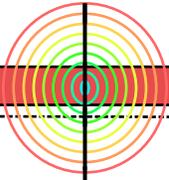


Chapter - 5

Basic Services



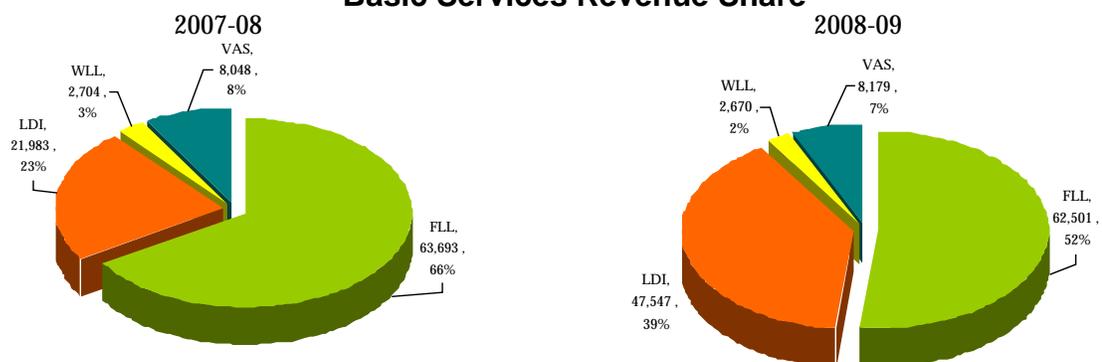
Overview

In 2003, Government of Pakistan deregulated telecom services and issued licenses for LL (Fixed and Wireless), LDI and VAS to a number of operators. As companies began to establish their networks across the country, cellular industry also took off at a fast pace, thus creating a fierce competition between the wired and the wireless services. The competitive environment ultimately facilitated the customers as tariffs lowered, quality of service improved and coverage areas widened. This began the era of growth in telecom services.

During 2008-09, basic services showed a healthy revenue growth rate of 26%, contributing Rs. 121 billion to the total telecom sector revenue which is around 36% of total telecom sector revenue. In 2008, this share was around 34%, thus showing a 6% increase. This growth is mainly attributed to growth in LDI segment of the telecom services, as Fixed Local Loop is grappling with inherent issues and WLL growth had not been very significant during the reported period as compared to the last year's growth patterns. Local Loop market has been going through tough times during the past few years due to number of issues including restructuring and revitalization of network. Although wireless local loop has been steadily growing over the years, fixed line services could not keep up with the increasing demands of quality and coverage. This poor performance by FLL has negated the positive effects of WLL growth in the overall Local Loop proliferation in the country.

Figure - 21 shows that Fixed Local Loop lost its stake in total basic services revenue by 14% this year, whereas LDI increased its share by 16%. Comparing to that of 2007-08, WLL market share slightly increased from 7% to 8%, while VAS decreased from 8% to 7%.

Figure - 21
Basic Services Revenue Share



Note: VAS Revenues 2007-08 are revised and 2008-09 are estimated

Decrease in VAS share in the total revenue of telecom services was primarily due to VAS facilities, now being offered by WLL and Mobile operators as well e.g. Internet.

PTCL still maintains its virtual monopoly in the fixed line sector despite introduction of many new FLL companies. Huge investments are underway for fiber deployment in rural areas of Pakistan.

In contrast, Wireless Local Loop (WLL) has been able to make its mark on the telecom industry by winning the customers' trust. Wireless service providers such as PTCL, Worldcall and Telecard have been able to penetrate into the market by offering viable business solutions in the form of PCOs. With a small investment and a suitable place, any common man could buy a wireless PCO and start business especially in rural areas where cellular revolution is yet to make a mark. Although WLL revenue share is the smallest in the basic services chart, it is a major contributor in the overall local loop subscriber base. With strong focus of companies on triple play services, the basic services will hopefully grow over time, especially in rural areas.

