

Information Memorandum

Mobile Cellular
License

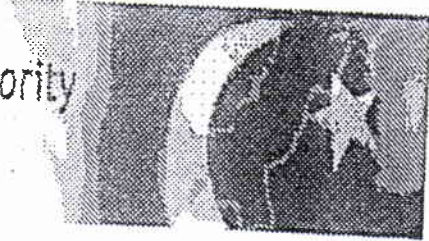


February 09, 2004

Pakistan Telecommunication Authority



Pakistan Telecommunication Authority



INFORMATION MEMORANDUM

MOBILE CELLULAR LICENCE

Final Version

February 09, 2004

Table of Contents

Part I - Preface

1. Introduction.....3
2. Schedule of Events.....4

Part II - Information on Pakistan Telecommunication Sector

3. Economy of Pakistan.....6
4. Overview of Telecommunication Sector.....9
5. Licensed Telecommunication Service Providers.....12
6. Telecommunication Sector Regulation in Pakistan.....15

PART III - Bidding Procedure and Auction Process

7. General.....17
8. First Round-Sealed Bidding.....18
9. Second Round-Open Out Cry.....19
10. Disqualification.....20
11. Information Provided by the Authority.....21
12. Other Communications.....21
13. Confidentiality of Applications.....21
14. Cost Associated with Bid and Bidding.....22
15. Reservation of Rights.....22
16. Miscellaneous.....22

Annexes

17. Telecommunication Deregulation Policy A
18. Mobile Cellular Policy B
19. Fec Structure C
20. Draft Mobile Cellular License Template D
21. Sealed Bid Form E
22. Second Out-cry Bid Form F

Part I - Preface

1. Introduction

1.1 The Government of Pakistan is opening telecommunication sector with the broader objective of increasing investment and competition. The liberalization policies are described in the following documents which are also available at the official website of the Ministry of Information Technology (MoIT) www.moitt.gov.pk.

a. Telecommunication Deregulation Policy Annex-A.

b. Mobile Cellular Policy Annex -B

1.2 The Pakistan Telecommunication Authority (PTA) will award two technology-neutral National Mobile Cellular Licenses through a bidding/auction process. The license awarded will be inclusive of one lot of radio spectrum from the following available four lots:

	Spectrum	Uplink-Downlink	Spectrum	Uplink-Downlink
✓ a.	4.8 MHz (24 carriers)	900 MHz Band 890-894.8 MHz + 935-939.8 MHz	8.8 MHz (44 Carriers)	1800 MHz Band 1710 - 1718.8 MHz 1805 - 1813.8 MHz
b.	4.8 MHz (24 carriers)	902.5-907.3 MHz + 947.5-952.3 MHz	8.8 MHz (44 Carriers)	1724.9-1733.7 MHz 1819.9-1828.7 MHz
✓ c.	5.0 MHz (3 carriers)	1900 MHz Band 1880 - 1885 MHz 1960 - 1965 MHz		
✓ d*.	4.0 MHz (3 carriers)	800 MHz Band 845 - 849 MHz 890 - 894 MHz		

*Note: Since two lots given at serial 1.2 (a) and 1.2 (d) are complementary therefore if the highest bidder opts for one of these two lots, the other lot will not be available.

1.3 The existing Mobile Cellular Operators will pay the same licensing fee as determined through auction for new Mobile Cellular licensees at the time of

renewal of their licenses. However, they have the option to come under new licensing regime before the expiry of their licenses, if they so desire. The expiry dates of licenses of the existing four Mobile Cellular Operators are as under:-

- | | | |
|----|---------------------|-------------|
| a. | Paktel | April 2005 |
| b. | Instaphone (Pakcom) | April 2005 |
| c. | Mobilink (PMCL) | July 2007 |
| d. | U-fonc (PTML) | August 2013 |

- 1.4 Spectrum charges per MHz per annum shall be applicable to all the licensees on the basis of FAB budgeted expenditure divided by actual total spectrum allocated in the light of Appendix B of the Mobile Cellular Policy. The applicable fee structure is attached as Annex-C.
- 1.5 The purpose of this Information Memorandum (IM) is to provide the following information to prospective investors who submitted Expression of Interest (EoI) on or before 21 January 2004 for the award of Mobile Cellular License:
- | | | |
|----|------------------------------------------------|---------|
| a. | Overview of Pakistan Telecommunications Sector | |
| b. | Bidding Procedures | |
| c. | Draft- Mobile Cellular License Template | Annex-D |
- 1.6 Questions or clarification on the contents of this IM may be raised in the Investors Conference Scheduled to be held on 18 February 2004 at Serena Hotel Islamabad. However advance information to this effect may kindly be forwarded at the address mentioned in Para 2.3 before the Investors Conference.

2. Schedule of Events

2.1 Schedule to be observed till award of Mobile Cellular Licenses is as follows:

<u>EVENT</u>	<u>CALENDAR DATE</u>
a. Submission of questions on IM to be responded in Investors Conference	16 February 2004
b. Investors Conference	18 February 2004
c. Submission of further queries/ Clarifications if any	25 February 2004
d. Announcement of Pre-qualified Applicants	15 March 2004
e. Intimation to PTA on finalization of Consortium	8 April March 2004
f. Payment of Earnest Money	12 April 2004
g. Bidding for Mobile Cellular Licenses	14 April 2004
h. Ceremony for Award of Licenses	21 April 2004

2.2 The Authority reserves the right to change this schedule as circumstances require.

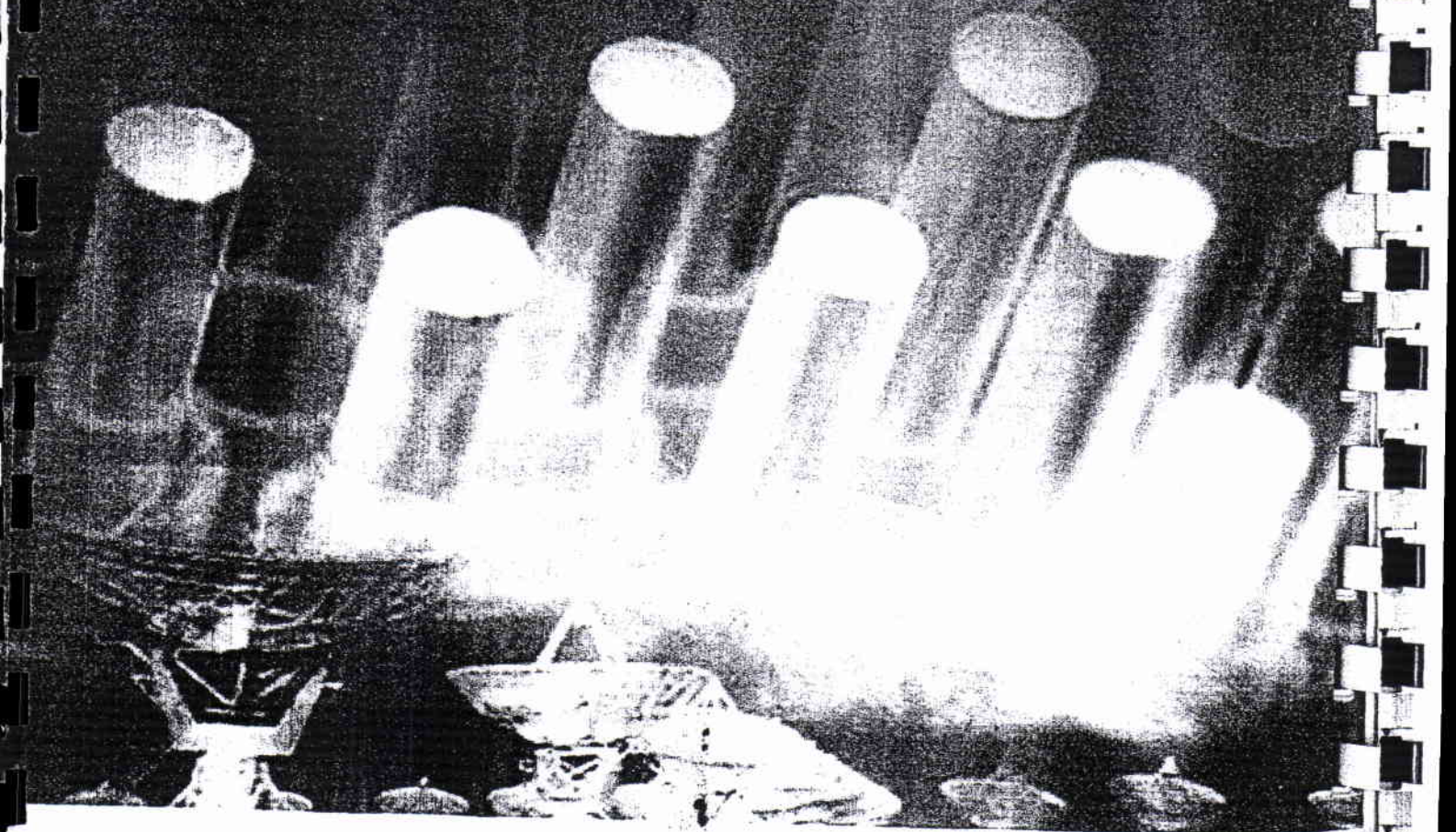
2.3 Address for Correspondence: All correspondence relating to this IM, Investors Conference, submission of application documents, Bidding/Auction Procedure and issuance of Licenses should be addressed to:

