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Regulating the Competition





Encouraging Competition

As a regulator, Authority continued its endeavors to maintain a level playing field for all telecom investors. The Authority also reiterates its commitment to encourage healthy competition with an aim to introduce cutting-edge telecom related technologies in the country and increase service choice and better quality at affordable prices.

Mobile Number Portability

PTA has successfully implemented MNP that was inaugurated on 23rd March 2007. This was a huge project that involved all cellular mobile operators to allow the subscribers to port their mobile numbers from one cellular operator to another operator. Pakistan is the first country to introduce MNP in the region. It is an honor for Pakistan that the said project has been selected by ITU to provide training to different countries in Pakistan, who like to implement Mobile Number Portability in their country.

So far 100,000 subscribers have been ported out successfully between the Cellular Mobile Operators. PTA is actively overseeing the said project and resolved the complaints of many subscribers.

Telecom Competition Regulations

In a deregulated environment, the anti-competitive framework is a basic tool for protecting the interests of new operators from the possible anti-competitive practices of dominant operators. In Pakistan's context, this aspect is becoming more critical due to imbalance of market shares among telecom players. Keeping this in view Telecom Competition Regulations have been drafted for the effective disposal of such complaints by the Authority.

The main features of these regulations are prevention of anti-competitive behavior of operators like unfair arrangements for anti-competitive mergers, undue preference to any associated or affiliated company. The

measures taken include prevention of abuse of dominant position by operators having SMP status, supply of competitive services at predatory prices, failure or unreasonable delay in provision of essential facilities and cross subsidization with the intention to damage the competition etc. Any operator or person will be able to submit a complaint to the Authority relating to the anti-competitive practices of any operator and the Authority will take the required corrective measure to rectify the issue raised.

Reduction in Bandwidth Tariffs

The industry has been approaching PTA for quite some time requesting the Authority to regulate the bandwidth tariffs. They have been emphasizing that the tariffs charged by PTCL, the incumbent, are abnormally high and thus do not give them any competitive advantage in the international market. The Authority in this regard issued a detailed consultation paper on the subject and received the feedback from the stakeholders and hearing was held on the subject on September 22, 2006 and October 5, 2006. The Authority after considering the arguments of all stakeholders issued the Determination and announced that the bandwidth tariffs of PTCL should be in accordance with the international benchmarks of countries where effective competition exists. PTA hopes that the reduction in bandwidth cost the broadband service providers will be encouraged to offer higher bandwidth to their customers thus resulting in an increase in usage of broadband services.

Costing and Regulatory Accounting Framework

For the purpose of determining cost-based interconnection charges for fixed and mobile operators using Fully Allocated Cost (FAC) and Long Run Incremental Cost (LRIC) and to develop a framework of Cost and Regulatory Accounting in accordance with the Policy, the Authority sought assistance from the World Bank to award consultancy on “Cost-Based Fixed and Mobile Interconnection Charges and Developing Cost and Regulatory Accounting Framework”. Authority issued Consultation Papers to the industry on 13th Feb 2007 where it sought comments from operators.

Based on these comments and discussions, the Consultants submitted Final Regulations and Guidelines on 12th April 2007. These regulations and guidelines have been approved by the Authority and are in the process of Gazette Notification.

Helping Law and Order

Maintaining Law and order is always a priority of any country which is important for foreign investors, tourist, local businessmen or an individual citizen. Government is trying all its efforts to provide a secure environment for the investors and the general public. Pakistan

Telecommunication Authority has played its due role towards achieving these objectives and has introduced a number of steps to assist law enforcing agencies in the country.

Anti Mobile Theft System

In order to tackle the menace of handset theft in the country, PTA on 30th September, 2006 successfully implemented a central IMEI based system across the country for blocking the mobile handsets which have been lost or stolen. PTA made these arrangements in collaboration with CPLC and the industry. Dedicated Reporting channels for registering complaints were given wide publicity through Media Campaign for the awareness of the public by PTA where it allocated toll free numbers, email, website where complaints can be registered.

The complaints for handset thefts have been registered from throughout the country. So far PTA has blocked 96,258 cellular mobile all across the country.

The main issue of handset theft is in the city of Karachi and therefore larger number of complaints have also been registered from Karachi. Other cities with major complaints are Lahore, Faisalabad, Hyderabad, and Rawalpindi/Islamabad. The

number of complaints registered have increased over the period, which shows the confidence of the consumers in the system. A small number (5%) of handsets were blocked erroneously due to wrong information provided or the set was misplaced which was subsequently found.