Long Distance & International (LDI) operators have been in quandary for the last few years due to high settlement rates and alarmingly high grey traffic. However, PTA took control of the situation initiating a number of steps in close coordination with LDI stakeholders. As a result, LDI sector experienced truly exceptional growth last year, as revenues increased, illegal traffic reduced and call rates improved. During 2008-09, revenue share of LDI in basic services jumped to 39% as compared to the last year's 23%. The project of Deployment of Monitoring & Reconciliation of International Telephony Traffic (M&RITT)

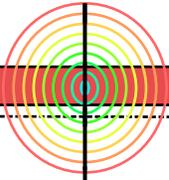
has streamlined the traffic record, billing and detection/ blocking of illegal IPs which had a huge influence in increasing the traffic volumes on LDI networks.

Fixed Local Loop

Fixed Local Loop is the one of the oldest means of communication in the country's telecom industry. Since Deregulation of telecom sector in 2003, a total of 84 licenses were issued to 37 operators for 14 telecom regions in Pakistan. It was expected that fixed line teledensity would increase, as PTCL would be forced to reduce the tariffs and improve its standards in lieu of intense competition in the market. However, this strategy could not mature due to delayed completion of roll out plans by the new entrants and enormous popularity of cellular and wireless sector. The Authority had been time to time pressing the new FLL licensees to roll out networks as per license requirements in the given period. It created a conducive environment for them to start services. However, after the elapse of over 5 years, the Authority reviewed the situation and issued show cause to 18 licensees for failing to complete the roll out obligations. After the hearings, the Authority cancelled /suspended 8 LL licenses, and extended the time limit of roll out for 10 other licensees on submission of valid reasons by them.

Subscriber Growth & Teledensity

Fixed line services have been experiencing a declining trend world over and so is the case in Pakistan. In United States of America, telecom operators are witnessing



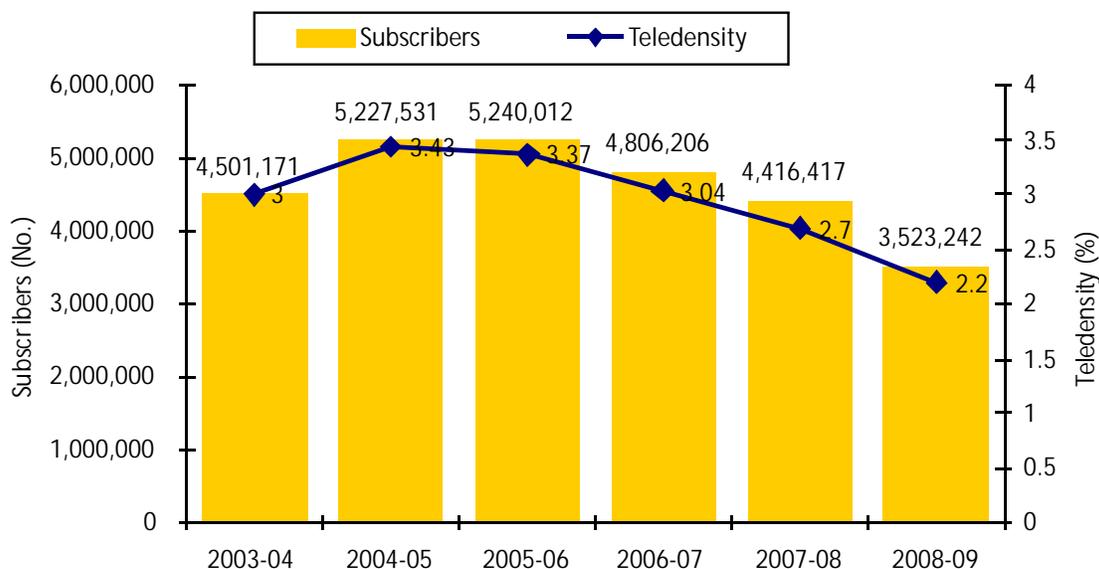
the decline in landlines at the rate of 70,000 per month. Analysts believe that currently about 25% of households in America rely entirely on mobile phones and this share could be doubled in next three years. Further it is estimated that if the decline of landline telephones in America continued at current rate, the last cord of fixed line phone will be cut sometime in 2025.

