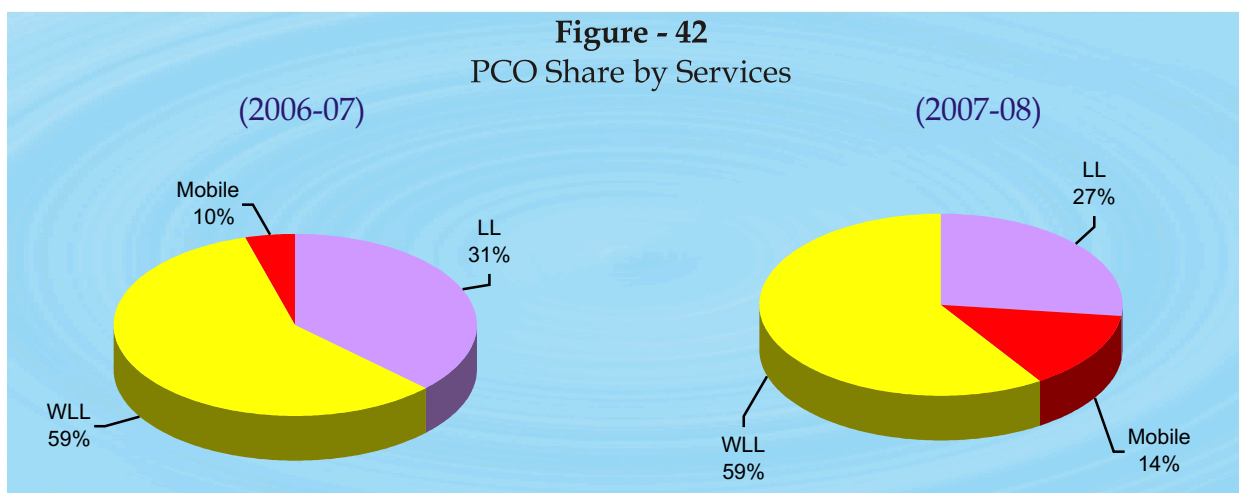


introduction of new cellular mobile operators. After deregulation, its growth became stagnant for some time but soon it got momentum after PTA allowed Mobile operators to start the PCO services and WLL operators started service on their networks. Today, over 449,121 PCOs are working all across the country and it showed 16% growth in the year 2007-08 while last year its growth was 10%.

Till the year 2005, this service was being provided on PTCL fixed line networks leased out to the private operators with a mechanism of profit sharing by private operator, franchisee and the PTCL. However, major players of card payphone companies got their own LDI licenses and shifted their business at to their own networks after

Table - 16
PCOs by Company (June 08)

	LL	Mobile	WLL	Total
PTCL	121,358		14,528	135,886
Mobilink		61,229		61,229
Telecard			178,576	178,576
World Call			72,341	72,341
GIBS			1089	1089
Total	121,358	61,229	266,534	449,121



deregulation of the sector. Moreover, most of the small operators who did not get Local loop licenses had to face closure of the service due to lower tariffs by mobile and fixed line operators.

Currently, only 27% of the total PCOs are working on PTCL fixed line network while rest of the business has shifted to Mobile and WLL service. Telecard and World call are major players for provision of PCO service who have their own WLL network and they are providing this service from their own platform. PCO share on fixed line network has declined from 31% in 2006-07 to 27% in the year 2007-08 while the mobile share (service is being provided by Mobilink) has increased from 10% in 2006-07 to 14% in the year 2007-08.

PCO service is available in all four provinces of Pakistan which provides telephony service along with employment to million of the people in the country. Most of the share of PCO is concentrated in the provinces of Punjab and Sindh which are more populated and lucrative for business of PCOs. Punjab has share of more than 53% having more than 239,326 PCOs while province of Sindh has share of 33% having 146,063 PCO working all across the province. Baluchistan has the lowest share and have 25,836 PCOs followed by NWFP who has 37,896 PCOs. In the year 2007-08, all provinces maintained their share of in total number of PCOs while major drop in total share of Balochistan has been witnessed. Although total number of PCOs increased in all provinces but this increased was more in Punjab and NWFP.