a. Director General (Licensing)
Pakistan Telecommunication Authority
H/Qs F-5/1, Islamabad
Pakistan
Telephone: + 92 51 287 8141
Fax: + 92 51 287 8139
E-mail: dgmd2001@pta.gov.pk

OR

b. Director (Radio Based Services)
Pakistan Telecommunication Authority
H/Qs F-5/1, Islamabad
Pakistan
Telephone: + 92 51 9225343
Fax: + 92 51 9225349
E-mail: iftikhar@pta.gov.pk

Part-II
Pakistan Telecom Sector



Part II – Information on Pakistan Telecommunication Sector

3. Economy of Pakistan

- 3.1 Pakistan, located in South Asia is a major regional economy, bordering Iran in the west, Afghanistan in the north-west, China in the north and India in the east. The Arabian Sea lies to the south of Pakistan. The Pakistani territory of 796,096 square kilometers comprises of four distinct geographical regions. The northern highlands - the Hindu Kush - are rugged and mountainous. The Indus Valley is a flat, alluvial plain with five major rivers dominating the upper region, eventually joining the Indus River flowing south to the Makran coast. Sindh is bounded east by the Thar Desert and the Rann of Kutch, and on the west by the Kirthar Range. The Baluchistan Plateau is vastly an arid land encircled by mountains.
- 3.2 Pakistan is one of the 10 most populous countries in the World, with an estimated population of 149.03 million in 2003. The annual population growth rate during the recent years (1996 to 2003) has been around 2.3 %.
- 3.3 Approximately 33% of the Pakistani population resides in urban areas. The largest urban centers are Karachi (estimated population of 10 million), Lahore (estimated population of 6 million) Faisalabad (estimated population of 5.4 million) and Rawalpindi/Islamabad (estimated population of 4.3 million). Islamabad is the capital city of Pakistan with an estimated population of 0.8 million.
- 3.4 The current GDP per capita of Pakistan is approximately US \$492. According to published reports of the World Bank, Pakistan is labeled as a low-income country.
- 3.5 Pakistan achieved an annual GDP per capita growth rate of 3.3% from 1982-1992 and 1.14% during the decade from 1992 to 2003. In terms of GDP, the sectoral structure of the Pakistani economy in 2003 was 50.7% services, 18.4% manufacturing and 23.6% agriculture. The annual growth rates from 1992 to 2003 for these three sectors were 4.5%, 4.7% and 3.9% respectively.
- 3.6 The economic performance of Pakistan improved during the period 2002-03. In the fiscal year ending June 30, 2003 ("FY03"), the GDP grew to 5.1%. The relatively high growth in FY03 was marked due to strong performance in all sectors of the economy: 5.3% in services, 7.7% in manufacturing, 4.1% in agriculture.
- 3.7 Agriculture is an important sector of the economy and employs about half the labor force, and accounts for a significant share of foreign exchange earnings. Agricultural production also provides basic inputs for key industries, including textiles and sugar. Pakistan is the world's fourth largest producer of cotton and the economy depends primarily on cotton and textile exports as a major source of foreign exchange and employment. Cotton textile production is the single most important industry, accounting for about 46% of overall manufacturing activity in

the country. Other important industries are cement, vegetable oil, fertilizer, sugar, steel, machinery, tobacco, paper and paperboard, chemicals, and food processing.

- 3.8 Pakistan is a democratic country consisting of two houses of the Parliament, the National Assembly and the Senate. The head of the State is the President, and the head of the Government is the Prime Minister. The Supreme Court heads the Judiciary. Administratively, Pakistan is divided into four provinces: Punjab (Capital is Lahore), Sindh (Capital is Karachi), North West Frontier Province ("NWFP") (Capital is Peshawar), and Baluchistan (Capital is Quetta).
- 3.9 Pakistan emerged from four years of stringent macro-economic adjustments. The government tackled some difficult economic issues, including Pakistan's significant debt payments. Pricing was broadly deregulated, including in the energy sector, import tariffs were rationalized and reduced significantly. Pakistan's central bank was granted unprecedented autonomy and capital market prudential oversight was strengthened. These measures were taken to improve the general investment climate in the country.
- 3.10 A central element of Pakistan's economic reform process has been the effort to reduce persistent government budget deficits. The Federal Government of Pakistan has contained the fiscal deficit to 4.6 percent of the GDP in FY03, mainly due to improvements in tax collection and expenditure control. There has been a 15 percent increase in tax revenue during the first ten months of FY03. Total revenue relative to the GDP increased marginally from 17.2% to 17.6% in FY03 and total expenditures as percent of GDP fell from 22.8% to 22.2% in FY03. The government's efforts to introduce wide ranging tax reforms and promote fiscal transparency were also the contributory factors to deficit reduction. As a result, public debt, as a percent of GDP, declined to 91% in FY03.
- 3.11 Foreign Direct Investment (FDI) in Pakistan stood at US \$700 million in FY03 in comparison to US \$308 million in FY02. A significant 22% of FY03 inflows were derived from the sale of state-owned United Bank Limited to a UK and UAE consortium. Historically, the United States, United Kingdom, United Arab Emirates and Saudi Arabia have been Pakistan's major sources of FDI investment. Principal sectors attracting such investment are financial services, oil and gas exploration, power, trade, transport, storage and communications, chemicals, pharmaceuticals, fertilizers, and textiles.
- 3.12 Financial reforms introduced in 1990 have liberalized Pakistan's banking sector, which had long been dominated by state-owned banks. Private Banks are gradually playing a more significant role. The Federal Government privatized three formerly nationalized Banks, i.e. Allied Bank Limited, Muslim Commercial Bank Limited and Habib Bank Limited. There are 44 banks operating in the country of which 25, are domestic, while 19 are foreign banks. The State Bank of Pakistan, the country's central bank, controls the money supply and credit, supervises the operations of banks, administers the country's international reserves, and acts as banker to the federal and provincial governments.