Pakistan is also witnessing a fast decline in fixed line subscription in last few years with the introduction of wireless based technologies in Pakistan which provide easy and cheap alternate of such services. Figure - 22 depicts the declining trend of fixed line services in Pakistan. In the current year, Pakistan lost over 893,175 subscribers reaching at 3.5 million at the end of June 2009 compared to 4.4 million subscribers of same period in last year. Fixed line subscribers decline by about 20% in the year 2008-09 while last year this loss was only 8%. It indicates that fixed line subscribers are clipping rapidly. The spillover effect of the loss in fixed line services could have

negative pressure on the growth of DSL services in Pakistan which is a worrying point for regulator. More than 20% loss in fixed line phones also brought down the fixed line teledensity down to 2.2% from the last year's 2.7%. Although FLL segment of the industry has a huge infrastructure on its disposal yet the poor service quality offered by fixed line operator (mainly the incumbent) has forced the users to lose their trust in this media and to look around for cheaper alternates like cellular or WLL phones.

The incumbent holds the major chunk of fixed line services (96%) who is diverting its sources towards WLL networks and other services causing loss in fixed line in Pakistan. As mentioned earlier the new FLL operators could not make up loss of fixed line by the incumbent though some new FLL operators have initiated services in few metropolitan cities of Pakistan. Vastness of the country is another problem which makes fixed line networks expensive to run or improve.

Figure - 22
Fixed Line Subscribers & Teledensity



Financials

Despite sharp decrease in subscriber base, the fixed line sector's revenue remained steady as compared to the past few years. FLL industry reported a revenue loss of almost Rs. 1.1 billion last year, the least since 2004-05. This drop in revenue is mainly caused by the heavy loss incurred by the incumbent PTCL, which has overshadowed the increase in the total FLL revenue figure by other operators. FLL revenues have also been declining due to low investments by the operators.

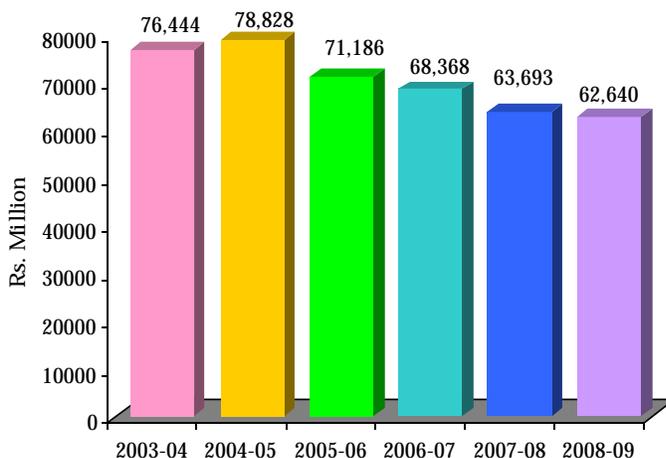
Fixed local loop services have 19% share i.e. Rs. 62 billion, in overall telecom sector revenue in 2008-09. FLL contribution in revenue of basic services' has declined to 52% from 66% due to increasing revenue collections by LDI and VAS. This grave situation is being closely monitored by the PTA, and a number of initiatives like study on PTCL's performance in post privatization era and other regulatory measures are proving helpful to revive this important sector.

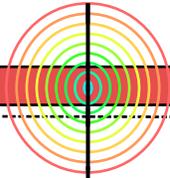
Wireless Local Loop

Wireless local loop is an important part of Pakistan's telecom sector as it provides a feasible last mile solution for rural telephony due to relatively low cost of deployment and maintenance. Pakistan opened the WLL market in 2003 by awarding 93 licenses to 16 operators for 14 telecom regions across the country. The emergence of new operators has proved as an important factor development of WLL sector, as they are pushing the existing giants like PTCL, Worldcall and Telecard to improve their coverage and service standards. The falling quality of fixed line services is also paving the way for wireless solutions to capture the local loop market. Prepaid billing, SMS, wireless internet and variety of handsets are the main advantages of WLL companies as rural subscribers can enjoy these services as a viable alternative to fixed line services, which still lag behind in terms of rural penetration. Currently, 9 WLL operators are providing services to over 11,669 cities/towns/villages includ-

ing AJK & NAs. WLL is a big hit, especially in rural areas where PCO is the easiest and cheapest way to start a business. Companies like PTCL, Telecard, Worldcall and PTCL have established their mark as major players in WLL market with Wateen, GreatBear, Link Direct and MyTel gearing up to stage a tough competition in the coming years. Wateen has launched its wireless business with strong marketing campaigns and attractive tariffs for tripleplay services.