Figure - 7
Stolen Hand Sets Blocked

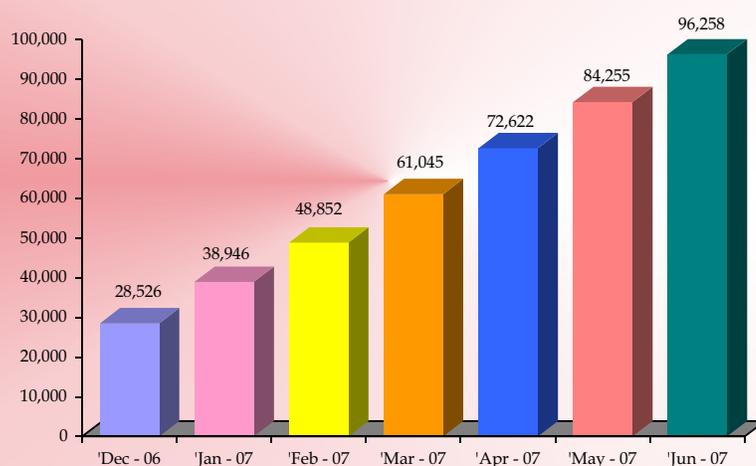
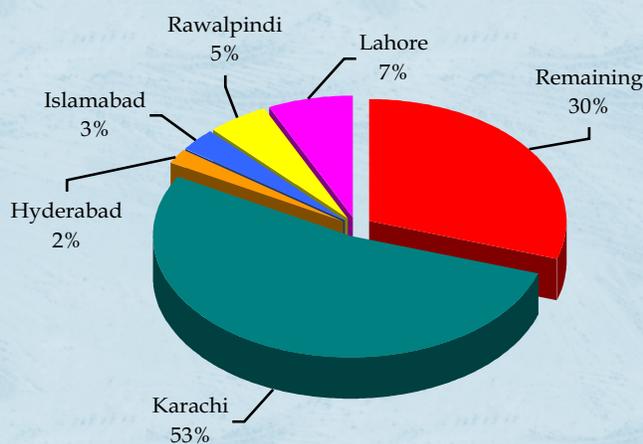


Figure - 8
Handset Theft Complaints by Cities (2007)



Directions for Proper Procedure for New Mobile Connections

Pakistan Telecommunication Authority issued Standard Operating Procedure (SOP) to mobile companies for new connections or issuing SIMs to the customers where it is mandated that a copy of the Computerized National Identity Card (CNIC) be acquired from the customer. The customer wishing to purchase a SIM would also be required to fill the Customer Agreement Form that has been made simple for the convenience of the general public. Under these directives, the franchisees would also be required to ensure that their sale points display the proof of their registration/authorization from respective operator(s) at their premises for the benefit of the customers.

This policy was implemented immediately with serious intentions of strict action made known to be taken against those franchisees that are found in violation. PTA teams would be visiting various Franchises of all the cellular mobile operators across the country to check whether proper procedure is being adopted while issuing the respective mobile connections. Any franchise found to be selling SIMs without a copy of CNIC duly incorporating the SIM number being issued, would be immediately sealed and strict action, including cancellation of Franchise, would be taken.

Cellular Mobile Operators have informed PTA that franchises are being checked to ensure PTA's directions regarding sale of connections on unverifiable antecedents. The CMOs have sent SMSs to their customers to get their connections transferred in their names if they have not done it before.

Facilitation to Operators

The Authority believes in provision of level playing field to all investors, facilitating new entrants in the market as well as establishing a fair regulatory regime where there is a win-win situation for all the stakeholders of the industry. PTA believes that with the right incentives and opportunities, private investment can boost universal service and create the infrastructure essential for overall economic growth.

PTA continued to provide incentives to telecom operators to facilitate growth in the industry. Some of the measures taken are further reduction of annual license fee for the card payphone industry, resolution of interference by jammers deployed in banks, supporting the issue to reduce taxation on telecom companies, review of settlement rates and many more.

Telecom Industry Forum

In order to address the issues of the telecom sector of Pakistan, PTA organized a Telecom Industry Forum on May 21, 2007 in Islamabad. The forum was attended by CEOs and representatives of all major players of the industry. The forum remained quite focused on prevailing industry issues. A

series of presentations were made on important issues with detailed discussions between operators and the regulator.

All major issues facing the Telecom Industry were discussed which included licensing in AJK and NAs, implementation of 8 Digit numbering and pursuing government to reduce the tax burden on telecom sector. It was also discussed that suggestions from operators be sought regarding improvement and changes in the Telecom Deregulation Policy 2003, FAB to improve procedures and processes for observing interference problems and PTCL be asked regarding provision of media to Mobile Operators and small licensees. PTA is currently working to address all such issues of the industry.

Establishment of Interconnect Clearing House

In order to address the growing complexities arising from multi-operator environment, the Authority took the initiative to introduce an efficient mechanism for inter-operator billing and settlement by issuing two Consultation Papers in December 2005 and April 2006. The Consultation Papers highlighted a number of specific issues for industry consultation relating to the establishment of Interconnect Clearing House in Pakistan telecom sector. Some operators provided the comments which were quite diversified.

A presentation session on the subject was also held in February 2007 in PTA where Bassett Labs explained the issue to the industry representatives. The industry was again approached on this issue during the Industry Forum held during May 2007 where PTCL and few other operators supported the concept for implementation. However, some operators are still not sure about the technical arrangements for the smooth working of clearing house.

PTCL has extended support for the project while meeting with other operators are also being conducted to bring all players on common grounds of understanding on the subject. Final roadmap will be formulated depending on the consensus of majority of operators. It is hoped that with the establishment of such system in Pakistan, the payment disputes between operators will be considerably reduced with the improvements in cash flows of their businesses.

Reduction of Settlement/APC Rates

The settlement rates of Pakistan are regulated by the Authority periodically in line with the international trends and their likely impact on the various stakeholders (particularly on LL and LDI operators). In this regard, detailed analyses were carried out comprising financial impact of previous reduction in Total Accounting Rate (TAR), various scenarios for the future settlement rates and the prevailing settlement rates of the LDI licensees etc. The consultative sessions were also made with the key stakeholders.

Based on the findings/results of the aforementioned factors, a reduction was made in the settlement rates with effect from November 07, 2006 by bringing them down to a level of US Cents 7.5 per minute (comprising APC of US Cents 2.5 and LDI share of US Cents 5 per minute). PTA hopes that it will help to curtail grey traffic in the country which is affecting the licensed operators in Pakistan.