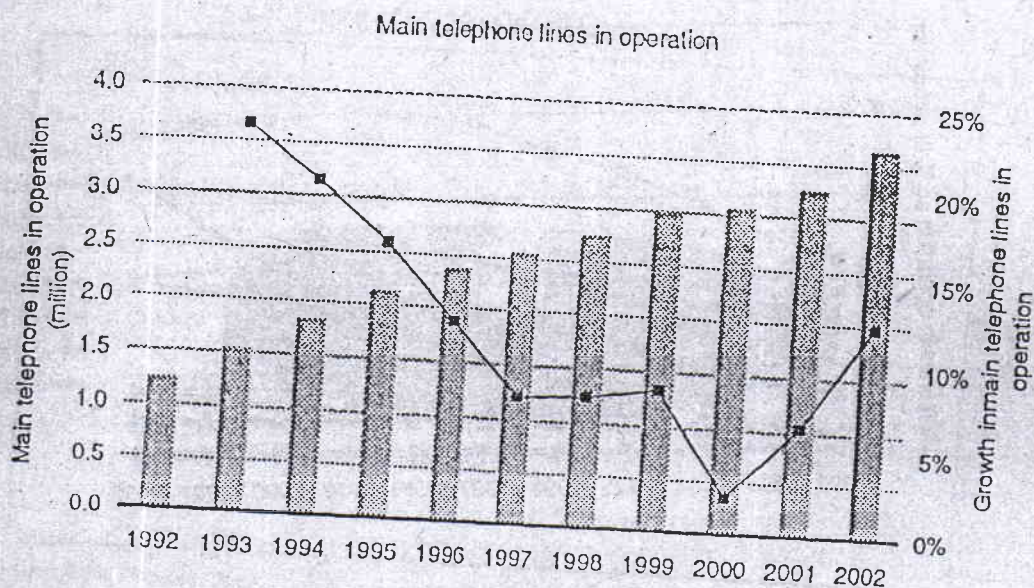
- 3.13 Additional information on the state of the economy in Pakistan is available in Pakistan Economic Survey-2002/2003 published by the Ministry of Finance. The Survey is available at the website of the Ministry of Finance: <http://www.finance.gov.pk>
- 3.14 Pakistan is a member of the main international and regional organizations, including the United Nations, the Organization of the Islamic Conference (OIC), the Economic Cooperation Organization ("ECO"), the World Trade Organization ("WTO"), the South Asian Association for Regional Cooperation ("SAARC"), the International Telecommunication Union ("ITU") and the Asia Pacific Telecommunity (APT). The ECO, whose founding members are Pakistan, Turkey, and Iran, grants a 10- percent tariff preference on statutory rates for some goods. In 1993, ECO membership was expanded and Afghanistan, Azerbaijan, and the five formerly Soviet Central Asian republics were admitted to this organization. The SAARC comprises India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, and the Maldives. SAARC proposed a South Asian Preferential Trading Agreement, which became operational after ratification by the member states in November 1994. The SAARC Governments have signed an agreement on South Asian Free Trade Area (SAFTA) on 6 January 2004. The agreement will enter into force on 01 January 2006 upon completion of formalities including ratification by all contracting states. This agreement shall supercede the SAARC Preferential Trading Agreement (SAPTA). Pakistan is also a member (along with India and Nepal) of the Asian Clearing Union, which was founded in 1976 and aims at facilitating multilateral payments through the use of currencies of participating countries in regional transactions in order to expand intra-regional trade and save convertible foreign exchange.
- 3.15 Pakistan has negotiated Bilateral Investment Treaties with several countries, including the Peoples Republic of China, France, Germany, the United Kingdom, the Republic of Korea, the Netherlands, Romania, Sweden, Spain, Portugal, Turkmenistan, Tajikistan, Kyrgyzstan, Uzbekistan, Switzerland, Azerbaijan, Bangladesh, the United Arab Emirates, Iran, Indonesia, Tunisia, Syria, Belarus, Mauritius, Italy, Oman, Sri Lanka, Australia, Japan, Belgium, Denmark, Czech Republic, Thailand, Philippines, Egypt, Lebanon, Morocco Qatar, Turkey, Kuwait, Malaysia and Singapore. These treaties generally include dispute settlement provisions. If a dispute cannot be settled through mutual consultation, investors can generally take cases to arbitration under rules of the U.N Commission on International Trade Law or to the World Bank's International Center for Settlement of Investment Disputes or to the Court of Arbitration of the International Chamber of Commerce. Pakistan is a member of the Multilateral Investment Guarantee Agency, an arm of the World Bank.
- 3.16 The Protection of Economic Reforms Act, 1992, safeguards local and foreign investments in Pakistan. This statute, inter-alia, guarantees the right to bring, hold, sell, transfer and take out foreign exchange within or out of Pakistan; protects fiscal incentives provided by the government; and protects investors against expropriation of assets.

- 3.17 Companies doing business in Pakistan are subject to the Companies Ordinance, 1984, as amended. This statute sets out the legal regime applicable to the incorporation, operation and termination of companies in Pakistan. The Securities & Exchange Commission of Pakistan (SECP) is the administrative entity responsible for registration of companies under Companies Ordinance 1984, as amended. Applicants should consult their own professional advisors for further information on company law requirements.
- 3.18 The Income Tax Ordinance, 2002 is applicable on the companies conducting business in Pakistan. To obtain more information on Pakistan's taxation regime, visit the website of the Central Board of Revenue: <http://www.cbr.gov.pk> Applicants should also consult their own professional taxation advisors for more complete information on Pakistan tax requirements.
- 3.19 Pakistan has bilateral and/or double taxation treaties or agreements with more than 50 countries, including Austria, Canada, Germany, Indonesia, Italy, Lebanon, Mauritius, Poland, Switzerland, Turkmenistan, Kazakhstan, the United Arab Emirates, Belgium, China, France, Greece, Iran, Japan, Libya, Saudi Arabia, Romania, Sweden, Belarus, Hungary, Jordan, Kenya, Kuwait, Malaysia, Netherlands, Nigeria, Norway, Oman, Philippines, Qatar, South Africa, Syria, Tunisia, Uzbekistan, the United Kingdom, the USA, Bangladesh, Denmark, Finland, India, Ireland, South Korea, Malta, Singapore, Sri Lanka, Thailand and Turkey.

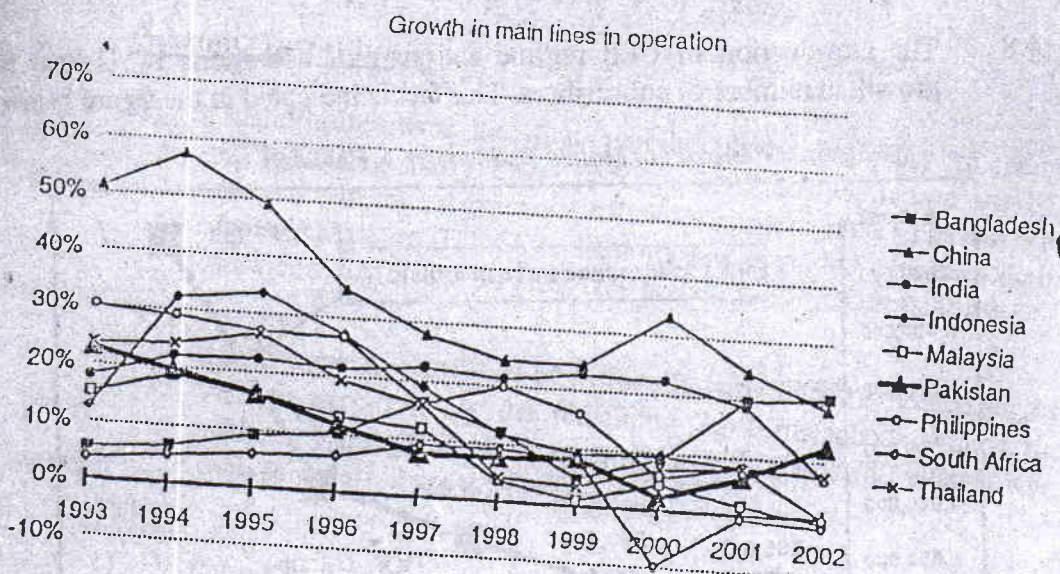
4. Overview of Telecommunications Sector

- 4.1 The telecommunication sector in Pakistan has grown rapidly in the past three years and offers significant opportunities in every segment of the telecommunications market. The Federal Government has granted high priority to developing telecommunications in the country to achieve sustainable growth in all sectors of the economy.
- 4.2 Pakistan has international connectivity with other countries through undersea cables, satellite links and terrestrial cables. Pakistan is linked to Southeast Asia, the Middle East and Western Europe by the SEA-ME-WE-III submarine fiber optic cable. An older submarine cable links Pakistan with UAE. In addition, Pakistan is negotiating for participation in the proposed Trans-Asia Europe optical fiber link that will connect China with Europe via countries enroute, and the SEA-ME-WE-IV undersea consortium.
- 4.3 The telecommunications sector in Pakistan has shown significant growth in the recent years, however, it still lags behind many of its comparable economies in terms of fixed line density (number of fixed phones per 100 inhabitants), mobile penetration (number of mobile subscribers per 100 inhabitants) and internet usage. Due to the fact that there is a substantial population that is devoid of telecommunication services, there exists an enormous potential for growth of telecommunications in the country.