Figure - 23
Fixed Local Loop Revenues





Subscriber Growth & Teledensity

WLL industry has been growing at a rapid pace since its inception in 2004. During 2008-09, WLL subscriber tally reached 2.6 million from 2.2 million in the previous year. A total of 376,655 subscribers have been added by WLL operators showing a growth of 17%. Although the growth rate is less when compared to 32% in 2007-08, the performance of WLL has been convincing if factors like recession, cellular growth and security situation are considered.

WLL teledensity has also been steady last year where total WLL penetration level increased to 1.6% from 1.4% in 2007-08. Although WLL is ideal for coverage in far flung areas, slow roll out of services by operators in rural areas is diminishing the potential of wireless media.

PTCL is the leader of WLL market with 1.3 million subscribers. Although PTCL has added 117,259 subscribers with a growth rate of 10%, its share in the total WLL market has declined from 53% during 2007-08 to 50% this year. Telecard has shown

laudable improvement by increasing its share from 21% to 24% during 2008-09. Worldcall slightly dropped its 22% market share of 2007-08 to 21% this year. Wateen improved its share as well ending at 3% this year from 1% during 2007-08. All other operators combine to form remaining 5% of the sector.

Network Growth

WLL operators have been expanding their network all across Pakistan mainly due to the success of WLL PCO's. Currently, there are 3,451 cell sites catering 2.6 million subscribers and covering almost 11,669 urban and rural areas. During 2008-09, a total of 544 cell sites added with a growth rate of 19%. Table – 11 shows the overall distribution of cell sites in Pakistan by all WLL operators. PTCL is the only operator, which provides the WLL facility all over Pakistan including AJK and NAs with 1,458 cell sites. PTCL provides its WLL services through brand name of “V-PTCL”, which is a good alternative to PTCL landline service. Wateen holds the second spot with 971 cell sites, though it has a small share in WLL