Payphone Concessions and Facilitation

The payphones industry is considered a source of self employment for the lower income strata of Pakistani populace. Due to competition/lower tariffs from mobile segment, the profit margin and business opportunities for payphones operators have reduced considerably.

To make payphone business sustainable, PTA has announced the reduction in the Annual License Fee (ALF) of Card Pay Phone (CPP) Operators from 1.5% to only 0.1% of their revenues. Further, to address the difficulties faced by Card Pay Phone Operators in payment of their outstanding ALF dues, the Authority rescheduled the outstanding ALF up to June 30, 2005 for all payphone licensees. The outstanding ALF shall be payable in 6 equal installments on a bi-monthly basis starting from December 16, 2006.

Further PTA will facilitate Mergers & Acquisition of Payphone Operators/ Companies. Payphone operators will submit specific proposals to PTA for consideration of mergers. Mobile operators have been asked to facilitate Payphone operators by offering discount on Mobile Termination Rates and to consider offering better packages to licensed payphone operators. PTCL was also asked to revise its tariffs for the payphone industry.

PTA Efforts to Reduce Taxes

Exorbitant taxes on telecom sector are creating hurdles in the growth of the sector. Keeping in view the burden of taxes on the telecom sector and its effect on growth, PTA has been pursuing the government to rationalize the taxes on telecom services. One such example is the abolishment of activation tax on new mobile connections. This reduction will play a significant role in the cellular growth. Withholding tax @10% is another hurdle although it is adjustable in the income tax returns. However, as most of the mobile users belong to lower income groups, they are not liable to pay income tax. Hence they are not able to get this adjustment. So this tax is also an extra burden on the mobile users and should be abolished. Value Added Tax (VAT) @ 15% on computers is considered another hurdle in the way of broadband growth. So, it is recommended that VAT on computers may also be reduced gradually and eventually it should be completely eliminated.

Floor Setting of Tariffs

A significant reduction in the tariffs has been observed during the last few years with an increased competition in the fixed-line and cellular mobile sectors. Some of the fixed-line and cellular mobile operators raised this issue and requested PTA to introduce floor price mechanism. The floor price mechanism, if implemented, would force the operators not to charge tariffs below a certain level. PTA has sought opinion of all operators on the issue and based on the feedback received, it will be decided accordingly.

Carrier Selection Issues between PTCL & LDI Operators

As per Deregulation Policy issued by the Government of Pakistan, PTCL is required to enable all its subscriber lines for Direct Access and Indirect Access to other LDI operators. LDI operators approached the Authority with complaints against PTCL in enabling all subscribers to have facility of carrier selection.

Keeping in view the provisions of the De-Regulation Policy and other obligations placed on PTCL, the Authority conducted regular meetings with PTCL and LDI operators to review the status of interconnectivity. Authority issued its Determination on March 19, 2007 and decided that PTCL is under no obligation to provide the service of local mobile calls to its customers through LDI prepaid calling cards, call-by-call and carrier pre-selection. PTCL shall provide access to LDIs on PTCL V-Phone and Aasan Phone connections through LDI prepaid calling cards, call-by-call and carrier pre-selection and PTCL shall allow the provision of Intra-Region calls on all PTCL lines (wire-line as well as wireless) through LDI prepaid calling cards, call-by-call and carrier pre-selection.

Consultation Paper on SMPs

The Authority vide its Determination dated 25th August 2004 declared the SMP status of different operators in relevant markets. Since the issuance of above-referred Determination, the telecommunication market has changed considerably with respect to its size, scope, diversity and dynamics. Keeping this in view, the Authority considered it necessary to conduct the market analysis to ensure that regulations remain appropriate in the light of changing market conditions. For this purpose, the Authority considered that it would be appropriate to review the already defined relevant markets and to evaluate the identification of new markets for the purpose of declaring SMP operators. In this regard, Consultation Paper on 'Identification of Relevant Markets, Significant Market Power Operators and their Obligations' was circulated to the industry on 1st August 2006. References were also made to the regulatory practices prevalent in other countries especially European Union, Malaysia and Bahrain. The Determination on SMP will be issued shortly.

Mobile Number Portability Onward Routing Charges

Mobile Cellular Policy required the Authority to initiate consultation process on the implementation of Mobile Number Portability (MNP). Keeping in view the provisions of the policy, the Authority initiated consultation process on MNP. The issue of onward routing service was first raised in a meeting with CMOs wherein it was noticed that due to delays in upgrading of network, PTCL would not be able to comply with the deadline. During the meeting, it was decided that CMOs would provide onward routing service to PTCL for which they would be compensated through charges. It was also decided that the CMOs would also provide onward routing services to other fixed-line licensees who may not opt to upgrade their network. Detailed discussions and consultations were held with all the Cellular Mobile Operators and Fixed Line Operators and reports were submitted for Authority's review. In addition, a committee was also constituted which included representatives from MoIT, PTA, PMD, LL, LDI and cellular mobile operators. Meetings of the committee were held at PTA and the committee recommended that the cellular mobile operators providing the onward routing service would be entitled to receive a total of Rs.0.30 per minute for fixed-to-mobile calls. The decision of the Authority was challenged by Worldcall Telecom in the High Court. The High Court after hearing the parties set aside the impugned order, with consent of both the parties and remanded the case back to the Authority. A hearing was conducted by the Authority which was attended by all LL licensees, LDIs including Worldcall, cellular mobile licensees. The Authority, after hearing all the concerned parties decided the matter and issued Determination on May 7, 2007.