4.4 The following table shows the growth in fixed line service in Pakistan in recent years (Source: ITU):

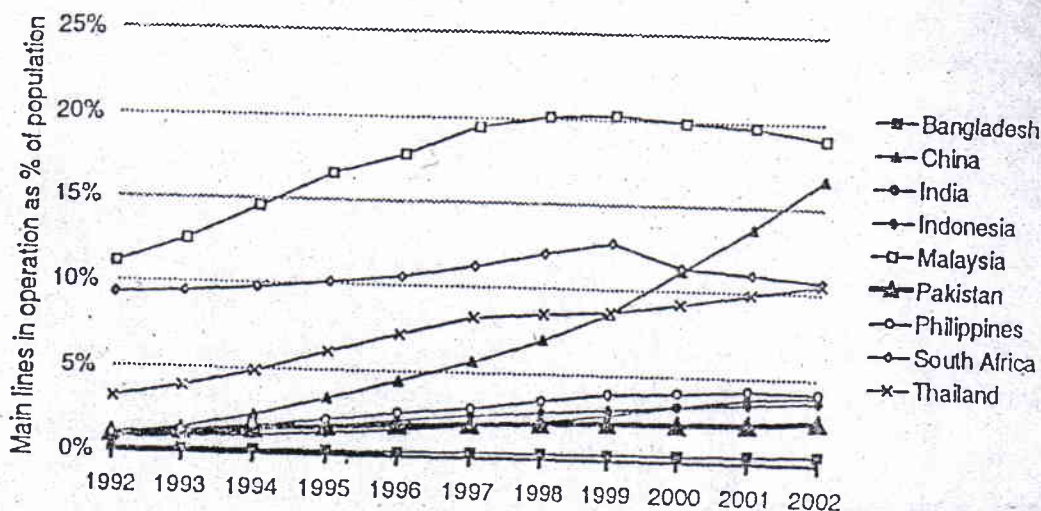


4.5 The following table compares Pakistan's growth in fixed line service with that of neighboring countries (Source: ITU):



4.6 The table below compares Pakistan's fixed teledensity with that of its neighbors and important trading partners (Source: ITU):

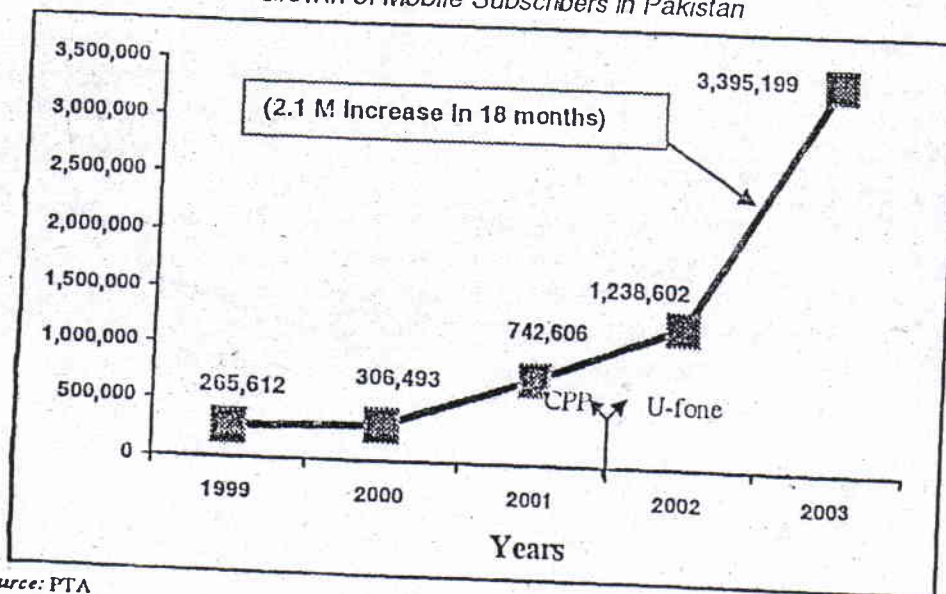
Teledensity



4.7 In line with the global trends, the mobile cellular sector of Pakistan has shown relatively stronger growth than the fixed line telephony. Pakistan currently has over 3.4 million cellular subscribers, the number of subscribers has increased three-fold in the past three years but there still exists high demand for mobile cellular communication services in the country.

4.8 The introduction of CPP regime and start of operations by U-fone facilitated growth in number of subscribers. This fact is indicated in the figure below:

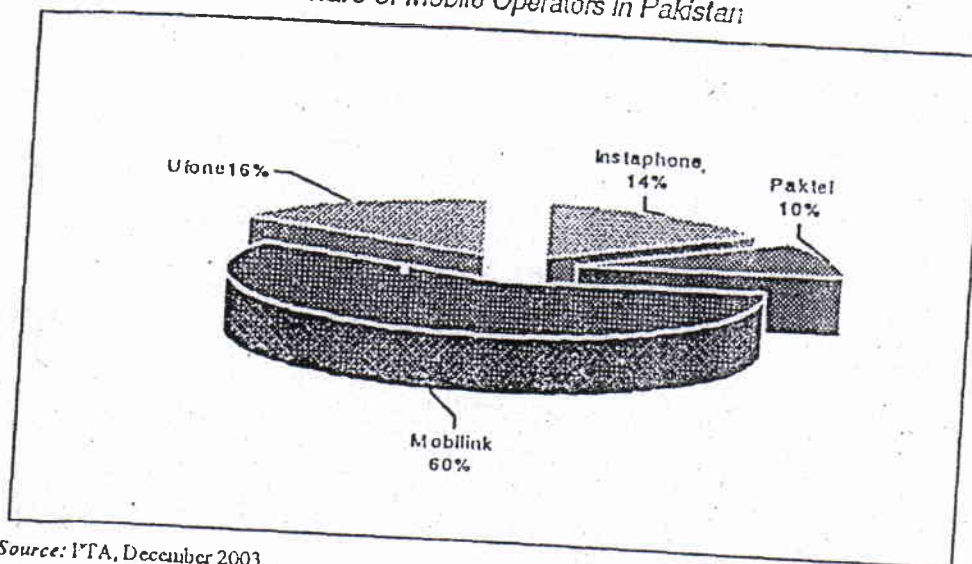
Growth of Mobile Subscribers in Pakistan



Source: PTA

- 4.9 The market share of four mobile operators in Pakistan mobile market is indicated in the figure given below. Mobilink being the market leader has 60% market share, U-fone 16%, Instaphone 14% and Paktel 10%.

Market Share of Mobile Operators In Pakistan



Source: PTA, December 2003

5. Licensed Telecommunication Services Providers

- 5.1 Mobile Cellular Service Providers. The following paragraphs give brief description of the four existing Mobile Cellular Operators.

a. Pakcom (InstaPhone)

- (1) InstaPhone was the first mobile phone company to launch CPP (Calling Party Pays) packages in Pakistan, before the CPP (free incoming) regime was officially implemented. The transition from AMPS to TDMA technology has provided access to digital services: SMS, SMS Pulse, Web and e-mail SMS services etc.

- (2) InstaPhone is controlled by Millicom, with 97.5% of issued shares. Arfeen group holds the remaining 2.5%. InstaPhone claims the widest coverage of all four networks with about 180 cities/towns, with population coverage of 40%.

b. Paktel

- (1) Paktel Limited was founded in 1990 and claims coverage, network quality, customer services and value added services. It presently claims to offer cellular services in over 100 cities/towns in Pakistan.

- (2) Paktel is controlled by Millicom with 98% of issued shares, the remainder being held locally. Paktel is moving its network from

AMPS to GSM, and plans to deploy GSM capacity for 1 million subscribers in year 2004 and another 2 million during year 2005.

c. PMCL (Mobilink)

(1) PMCL Mobilink launched its GSM network in 1994. In June, 2003, the company became the largest single operator in Pakistan. The company has cell sites covering 55 cities and towns, and plans to double its cell sites in the next two years.

(2) PMCL Mobilink operates under the consumer brand Mobilink and is 90% owned by Egyptian telecom operator Orascom.

d. PTML (Ufone): Pak Telecom Mobile Ltd. is Pakistan's fourth mobile operator and second GSM 900 operator. It launched services in January 2001 under the Ufone brand. At the end of 2001, it had 117,711 subscribers and a market share of 15.7%. It currently has over 550,000 subscribers, and is building capacity to add one million more. Pak Telecom Mobile Ltd. is a wholly owned subsidiary of PTCL.