Figure - 24
WLL Subscribers and Growth

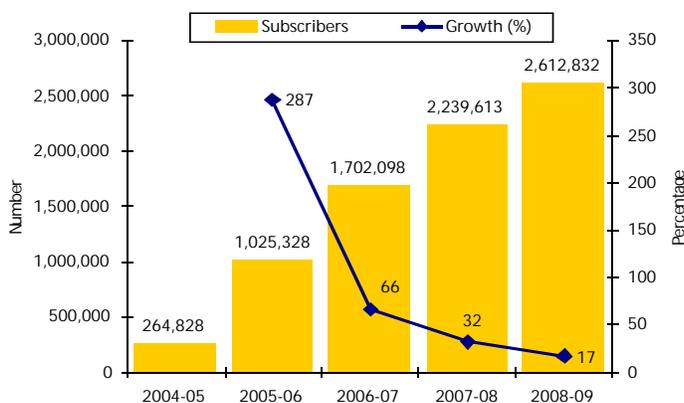


Table - 11
WLL Cell Sites June 09

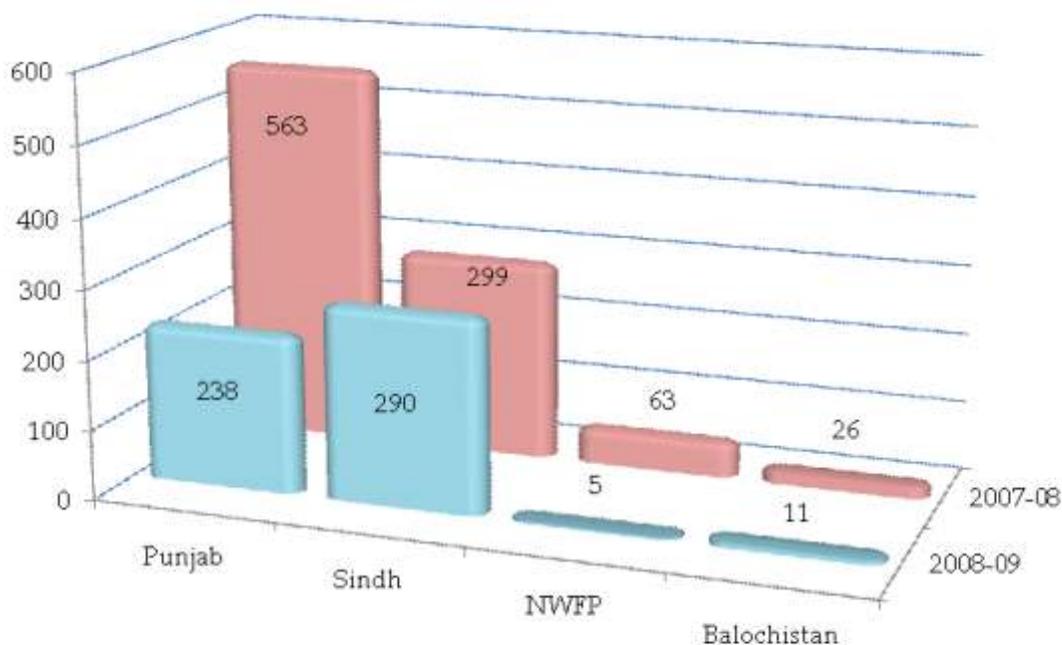
	Punjab	Sindh	NWFP	Balochistan	AJK	NA	Total
PTCL	808	329	222	89	7	3	1,458
Wateen	621	273	53	24			971
WorldCall	216	121	14				351
Link Direct	114	214	3	1			332
Telecard	152	120	14	9			295
Great Bear	42						42
Mytel					2		2
Total	1,953	1,057	306	125	7	3	3,451

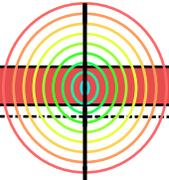
market so far. Worldcall and Link Direct follow with 351 and 332 sites respectively. In terms of provincial network growth, figure-25 depicts the comparison of number of cell sites added in all provinces in last two years. Punjab had been the leader in terms of cell sites addition in 2007-08 with 563 new cell sites but this year, Sindh holds the top spot with 290 new installations. Punjab being the most covered province is converging towards saturation; therefore, WLL operators have deployed only 238 new cell sites this year. NWFP and Balochistan could not acquire a substantial share of new cell sites due to ongoing military operation and precarious security situation, therefore during 2008-09, only 5 and 11 new cell sites have been installed in NWFP and Balochistan respectively as compared to 63 and 26 in 2007-08.

Long Distance & International (LDI)

LDI is an essential component of Pakistan's telecom structure as it has the responsibility of providing affordable and reliable media for worldwide telecom access. During the telecom sector's liberalization in Pakistan, 14 LDI operators were awarded licenses to carry international traffic to and from Pakistan. It was expected that LDI market would flourish because of a large number of Pakistani nationals working abroad, there would be a heavy traffic from the countries like Saudi Arabia, the UK, the USA, Europe and Middle East and the offshore IT business would also grow with availability of reliable media on cheap rates; however, high competition, deteriorating economic