Review of PTCL Reference Interconnect Offer (RIO) for FixedLine Operators

The PTCL RIO for Fixed line operators was approved by the Authority in May 2005. Several issues were indicated by PTCL as well as the LL & LDI operators to improve the RIO. Review of the RIO was started so these issues can be addressed effectively in consultation with the industry and keeping in mind best international practices. Comments were sought from the stake holders, which were analyzed and were forwarded to PTCL. PTCL provided its point of view, and also suggested a number of modifications in the RIO. After receiving industry feedback, further changes were made in PTCL's RIO. PTCL RIO has been approved by the Authority and is placed on PTA's website.

Universal Access Number (UAN) Policy Guidelines

Universal Access Number (UAN) allows a service subscriber to provide its customers with a unique number to access its offices. The offering is based on the use of a single number of no

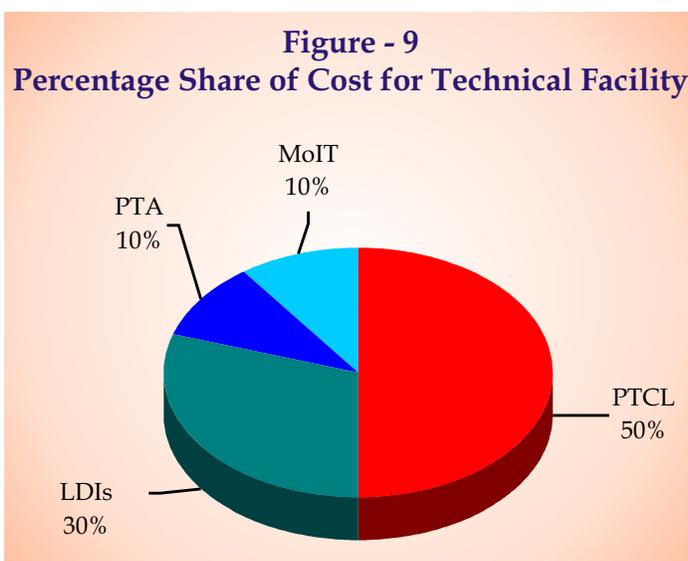
geographical significance. Using routing functions, the service enables the subscriber to accept the incoming calls at any location. The Universal Access Number (1566) service is ideal for organizations with a nation-wide network, including among other banks, large businesses, government agencies and media organizations. The service, particularly useful for call centers, allows service-oriented organizations to provide customers with one single, easy-to-remember, nation-wide number instead of customers having to memorize a series of branch office numbers. Incoming calls to this number are automatically forwarded to the nearest subsidiary, branch office or next available Customer Service representative.

PTA is regulating this service for the benefit of the consumers and to further simplify the process of UAN allocations guidelines are under review. These guidelines classify UANs numbers in different groups based on number pattern. UANs with unique patterns will be auctioned and baseline charges for the categories are to be paid by the firm/company on an annual basis with effect from 1st July 2007.

Technical Facility to Counter Grey Traffic

Grey market telephony has always remained a soaring issue for the telecom operators and Government of Pakistan. Fueled by prevalent non cost-based settlement rates for international termination of traffic and advancements in technology, this menace is not only affecting rightful share of telecom operators but also incurring losses to the government exchequer. It does not provide level playing field to the licensed operators who have paid sizeable amounts of money as license fees. Moreover, it is a threat to national security as legal gateways are bypassed. Due to the deregulation of telecom industry, the situation has become even worse as the number of telecom operators have increased from one incumbent to several telecom entities. For each illegally terminated minute; LDI, LL operators and the Government have to bear certain revenue loss which can be avoided by safeguarding interests of the industry and security concerns.

Taking cognizance of the situation, it was decided in June 2006 that technical solution was inevitable for automated detection and hence elimination of grey telephony. PTA was mandated to complete the acquisition process. The primary objective of the technical facility is automated detection of IP addresses involved in grey traffic, revenue



assurance to LDI Operators and the proposed facility will also extract QoS parameters like jitter, fraction loss, etc from the IP packets and hence will allow Authority to determine QoS of LDI operators.

An Evaluation Committee comprising of officers from PTA and one representative each from PTCL and LDIs was designated to complete the tendering process. The whole process from tender invitation till the technical and financial evaluation of the project was duly completed by the Committee. The project would be funded by the main stake-holders as shown in the diagram. Funds are being arranged as per the proposed share and the facility is expected to be commissioned in 6 to 8 months' period

Frequency Assignment Management

To help facilitate activities of the Broadcasting Sector in the country 38 cases of frequency assignment were finalized. In addition frequencies were also allocated to the private sector organizations like security companies, hospitals, oil and gas companies, VSAT and SST links etc.

Examinations of Global Maritime Distress Safety Systems (GMDSS) certificates, which is mandatory for officers on board ship to operate wireless communication system were conducted and around 177 certificates were issued for the purpose.

For the resolution of interference 388 interference complaints have been attended. Under a well designed detailed monitoring of spectrum was carried out phase wise by employing Mobile Monitoring Stations throughout the country. International Frequency Information Circular (IFIC) Analysis is also a continuous process. As such, the same was carried out and responses dispatched to different administrations are being pursued on the basis of data published by ITU.