5.2. Fixed Line Telecommunication Service Providers.

a. Pakistan Telecommunications Company Limited ("PTCL"): PTCL is the incumbent service provider for the provision of local (fixed line), long distance and international telecommunications. PTCL provides service to approximately 4.9 million access lines, an increase of more than 1.5 million since 1997. Previously, Pakistan Telecommunication Corporation (PTC) was converted to a public limited company in 1996. It is mainly owned by the Federal Government, which controls 88% of PTCL shares. The remaining 12% of PTCL shares are listed on the Karachi Stock Exchange. To obtain more information about PTCL visit its website: <http://www.ptcl.com.pk>

b. National Telecommunication Corporation ("NTC"): NTC was formed in 1996 to meet the telecommunication requirements of the Federal Government and national defence forces. It has nationwide fibre-optic backbone infrastructure. To obtain more information about NTC, visit its website: <http://www.ntc.gov.pk>

c. Special Communications Organization ("SCO"): SCO was created in 1976 as a unit of the Pakistan army's signal corps. It provides telecommunication services for Azad Jammu & Kashmir and Northern Areas. SCO operates a network of approximately 63,573 lines. To obtain more information about SCO, visit its website: <http://www.sco.gov.pk>

d. Payphones: The payphone market in Pakistan can be divided into unmanned payphones (typically located outdoors) and Public Call Offices (PCOs) which are supervised, indoor terminals (typically in post offices,

shops, petrol stations and hospitals). Both types only accept pre-paid cards. The number of PCOs rose from 5,219 in 1995 to 27,710 in June 2003 and 1,44,584 in 2003.

e. Internet Services

- (1) In line with the Federal Government policy of expanding Internet access throughout the country, there is direct digital Internet connectivity in 1,800 cities and towns. Customers are able to make flat rate local calls (131 service) and reach their selected Internet Service Providers (ISPs).
- (2) To promote broadband Internet services in Pakistan, the Authority recently directed PTCL to enter into agreements with ISPs for the provision of Digital Subscriber Line (DSL) services under certain conditions.
- (3) Currently, there are more than 70 active ISPs in Pakistan, mostly in the four major cities of Islamabad, Karachi, Lahore and Peshawar.

6. Telecommunication Sector Regulation in Pakistan

6.1 Regulatory Framework

- a. Prospective Applicants should familiarize themselves with the regulatory and institutional framework for the regulation of telecommunications in Pakistan. The same is available at the Pakistan Telecommunication Authority's website at www.pta.gov.pk.
- b. Pakistan modernized its regulatory framework for telecommunications in 1996. The Authority was established as the sector regulator, and the Frequency Allocation Board was constituted to manage the radio frequency spectrum. Since then, further changes have occurred in 2000, when the Pakistan Telecommunication Rules came into force, and more recently in preparation for the liberalization of the sector with the granting of new Licences.

6.2 Pakistan Telecommunications (Re-organization) Act, 1996. The Act came into force in 1996, and contains the following:

- a. Establishes the institutional framework for, and the main principles applicable to, the regulation of telecommunication activities.
- b. Establishes a licensing regime for telecommunication operators.

- c. Established the Authority and granted it powers to issue and enforce licenses, regulate tariffs, determine interconnection disputes, and issue regulations in support of its powers and functions.
 - d. Established the Board, which is charged with allocating and assigning radio frequency spectrum resources.
 - e. Authorizes the Federal Government to make rules to implement the Act.
- 6.3 **Pakistan Telecommunication Rules, 2000:** The Rules, issued by the Federal Government in 2000, establish regulatory requirements for licensing, interconnection, PTCL tariffs, procedural matters and appeals.
- 6.4 **Regulations:** The Authority has the power to issue regulations relating to its powers and performance of its functions under the Act. Regulations have been prepared to deal with holding of public hearings on specific matters, license application process, criteria for granting licenses, quality of service, complaints against licensees, terminal equipment standards and approval, numbering, universal service, promotion of competition, fees to be charged to licensees, establishment of advisory committees and regional offices of the PTA.
- 6.5 **Proposed Amendments in the Regulatory Framework:** PTA plans to update the regulatory framework stimulated by the fixed line telecommunications Deregulation Policy and the Mobile Cellular Policy.
- 6.6 **Institutional Framework:** The three key components of the institutional framework are the Ministry of Information Technology, the Pakistan Telecommunication Authority and the Frequency Allocation Board. These are briefly described below:
- 6.6.1 **Ministry of Information Technology ("MOIT"):** The Ministry of Information Technology (Information Technology and Telecommunications Division), is the Federal Government department that oversees the telecommunication sector. Its functions, inter-alia, include:
- a. Preparation of an overall integrated Plan as well as formulation of policy for the development and improvement of information technology, including infrastructure, in Pakistan.
 - b. Co-ordination with the Provincial Governments, autonomous bodies, private sector, international organizations and foreign countries in respect of information technology.
 - c. Planning and policy making covering all aspects of telecommunications excluding radio and television.
 - d. Representing Pakistan before the International Telecommunication Union and other international bodies in the telecommunications field.

- e. All matters relating to PTCL, PTA, FAB, NTC, TIP, CTI, Telecommunications Foundation and the Special Telecommunications Organization.

Note: To obtain more information about the Ministry of Information Technology, visit its website: <http://www.moiit.gov.pk>

6.6.2 Pakistan Telecommunication Authority ("The Authority"): The telecommunication sector is regulated by the Authority, an independent administrative agency governed under the Act and reporting directly to Cabinet Division.

- a. Regulating the establishment, operation and maintenance of telecommunication systems and the provision of telecommunication services in Pakistan;
- b. Receiving and disposing of applications for the use of radio frequency spectrum;
- c. Determining interconnection disputes between operators;
- d. Investigating and adjudicating on complaints against licensees; and
- e. Submitting recommendations to the Federal Government on policies with respect to international telecommunications.

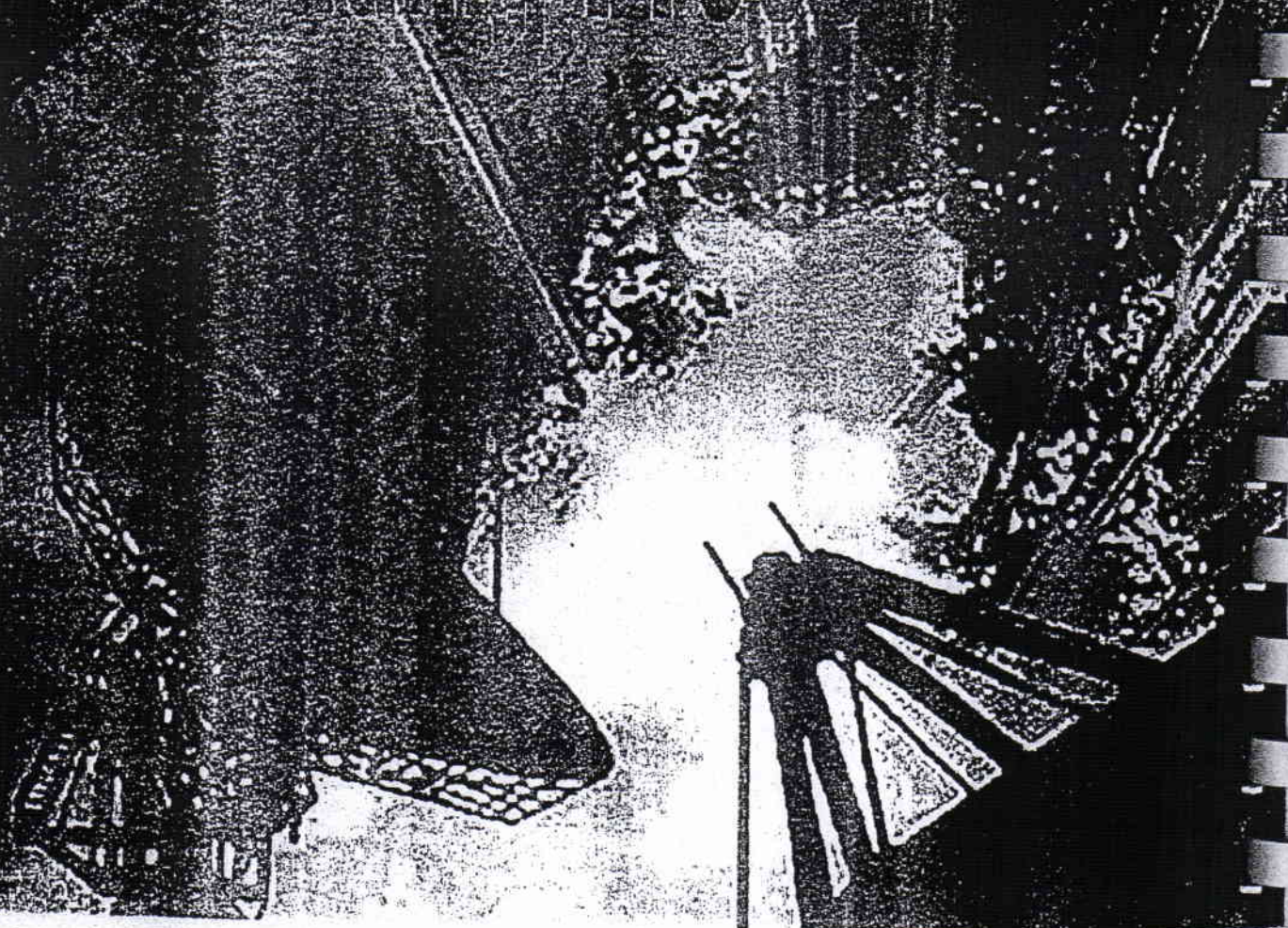
Note: To obtain more information about the Pakistan Telecommunication Authority, visit its website: <http://www.pta.gov.pk>