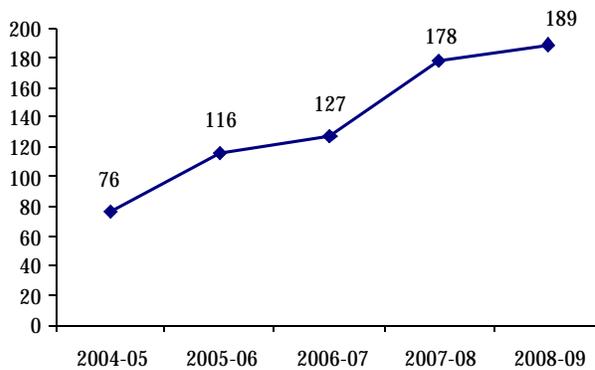
Figure - 25
WLL Cell Sites





conditions and illegal traffic hampered the growth of this important sector. PTA took notice of the situation closely working with LDI operators to improve the scenario. The Authority launched “Monitoring and Reconciliation of International Telephony Traffic (M & RITT)” facility, which could automatically detect IP addresses involved in illegal termination and also block them. These initiatives combined with the PTA's successful raids against illegal operators all around Pakistan gave a new life to the LDI sector as revenues and traffic volumes reached a record high this year. Currently, there are 09 companies providing LDI services via 163 Points of Presence (POP's) all across Pakistan. The POP's have increased from 178 in the previous year to 189 for new installations of DVCom and expansions by Multinet, Wi-Tribe and 4B Gentle. Most of the companies have met the license condition of 14 POP's with Worldcall having 24 POP's.

Figure - 26
Point of Presence by LDI Operators



*Note: CallMate POP's have been excluded due to termination of its license

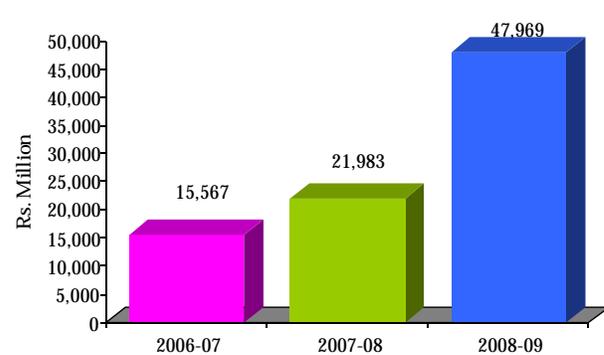
Financials

During the year 2008-09, the LDI operators' revenues reached an all time high. The new

LDI operators's revenues have reached Rs. 47.9 billion as compared to the previous year's Rs 21.9 billion, showing a remarkable growth of 119%. This remarkable increase is mainly attributed to reduction in gray trafficking due to the PTA's concerted efforts in deploying the monitoring facility along with Federal Intelligence Agency and Police. Figure - 27 depicts annual revenues of new LDI operators (other than PTCL) over the last few years.

The increasing trend of revenue growth finally reached its apex and consequently raised the share of LDI in basic services revenue. With net additions of almost Rs. 10 billion and Rs.6 billion respectively, Link Direct and Wateen were the leaders in terms of revenue growth. Worldcall and Telecard also reported extraordinary increase in revenue worth Rs.4 billion and Rs.2 billion net additions respectively. 4B Gentel and Wi-Tribe followed with an approximate

Figure - 27
Revenues by New LDI Operators



revenue growth of Rs.1 billion each. Such an unprecedented growth in revenues is highly beneficial for LDI market as it attracts new investors and discourages illegal trafficking.