Dispute Resolutions

After de-regulation and introduction of multiple players in both mobile and fixed sectors the inter-operator issues are becoming complex. PTA has always taken prompt action on the complaints filed by the operators and tried to amicably resolve the issues.

Interconnect Payment Disputes of PTCL

PTCL approached the Authority in December 2006, on difficulties it was facing in recovering its legitimate dues from LDI operators for provision of Interconnect services. PTCL informed that they have sent number of notices to such operators for recovery and held numerous meetings but received no positive response. PTCL further explained that its exposure has increased to an alarming level and if the issue is not resolved, PTCL will have no choice but to disconnect such operators interconnects as per RIO's clauses.

PTA started the resolution process and arranged several meetings with PTCL and the respective LDI operators to resolve the interconnect payment issue. As a result, agreements have been made between operators and PTCL, to clear all their outstanding interconnection payments of PTCL.

ISPAK & PTCL Dispute over DSL Services

PTCL launched its DSL services on May 17, 2007 under the brand name “Broadband Pakistan”. Initially services were offered in Rawalpindi and Islamabad but Lahore and Karachi were added in June 2007. PTCL introduced three packages having data speeds of 256Kbps, 512Kbps & 1024Kbps bandwidth. PTCL also offered free DSL modem and installation and three (3) months of unlimited data transfer upon signing up of one year's contract. Internet Service Providers Association of Pakistan (ISPAK) approached the Authority alleging PTCL for predatory pricing and anti-competitive practices and requested the Authority to issue restraining orders to PTCL to stop offering DSL services. ISPs after filing complaint with the Authority also went to Lahore High Court and filed a petition against PTCL launch of DSL services. Later the ISPs withdrew their petition on June 25, 2007, and the High court disposed off the appeal and referred it to the Authority to decide within three weeks.

Written response to the appeal was received from PTCL and Authority level meetings were conducted with PTCL and ISPAK on this issue. Final hearing on the issue was conducted on July 12, 2007 and determination on the subject shall be issued shortly.

Dispute Between NayaTel and PTCL

On 20th March 2006, NayaTel, an LL Operator approached the Authority appraising the fact that it is deploying Fiber To The Home (FTTH) network in Islamabad, which is ready for commissioning. However, PTCL Reference Interconnect Offer restricts to install up to only two optical fiber cables having a maximum of 8 strands in each fiber. NayaTel requested the Authority to direct PTCL to remove the restriction imposed by Clause 1.2 of Schedule 9 of Attachment D of PTCL RIO.

A series of meetings were conducted to resolve this dispute and a final hearing was conducted on January 22, 2007. After the detailed negotiation & final hearing, the Authority issued a determination on this dispute on March 06, 2007 in which it was directed that PTCL and Naya Tel shall modify their existing interconnection agreement to accommodate more number of fiber optic cables required for the deployment of FTTH networks for broadband services. PTCL was directed to allow NayaTel to install the cables (fibers and strands) as per its demand required/ necessary for FTTH networks.

Fixed to Mobile Transit Traffic Settlement

The Authority received complaints from LL/LDI operators regarding blocking of transit traffic terminating on Cellular Mobile Operators' (CMOs) network. The complaints showed that a clearly devised settlement mechanism was not developed resulting in suspension of transit traffic without prior notification to the LL/LDI operators and without approval of the Authority.

All CMOs and PTCL were advised to mutually formulate a clear settlement mechanism to address the issue. PTCL was also advised to abide by the provisions of its RIO for fixed-line operators and not to suspend service of any operator without prior approval of the Authority. As a result, PTCL restored the services of a number of operators.

Consumer Safeguards

Pakistan Telecommunication Authority has always tried to promote and protect the interests of the users of the telecommunication services in Pakistan and has made efforts for the availability of wide range of high quality, efficient and competitive telecommunication services in the country. Regular inspections and surveys are carried out to assess the quality of service and PTA campaigned for awareness among the telecom users and to educate consumers about misleading advertisements, hidden charges and comparison of tariffs of different telecom operators.

Quality of Service Surveys

Pakistan Telecommunication Authority comprises of five Zonal Offices across the country (Karachi, Lahore, Rawalpindi, Peshawar and Quetta) and Regional Office at Multan. These offices monitor and enforce quality standards for telecommunication services by conducting QoS surveys and inspections. Resultantly, punitive actions are taken against operators who provide low quality services to the masses.

In this regard, PTA conducted a quality of service survey of GSM Operators, quality of service surveys/inspections of ISPs, PTCL exchanges and CPP operators. In addition to the above, inspections of installations of LL and LDI operators for commencement of their services were also carried out in various cities.

ISPs

A short survey to judge the quality of service of ISPs was conducted at district level during March 2007. As per the results services of majority of the ISPs was either good or satisfactory.

Cellular Mobile

With a view to ensure provision of quality services to end users, quality of service surveys were planned to be conducted by all zonal offices at district level. Five surveys were conducted at Gujrat, Hyderabad, Peshawar, Sialkot, and Rawalpindi /Islamabad from February to April-2007. Quality of service parameters checked were Network Accessibility, Service Access, Access Delay (Set up time in seconds), Voice Quality and SMS.

QoS Inspections of PTCL/NTC Services

Sixty-six PTCL and NTC exchanges were inspected during the period under review. The inspection reports revealed that the services of PTCL in these exchanges were not up to the license standards. During the period 993 complaints were received against the PTCL/NTC out of which 961 complaints were resolved. The PTCL and NTC were directed to improve the quality of service standards.