6.6.3 Frequency Allocation Board ("The Board"):

- a. The Board allocates and assigns radio frequency spectrum to licensees. It has prepared draft regulations (the 'Frequency Allocation Board Regulations, 2000'), that define the procedures for the allocation and assignment of radio frequency spectrum. These draft regulations are not yet in force.
- b. The Board is currently reviewing the regulatory framework pertaining to radio frequency spectrum, including the Board's own responsibilities and functions. This review may lead to changes that will be implemented later in 2004.

Part - III

THE TOGETHER



PART III – Bidding Procedure and Auction Process

7. General

- 7.1 The Authority will notify the "Pre-qualified Applicants" by letter, fax, or e-mail on 15th March 2004 stating that its EoI has been accepted and it is entitled to participate in the bidding process subject to the submission of earnest money.
- 7.2 Pre-qualified Applicants may raise questions and queries in writing through letter, fax or email to the Authority concerning this IM up to two weeks following the date of issuance of this document. The Authority may not respond to questions and queries received after two weeks period.
- 7.3 The bidding procedure and auction process shall be as following:
- a. The bidding procedure and auction process will be conducted in two rounds, the first round will be through sealed bids and the second round through open outcry.
 - b. The Authority will send out invitations on 15th March 2004 to pre-qualified Applicants for submitting Bid Earnest money of US Dollar 10 Million (US Ten Million only) or Pak Rs. 575 Million (Pak Rupees five hundred and seventy five million only). The bid earnest money can either be deposited in US dollars or in Pak Rupees. The payment of the earnest money to the Authority is required to be deposited through normal banking channels and should be received by the Authority by way of credit in the designated bank account of the Authority by 12th April 2004.
 - c. The earnest money of the successful bidder(s) will be adjusted towards the Auction Winning Price (License Fee) while the earnest money of the unsuccessful bidders shall be returned within thirty (30) working days¹ of the Bidding date without bearing any liability towards interest, indexation, inflation or deflation.
 - e. The bidding will be held at 1000 hours on 14th April, 2004 at a Venue to be notified by the Authority. Only three persons including the authorized representative from each pre-qualified Applicant shall be allowed to participate in the Bidding process.
 1. "Working Days" means Monday to Saturday, excluding public holidays.

8. First Round: Scaled bidding

- a. The Authority would invite the pre-qualified bidders to file the bids for the licenses. The pre-qualified bidders shall submit sealed bids on prescribed form on April 14, 2004. The sealed bid form is placed at Annex 'E' to this IM. First round of bidding shall be held at 1000 hours.
- b. The sealed bids shall be dropped by the Authorized Representative of the Bidder between 1000 hours and 1100 hours PST on the bidding date in a sealed box reserved for this purpose in the presence of the Bidding Committee. The bid shall be unconditional, irrevocable and valid for at least sixty (60) working days from the date of submission.
- c. The bids shall be typed or written in indelible ink and shall be signed by the Authorized Representative of the bidder. The amount of Bid shall be in multiple of million US Dollar and invariably written both in words and figures.
- d. The Bid shall contain no additions, alternations or omissions. Any such Bid may be cancelled/rejected by the Bidding Committee.
- e. A Bid shall be returned unopened if:-
 - (1) It is received by the Bidding Committee after 1100 Hours PST on 14th April 2004, the deadline fixed by the Authority for the submission of Bids;
 - (2) It is not submitted by the authorized representative who is holding the special power of attorney; OR
 - (3) The earnest money of US Dollar 10 M or Pak Rs. 575 M has not been deposited within the stipulated time.
- f. The Bidder shall not be able to modify or substitute their Bids after the Bid submission.
- g. The top 50% bidders will qualify for the second round of bidding. Any bidder whose quoted amount is not less than 80% of the highest Bid shall also qualify for the second round.
- h. The Bids will be opened by the Committee constituted by the Authority for this purpose.
- i. The Committee would be responsible for proper conduct of the Bid opening process. In case of any dispute, the committee shall refer their recommendations to the Authority whose decision shall be final.
- j. The Bidding Committee shall open sealed Bids in front of the Authorized Representatives of the Bidders. The Bidding Committee shall announce:
 - (1) Bid Price of each Bidder

- (2) Highest Bid
- (3) Qualified Bidders for the next round
- (4) Time for reassembly for the Second Round

- k. All the Authorized Representatives shall sign a proforma confirming that all the Bids announced are correct and true.
- l. The highest Bid received in the first round shall become the reserve/ floor price for the second round.

9. **Second Round: Open Out-cry:** The following procedure shall be followed in the second round of bidding:

- a. Each successful bidder of the first round will be issued a card to identify himself;
- b. The auction shall be based on an open outcry on the same date, the same Venue and the time announced by the Bidding Committee.
- c. The bidder shall cry-out his bid and write it on the prescribed form duly signed by the Authorized Representative and hand it over to the Bidding Committee. The bid form for second out-cry round is placed at Annex 'F' to this IM.
- d. The Authority shall continue the open outcry auction until there are no further Bids.
- e. Each subsequent bid increment shall be in multiple of US\$ 1 Million.
- f. After each Bid, the bidding and Bidder' details will be recorded before the next Bid;
- g. When there are no further Bids, the Bidding Committee shall announce the Auction Winning Price and the names of the top two Bidders. Thereafter the highest Bidder will be asked to select one of the available Lots of frequency spectrum. The selection of the highest Bidder will be recorded.
- h. The second highest Bidder will be asked to match the Auction Winning Price and if he agrees, he shall qualify for the second License.
- i. In case the second highest Bidder is unwilling to match the Auction Winning Price, the second License shall be offered at the same price to the other Bidders in order of their bid amounts, i.e., from higher to lower until Auction winning Price is matched. If no other Bidder is ready to match the Auction Winning Price, the Bidding session will be closed with the award of only one license.

- j. If the second or subsequent Bidder agrees to match the Auction Winning Price, he will be asked to select one of the remaining Lots of frequency spectrum. Their selection will also be recorded and the auction will then be declared closed.
- k. Each one of the winning Bidders shall deposit in PTA designated bank account, 25% of the Auction Winning Price (License fee) after adjustment of the Bid Earnest money within ten (10) working days. Each winning bidder shall deposit remaining 25% of the Auction Winning Price within forty (40) working days from the Bidding Date.
- l. The remaining 50% of the license fee shall be paid within ten (10) years in equal annual instalments in US Dollar or its equivalent in Pak Rupees to be converted at the TT selling rate of National Bank of Pakistan on the day preceding the date of payment. A clause to secure the payment of remaining 50% of the License fee shall be included in the License conditions.
- m. If both or either of the winning Bidders fail to make the payments as referred in sub-clause (k) above within the stipulated time, the next highest bidder(s) in order of their bid(s) will be offered the License(s) on the same Auction Winning Price and on the same terms and conditions. If no Bidder is found ready to match the Auction Winning Price, the Bidding session will be closed without awarding any license.
- n. The Authority shall forfeit the Bid earnest money and all other amounts received from the defaulting bidder(s).
- o. The license shall only be issued after payment of 50% of the License Fee within forty (40) working days from the Bidding Date.
- p. After the announcement of the highest Bidder, no further offers to obtain the license shall be entertained by the Authority.