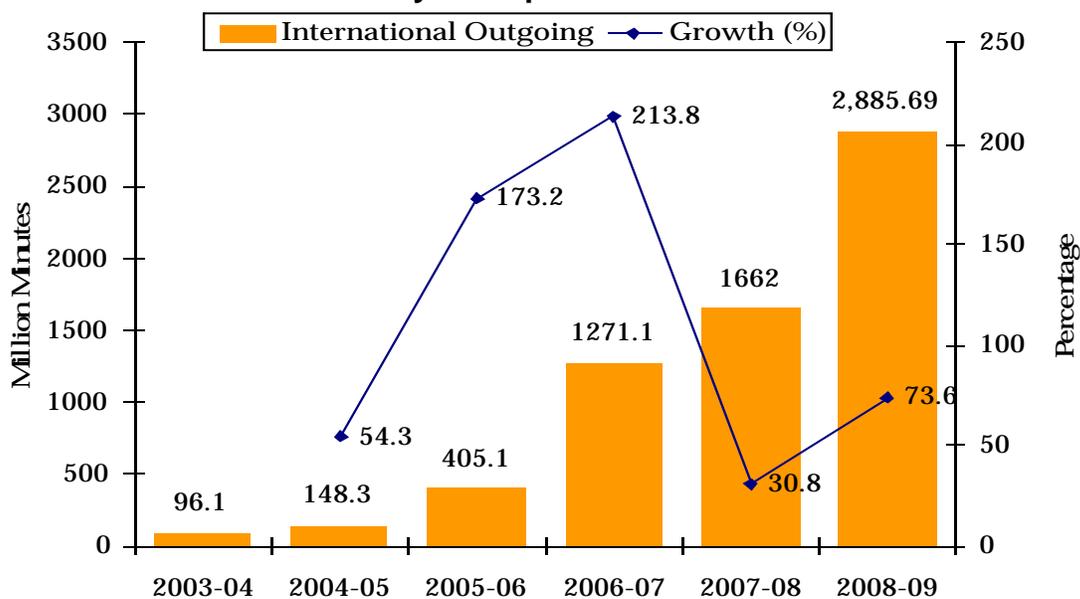
Traffic

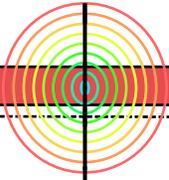
The LDI operators carried a record amount of international traffic to and from Pakistan during 2008-09. Total international traffic (incoming and outgoing) reached 8.9 billion minutes in the year, which is 25% more than that of the last year.

International Outgoing traffic increased by 73% from last year and a total of 2.9 billion minutes were originated from local networks. All operational LDI companies showed positive growth in 2008-09. PTCL achieved a remarkable growth rate of 145% adding almost 600 million more minutes this year. Wi-Tribe, Wateen and 4BGentel indicated significant growth rates of 189%, 145% and 109% respectively. In terms of market share of new LDI operators in total international outgoing traffic, Wateen, LinkDirect, Wi-tribe and 4B Gentel were the major players with a combined share of 81%.

The incoming traffic to Pakistan stabilized due to massive crackdown against illegal operators across the country, and a steady rise is expected in the coming quarters in this regard. Figure-28 shows volume of total international incoming traffic terminated on fixed and mobile networks during 2008-09. Total international incoming traffic reached 6 billion minutes, as compared to 5.5 billion minutes in 2007-08. This shows growth of 9% in 2008-09, which is negligible when compared to 163% growth of 2007-08. Deployment of monitoring facility at PTA reduced the illegal traffic to a considerable extent this year but the high settlement rate balanced out the positive effects of reduction in gray traffic. Therefore, the overall incoming traffic volumes were kept at bay. PTCL leads the share in traffic by a clear margin in both mobile and fixed line termination of incoming traffic while World Call and Wateen proved to be leaders among new LDI operators. Telecard and Wi-Tribe are also emerging as important players in the total international incoming LDI market.

Figure - 28
International Outgoing Minutes
by LDI Operators





Owing to relatively higher rate of call charges to Pakistan and low tariff offered by local companies for calls outside Pakistan, outgoing minutes tremendously increased. Attractive call packages offering low tariffs and longer talk times like PTCL's International Plus package coupled with PTA's helping hand took the LDI sector to a new height, and this trend is likely to continue in the days to come. One such example is PTA's improvement in settlement rates from \$12.5 to US \$10.5 cents per minute for calls to Pakistan, which will assist the incoming LDI traffic to a great extent.

Basic services have a huge role to play in Pakistan's telecom industry, as they form a one third of the total telecom revenue. In

general, remarkable output of LDI has elevated the the sector's performance indicators in spite of dull performance by FLL and WLL services. The PTA has put in a lot of efforts to lend a helping hand to LDI sector by deploying monitoring facility and improving settlement rates. Similar concerted efforts are required to be taken to save the sinking ship of FLL, as importance of copper media cannot be ignored. For broadband proliferation, we cannot rely only on wireless networks, as fixed line sector remains an important tool in this regard. The PTCL has to perform the uphill task of reviving the sector by introducing revolutionary reforms on urgent basis and improving its infrastructure. Similarly, new LL operators have to increase investment levels especially in rural areas to inject some competition in the market.

Figure - 29
Total International Incoming Traffic