LL, LDI, WLL and Payphones

Limited Mobility aspect was checked to verify compliance of “Limited Mobility” Determination issued by PTA to all WLL operators. It was observed in the survey that WLL operators are not strictly following the determination on limited mobility. Therefore, they have been asked to take immediate action to implement the same and submit a compliance report to PTA. Inspection of 30 CPP operators was also made. 113 complaints were received against CPP Operators and 102 complaints were resolved during the period. PTA conducted 45 commencement inspections and 18 QoS inspections during the period, 28 inspections for issuance of commencement certificates were also made.

Illegal Gate Way Exchanges

Several companies have established Gateway exchanges in the country for illegal international traffic causing great loss to exchequer. PTA has raided these exchanges along-with the law enforcement agencies. Seven successful raids on illegal Gate way Exchanges were made in Rawalpindi and Peshawar during the last year. Due to this successful activity illegal voice termination has reduced to a certain extent.

Consumer Alerts

In order to facilitate and warn consumers regarding misleading advertisements, hidden charges and applicability of free minutes, PTA has launched Consumer Alert on its website. Industry in general has appreciated PTA's effort to create awareness among telecom subscribers. Consumer alert section is constantly updated and issues of general importance are placed on consumer alert.

Some of the alerts provided that Mobilink is charging Rs.0.86 (including taxes) per call for calls made to Mobilink Helpline (111). Customers were advised to be aware of hoax calls and false/ unsolicited SMS(s) that are being called / sent to subscribers to buy scratch cards and notify scratch numbers to calling party for prizes of immense value. Telenor and Ufone subscribers are cautioned not to reply to unsolicited SMS(s) that are being sent to subscribers, promising prizes of immense value or luring for entertainment. Any reply to those SMS(s) or entering hidden message can result in transferring subscriber's balance to other unknown numbers. Free minutes offered by Ufone include "Airtime Charges" only and do not include interconnect charges for calls to fixed-line or other cellular mobile networks.

Telecom Consumers Protection Regulations

In order to protect the rights of the telecom consumers, PTA has drafted 'Telecom Consumer Protection Regulations, 2007'. The focus of these Regulations is to protect consumers from unauthorized use of their personal information. The regulation notified shortly.

In these regulations, there are a number of measures taken to protect the rights of the consumers i.e., protection of unauthorized use of personal information record of consumers, advance information for changes in tariffs, provision of quality of service as per the license conditions of the operator, clear and easy-to-understand descriptions of the services etc. Authority may ask any information about any complaint and its solution, settlement and progress made and direct the operators to follow its direction in resolving complaints.

QOS issues in International Roaming

A limited study was assigned to cover a few important aspects of International Roaming with a limited set of countries with the aim to identify any critical issues with the offered services for Pakistani cellular subscribers using 'International Roaming' services abroad. The recommendations brought forward have been thoroughly examined. Although limited in scope, the consultancy identified areas of immediate attention of the Regulator and will help to steer the cellular operators in the right direction. Most of all, the consultancy highlighted discrepancies in the bills of the international roamers and the minutes charged for some countries, specifically. PTA has taken the issue very seriously and directed all operators to resolve the issue within 30 days, following which a more extensive survey shall be conducted.

Consumer Complaints

PTA is always vigilant about the individual complaints lodged by consumers against the operators. The complaints lodged are utilized by the Authority to regularly review the issues raised by the consumers and to initiate necessary actions for rectification of the problems faced by the telecom users.

There was an overall 27% increase in the number of complaints lodged with the Authority compared to previous year. The maximum number of complaints, are still for the fixed sector followed by 20% complaints of mobile sector.

Analysis of Fixed Sector Complaints

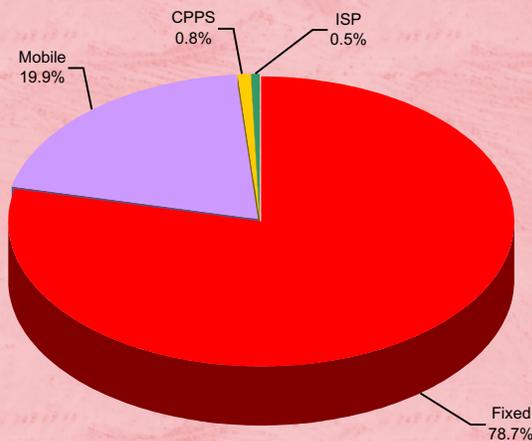
The highest numbers of complaints were related to telephone faults. In most of the cases the subscribers registered 5 to 6 or more complaints with hotline and other fault management systems but of no avail. The main concern raised by majority of consumers focused on staff behavior and poor complaint handling by the operator. The second major issue raised by the consumers was the applications for new telephone connections, which remained pending with the operator due to non availability of infrastructure and sluggish pace of development

in populous areas. The remaining complaints were related to excessive billing, malfunctioning of remote area exchanges due to cable fault or for any other reason and directory assistance.