10. **Disqualification:** The Authority may, on the recommendation of the Biding Committee, disqualify any Bidder and forfeit its money for any of the reasons set out below:

- a. If a successful Bidder abandons the bid or fails to pay 25 % of the license fee within ten (10) working days or remaining 25% within forty (40) working days from the Bidding Date.
- b. Inaccuracy or misrepresentation of any facts in any part of the EOI.
- c. Illegal conduct in the Bid procedure and auction process or improper attempts to influence the outcome, or delay or disrupt the process.

- d. Any "corrupt practice" meaning the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in relation to licensing process provided in the IM.
- e. Any "fraudulent practice" or misrepresentation of the facts in order to influence the results of the licensing process established by the Information Memorandum.

11. Information Provided by the Authority

- 11.1 The information contained in this IM and any other information provided to Applicants during the Application process, in writing, is intended to assist Bidder in the preparation of their Bids and shall be binding on them in the course of bidding/auction.
- 11.2 The Authority has made and will continue to make reasonable efforts to include accurate and current information in the IM and in any other documents provided to the Applicants. However, neither the Authority nor any of the agencies, employees, representatives, advisors or consultants shall have any liability whatsoever to any Applicant or any of its shareholders or members or any other person resulting from use of or reliance on any of the information so provided. Applicants are encouraged to undertake their own verification of any information supplied by the Authority prior to use of or reliance on that information.

12. Other Communications

- 12.1 All deliveries, notices or other communications made to Applicants in connection with the Application process shall be sent by fax or email or personal delivery to the contact office of the bidder(s) /Applicant(s), as specified by the Applicant to the Authority in his EOI.
- 12.2 All deliveries, notices or other communications made by Applicants to the Authority in connection with the Application process shall be sent by fax, E-mail or personal delivery to the officers mentioned at the address mentioned in Para 2.3 of the IM.
- 12.3 The Bidders are expected to carefully examine all information, instructions, and annexes given in this IM.

13. Confidentiality of Applications

- 13.1 The Authority shall make all reasonable efforts to ensure confidentiality of the information provided by the Applicants. However neither the Authority nor any of its agencies, employees, Representatives, advisors or consultants shall be liable in any respect whatsoever to any Applicant or any of its members or representatives for damages or harm resulting from a failure to maintain such confidentiality.

14. Costs associated with Bid and bidding: The Bidders shall bear all their costs associated with the preparation and submission of their Bids and the Authority shall in no case be responsible for these or any other costs, regardless of the conduct or outcome of the application process.

15. Reservation of Rights

15.1 The Authority reserves the right, in its sole discretion, to take any action, including amendment in this IM, which it considers necessary to ensure that the Bid process occurs in a fair, open and transparent manner, in accordance with law and discourage collusion and predatory bidding that may block the entry of potential bidders into the bidding/auction process.

15.2 The Authority further reserves the right to modify or terminate the Bid process at any time in its sole discretion. In such an event earnest money would be returned to the Bidder within thirty (30) working days without bearing any liability.

16. Miscellaneous

16.1 This IM and any License issued pursuant to the process announced herein shall be exclusively subject to, and interpreted in accordance with provisions of the Act, the Rules and the Regulations issued there under.

16.2 Any dispute, controversy or claim arising out of or in connection with this IM, or the breach, termination or invalidity thereof, shall be settled by the Authority and its decision shall be final.

16.3 The Bid process, the accompanying documents, and all correspondence relating to the process announced in this IM shall be submitted in English language.

16.4 The Authority at all times shall reserve the right to change, alter, modify, amend, supplement or replace any or all of the Bidding procedure before the Bidding Date and such change, alteration, modification, amendment, supplemental or replacement shall be communicated to the Bidders and become an integral part of the Bidding procedure.

16.5 No suit, prosecution or other legal proceedings shall lie against the Authority or any member or employee of the Authority in respect of anything done or intended to be done by the Authority in good faith in connection with this IM.

Sealed Bid Form

[Note: To be printed on the Letterhead of the Bidder and signed each page by the Authorized representative]

The Director General (Licensing),
Pakistan Telecommunication Authority,
F-5/1
Islamabad

Date: [-----]

Dear Sir,

In terms of the Information Memorandum dated 11th February and addendum dated 9th March, 2004 for the issuance of Mobile Cellular License (hereinafter "the License"), we hereby provide the following information and documents as required:-

1. Our unconditional and irrevocable initial bid for the first round for the License is USD [insert Bid Amount In Figures] ([Insert Bid Amount In Words]), which shall be valid for sixty (60) days from the date of Bid submission.
2. Banker's certificate / certified copy of tested telex / SWIFT Message dated [____] evidencing remittance of the Earnest Money amount of [Insert Amount of Earnest Money in USD or PKR]
3. Special Power of Attorney to participate in bidding process in favour of [Insert Name Of Authorized Representative] duly stamped and notarized;

We hereby irrevocably and unconditionally agree as follows:-

- (a) That we have carefully examined the Information Memorandum made available and all such other material, information and documents as we have considered necessary or advisable and have conducted our independent legal, financial and general due diligence which we consider to be adequate for the purpose of our bid.
- (b) That, in reiteration of the terms of the Information Memorandum, release and forfeiture of the Earnest Money is acceptable.
- (c) That we would not be entitled to receive any interest / mark-up whatsoever, on the Earnest Money whether our bid is accepted or rejected.
- (d) That we have examined the Information Memorandum and we unconditionally and irrevocably agree and accept the terms and conditions mentioned therein and each and every term and condition may be considered as having been repeated herein as our express agreement.
- (e) That we understand and acknowledge that neither Government of Pakistan nor the PTA nor any of their respective employees or advisors/consultants, etc., shall be liable to reimburse or compensate us for any losses, costs or expenses incurred by or on behalf of ourselves in

Annex 'F'

Pakistan Telecommunication Authority
Auction of Mobile Cellular License 2004
Bid Form for Second Round (Out-cry)

Name of Company

Name of Authorized Representative

Bid Amount in Figures

US\$

Bid Amount in Words

US\$

I solemnly declare that this bid for cellular mobile license is unconditional, irrecoverable and is valid for sixty (60) days, and all conditions of the sealed bid i.e. Round 1 are also binding where applicable.

Signature of Authorized Representative

ion Policy for
lication Sec
y 2003



De-Regulation Policy for the Telecommunication Sector

July 2003

**Ministry of Information Technology
IT & Telecommunication Division
Government of Pakistan
www.moitt.gov.pk**

CONTENTS

S.No.	Title
1	Economic Landscape
2	Telecommunication Sector of Pakistan in 2003
2.1	Pakistan Telecommunication Company Limited (PTCL)
2.2	National Telecommunication Corporation (NTC)
2.3	Special Communication Organization (SCO)
2.4	Cellular Mobile Telephony
2.5	Internet Services
2.6	Role of Other Private Sector Operators
2.7	Regulatory Perspective
3	Policy Objectives
4	Numbers and Type of Fixed Line Telecommunication Service Licenses
4.1	Rights of the Licensees
4.2	Obligations of the new Licensees for Fixed Line Telecommunications
4.2.1	LDI Licensees
4.2.2	LL Licensees
4.2.3	Both Licensees
4.3	Access Promotion Contribution
4.4	Radio Spectrum
4.5	Interconnection
4.6	Obligations on PTCL
4.7	Pricing Regime
7	Cellular Mobile Operators
8	Existing Organizations
9	Continuity of IT Policy
10	Policy Tenure
11	Regulatory Changes
12	Technology Neutral Licensing
13	Miscellaneous
14	De-Regulation Facilitation Unit

Telecommunication De-Regulation Policy

1. Economic Landscape:

- 1.1 Located in South Asia, Pakistan is one of the major regional economies and among the 10 most populous countries in the world with a population base of 146 million. The country is nearly four times the size of United Kingdom, and has India, Afghanistan, Iran and China as its neighbours. The economy of Pakistan is primarily driven by agriculture, which accounts for the largest share of GDP, contributing about 25% to the economy. Pakistan is one of the world's largest producers of raw cotton, which serves as the input to drive the textile industry - the mainstay of industrial activity in Pakistan. Pakistan's per capita income per annum is about US \$ 492.
- 1.2 The Government is committed to revitalizing the economy and to demonstrate its commitment to business friendliness through internationally acknowledged fiscal policies, good governance and transparency in managing Government affairs.
- 1.3 Telecommunication de-regulation policy ("Policy") has been prepared in line with Government's objective to de-regulate and liberalize various sectors of the economy. The Policy applies to opening up of the fixed-line telecommunication sector. The exclusive rights of Pakistan Telecommunication Company Limited ("PTCL") to provide basic telephone services (local, long distance, international and leased line services), which it enjoyed under The Pakistan Telecommunication (Re-Organization) Act 1996 ("Telecom Act 1996"), have expired since 31st December 2002.