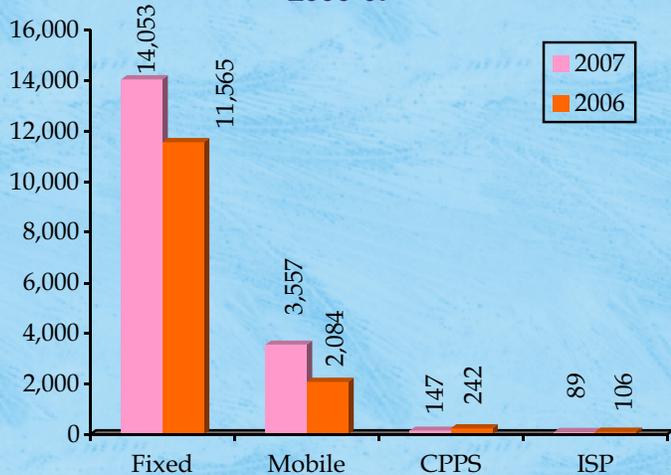
Analysis of WLL Sector Complaints

General satisfaction level of customers regarding WLL services was not as expected. The nature of complaints received in this regard were customer services, Poor Quality of Services, billing, misleading advertisement and poor internet connectivity.

**Figure - 10
Complaints by Industry (2007)**

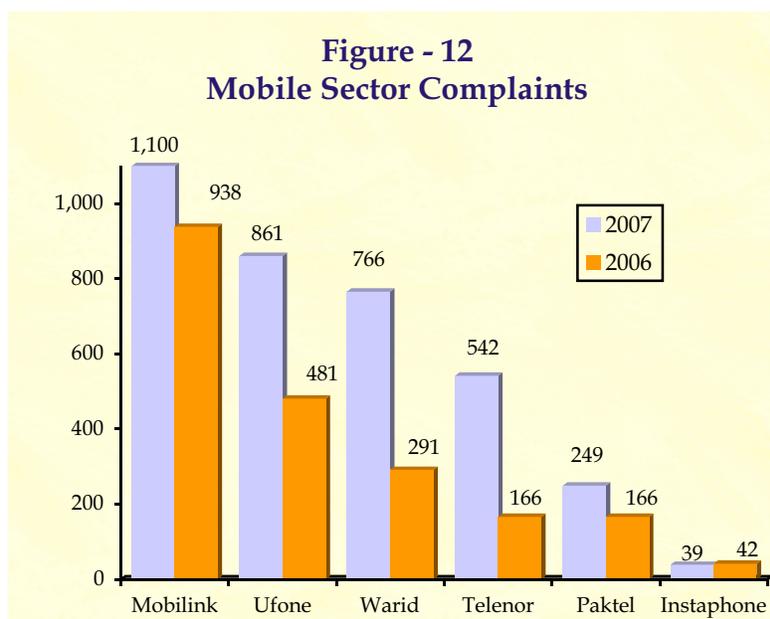


**Figure - 11
Comparison of Complaints
2006-07**



Analysis of Mobile Sector Complaints

There is a 70% increase in the overall complaints of the mobile companies. The highest number relates to Mobilink, followed by Ufone and Warid. The issue raised by the customers was mainly consumer were quality of service, which includes issues of dropped calls, busy circuits, weak signals etc. Many customers voiced serious concern regarding billing practices, complexity and obscurity in billing procedures, and over charging. Many cases of



irregular issuance of mobile connections by the companies and their franchisees were reported. Many cases of fraudulent calls related to fake business deals were also reported.

Analysis of ISP and CPPS Sector Complaints

Only few complaints regarding ISPs and CPPOs were received and that too of insignificant nature. These were amicably resolved. Threatening and obnoxious calls continue unabated from PCOs and many cases were reported in this regard.

PTA Forward Looking Approach

Being a progressive and independent telecom regulator, PTA continued to evolve its approach and strategy for future. A forward-looking approach by the Authority, followed by consecutive successes, has placed telecom as one of the leading sectors of Pakistan economy. PTA's mission is to envisage new and emerging technologies and their implications as well as other latest developments in the telecom world in a comprehensive regulatory framework to continue providing fair, competitive market for the stakeholders.

Rural Telephony Project

PTA launched its Rural Telephony Project on Feb. 1, 2007. The main theme of the project is to facilitate the development of rural telephony i.e. provision of telecom services in the un-served and underserved areas of Pakistan. The project entailed the establishment of Rabta Ghar (Telecentres) in rural areas all over Pakistan. PTA has planned to set up 400 Rabta Ghar in collab-

oration with the support of the telecom companies. This scheme includes the Azad Jammu & Kashmir and Northern Areas through unemployed individuals including women in rural areas that meet the eligibility criteria set by PTA.



Advertisements in all regional newspapers were published and radio spots were run on radio channels to inform the people across Pakistan about the Rabta Ghar Scheme. The last date for submission of applications for this Phase was Feb. 28, 2007.

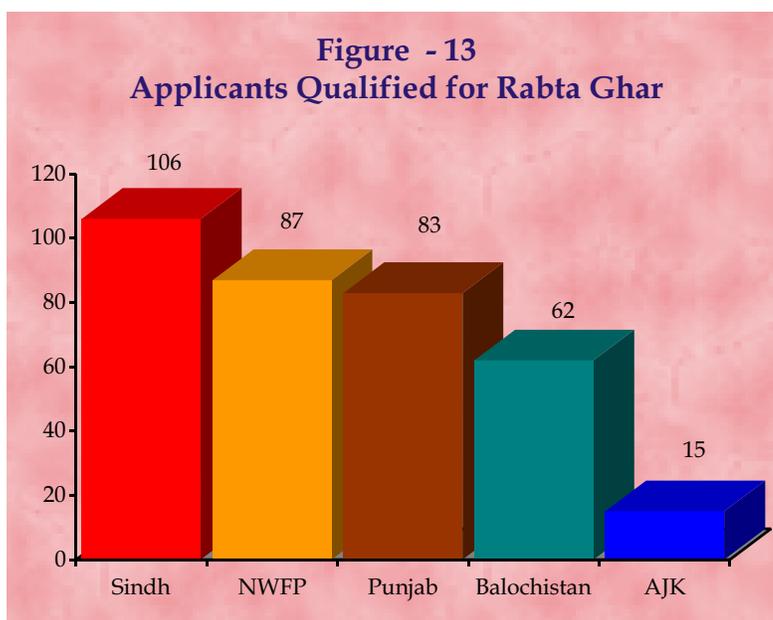
After scrutiny a total of 353 applicants qualified whose names have been forwarded to Intel for deployment of equipment at their premises.

All the necessary equipment like Computer, 2 phones, Fax Machine,

a Printer cum Scanner, UPS, Voltage Stabilizer and an extension cable will be provided to the qualified individuals free of cost by PTA for the establishment of Rabta Ghar. The cost of all this equipment will be approximately Rs.50,000 per Rabta Ghar. PTA has planned a two tier-training program that provides maximum information and support to the new Rabta Ghar operators to learn the use of equipments. In order to make the overall training program uniform across Pakistan, PTA has developed a CD and a manual through Allama Iqbal Open University.

PTA Vision 2010

In March, 2007, PTA presented its vision 2010 to further develop the sector. According to the vision, the Authority made projections for different telecom indicators including potential telecom market, subscriber growth and investment. Total investments according to estimates would grow to Rs. 393 billion whereas total revenue of the telecom sector will reach Rs 387 billion by 2010.



With consolidation of the market, new international players in the WiMAX Broadband Market will replace small ISPs and local WiMAX operations, PTA therefore plans to further facilitate mergers & acquisitions & and make more spectrum available for wireless operations (WiMAX). Since E1 / DS (IPLC / DPLC) will be taken over by IP / MPLS port or nodes, there needs to be bulk (IP / MPLS Nodes) based pricing strategy by 2010. Huge price reduction, due to economy of scales and competition, are expected in the local telecom market as a consequence of changes in the international market. PTA therefore would be working on IP based interconnection mechanism, SLA among operators, and amendment in interconnection regulation to accommodate operators to interconnect at PTCL co-locations. WiMAX along with VOIP will be having potential to bring revolution in FLL and broadband markets which is an ideal combination to bridge Digital Divide.

The mobile penetration is expected to grow up to 57% by 2010, in this regard activation charges and Withholding tax levied on telecom services are required to be further reduced to increase the potential market. Similarly there is a potential of 3 to 5 million broadband customers. Since WiMAX and VOIP can create another revolution in Pakistan, a legal framework of SIP/VOIP is required. Accordingly fixed Number portability and Symmetric termination rate frame work should also be developed to increase the fixed (wire/wireless) density.

Expert Group Forum in PTA

Potential developments in telecommunications have significant impact on policies, market and regulatory set of a country. It is therefore of importance that all the possibilities that may emerge in the future are considered before the implementation of these radical changes. PTA strongly favors this approach as it will provide greater clarity and certainty to the sector which will encourage investment and innovation.

PTA has developed a refined panel/group of experts who will provide opinions & recommendations and share their expertise with us on technical, financial and legal aspects pertaining to IT and telecom sector.

The foundation of "Expert Group Forum" has already been laid down with the inaugural meeting of the Forum on 27th November 2006 chaired by Chairman PTA. During the session, representatives from academia, operators, government organizations and consultancy firms presented suggestions to shape and run the forum.

Consultation Paper and Determination on Broad Band Issues

Broadband services in Pakistan started in 2002. However, the growth in this sector has remained slow due to various factors including high tariff(s), less consumer awareness and limited number

of service providers. Keeping in line with the strategic objectives of GoP to enhance penetration of broadband services in Pakistan, the Authority, through consultation, requested all stakeholders in September 2006 to highlight major bottlenecks for slow penetration of broadband. Keeping in mind the feedback received from the industry, the Authority on March 06, 2007 issued another consultation paper on “Broadband proliferation in Pakistan”.

The Paper was floated to the industry for their comments and meetings were also held with the operators . Finally the hearing on this matter was conducted on July 12, 2007 and the Determination on the subject will be issued shortly.

Numbering Plan

With full liberalization of telecom market in Pakistan cellular mobile sector has witnessed unprecedented growth putting the existing numbering plan under severe constraints leading to allocation of multiple access codes to mobile service providers. With the award of seventy plus licenses in the fixed line sector, numbering resource has to be shared by all the licensees as opposed to mobile sector where access code differentiates various service providers while the whole chunk of numbering resource is available to each service provider individually. As a result of new services i.e. triple play, IN based services, FTTH etc there is growing demand in the expansion of existing numbering plan to accommodate all stakeholders to meet their future requirement of numbering space for various services.

In view of the above, the Public Consultation process for migration from 7 to 8 digits, for fixed as well as mobile sector was initiated by PTA. The implementation schedule has been finalized and shall be implemented by December 2008.

PTA Gold Medals for Students

To encourage academia industry partnership in IT & Telecom sector, PTA has introduced rewards for students coming up with unique research projects in Information Technology and Telecom disciplines. Five Gold Medals, with cash reward of Rs 50,000/- each, to shining students are planned. Prime objective of this award is to encourage academia to undertake research in telecom sector and develop relationship with academia for advice on important issues faced by the Regulator in the sector. Advertisement for nomination of students with best projects has been published in the national press.