2. Telecommunication Sector of Pakistan in 2003

Pakistan has made steady progress in expanding telecommunication networks and services in recent years. Key features of the present telecommunication infrastructure in Pakistan are:

2.1 Pakistan Telecommunication Company Limited ("PTCL")

- 2.1.1 PTCL is the incumbent service provider for provision of fixed line telecommunications. Established as public limited company in 1996, PTCL is 88% owned by the Government of Pakistan. It has shown impressive growth in the past 5 years and manages a well-developed domestic telecommunication infrastructure of 4.85 million access lines (June 2003), nationwide fibre-optic backbone and international communication through sub-marine cable (SMW³) and satellite links.

2.1.2 PTCL has installed more than 1.5 million new telephone lines since June 1997. As a result, teledensity (defined as the number of operational telephone lines as a percentage of population), at about 2.7%, has increased by 6% per year.

2.1.3 The telecommunication network is almost entirely digital.

2.1.4 As a result of tariff rebalancing program initiated by the Government in 1997, the prices of long distance and international calls have been significantly reduced in recent years.

2.2 National Telecommunication Corporation ("NTC")

2.2.1 National Telecommunication Corporation was formed in 1996 in order to meet telecommunication requirements of Government and Defence Forces. It has nationwide presence with a network of 72,000 customer access lines and nationwide fibre-optic backbone infrastructure.

2.3 Special Communications Organization ("SCO")

2.3.1 The Government created SCO in 1976 and gave it the task of installing and maintaining telecommunication facilities in the entire Azad Jammu and Kashmir and Northern Areas. SCO operates a network of 60,000 lines in its territory.

2.4 Cellular Mobile Telephony

2.4.1 Cellular usage is growing strongly after the introduction of Calling Party Pays ("CPP") regime in the year 2000. Currently, four operators (2 GSM, 1 D-AMPS, 1 AMPS) provide service to over 2.2 million cellular subscribers all over the country. The number of subscribers has more than tripled in the past two years.

2.5 Internet Services

2.5.1 More than 70 active Internet service providers provide Internet access, which is accessible in more than 1400 cities and towns. Low Internet access charges have encouraged Internet usage and acceptance by the Pakistani public. Internet services are accessible at a cost of unit local call without discrimination of distance, in most parts of the country. Low-priced data communication services are

available to companies in the information and communications technology sector in order to encourage these companies to establish and grow in Pakistan.

2.6 Role of Other Private Sector Operators

2.6.1 Private sector operators have played a very important role in developing the value added services market in Pakistan. Their key achievement is installation of over one hundred and twenty thousand pay phones and public call offices in addition to operations of value added services, premium rate calling systems and so forth. Some private sector service providers have deployed fibre optic infrastructure in main cities to provide Cable TV and Internet services. In addition, PTCL has entered into O&M contracts with private sector partners to offer services such as Wireless Local Loop (WLL) pay phones, DSL based Internet access, pre-paid calling cards, International voice termination using VoIP technology. Companies in the Information Technology business can set up satellite based direct international connectivity for call centers / IT services under franchise agreement with PTCL.

2.7 Regulatory Perspective

2.7.1 Efforts to develop a fully competitive market in telecom sector were initiated in the early 90's. The Pakistan Telecommunication (Re-organization) Act was promulgated in 1996. Pakistan Telecommunication Authority ("PTA") – the industry regulator, was established to regulate the telecom industry. PTA is a fully functional organization and has played a key role in developing private sector's role in telecommunication services.

2.7.2 Frequency Allocation Board ("FAB") is an independent organization entrusted with the responsibility of allocating and assigning frequency spectrum to Government, telecom system / service providers, broadcasting operators and private users of wireless systems. It operates within the provisions of Telecom Act of 1996 and the guidelines / recommendations laid down by International Telecom Union (ITU).

3. Policy Objectives

The policy is designed to achieve the following objectives:

- a. Increase service choice for customers of telecommunication services at competitive and affordable rates
- b. Promote infrastructure development, especially infrastructure that will increase teledensity and the spread of telecommunication services in all market segments (including voice, data and cellular etc).

- c. Increase private investment in the telecommunication sector and encourage local telecom manufacturing / service industry
- d. Recognizing the challenge to incumbent, minimize exposure to the Government's revenue base in the short term
- e. Accelerate expansion of telecommunication infrastructure to extend telecommunication services to un-served and under-served areas
- f. Liberalize the telecommunication sector by encouraging fair competition amongst service providers
- g. Maintain an effective and well defined regulatory regime that is consistent with international best practices, and;
- h. Maintain consistency with Pakistan's IT and Internet promotion policy of low prices for bandwidth to make Internet access affordable.
- i. Safeguard Pakistan's national and security interests

4. Number and Type of Fixed Line Telecommunication Service Licenses

1. It is proposed that there will be two types of licenses for fixed line operators:

- Local loop ("LL") fixed line telecommunication within a PTCL region
- Long-distance and international ("LDI") fixed line telecommunication

2. **Local Loop Licensing:**

Entry to Local Loop market will be unrestricted and open. Any person who requests for a license, and meets the licensing requirements, will be eligible to get a license on payment of the prescribed fee which will be set at the Pak rupee equivalent of US\$ 10,000 for a LL license.

3. **LDI Licensing:**

Entry to LDI market will be unrestricted and open. Any person who requests for a license, and meets the licensing requirements, will be eligible for a license on payment of prescribed fee, which will be set at the Pak Rupee equivalent of US\$ 500,000. In order to ensure that only serious players enter the market under this regime, stringent requirements of technical and financial capabilities, experience and rollout will be incorporated in the licensing documents. The decision of award of license will be preceded by an open, public hearing process.

4. A company can hold both (LL / LDI) types of licenses.

5. Existing licensees of telecommunication services in Pakistan would be permitted to retain their current licenses or O&M agreements with PTCL. They may compete for a new Long Distance International or seek a Local Loop license.

6. Tariffs of both types of licensees (LL / LDI) will not be regulated by PTA until they attain SMP status. However, PTA has the right to regulate tariffs in case of evidence of unfair and burdensome pricing to consumers.

4.1 Rights of the Licensees

- 4.1.1 Licensees will have the right to contract for the "Right of Way" (RoW) they need to construct their networks, subject to conditions laid down by the concerned agencies.
- 4.1.2 Entities (for example, those in the power, gas, water and rail transport sectors) besides PTCL, with suitable land holdings, will be encouraged to provide access to Rights of Way, subject to availability, on non-exclusive basis.
- 4.1.3 LDI licensees will have the right to non-geographic numbering ranges, and will also be allocated short codes for operator services. They will also be issued a four digit Access Code of the type "XXXX", to allow Indirect Access (call-by-call carrier selection) by incumbent's customers.
- 4.1.4 LDI licensees will have the right to sub-lease half-circuit capacity on the SEA-ME-WE-3 submarine cable system on non-discriminatory prices under commercial arrangements. In the event of capacity shortage on the system, PTCL shall allocate a minimum proportion of the total capacity employed for voice circuits to new entrants.
- 4.1.5 LDI licensees will have the right to participate in, and obtain IRUs (Infeasible Rights of Use) from submarine cable consortia and the right to install earth stations. They will have the right to co-locate in PTCL's international exchange buildings, and backhaul to and from them using their own fibre and / or own radio spectrum, where practicable. Licensees will have the right to participate in future landing points for new submarine cables. Access by licensees to PTCL's satellite earth stations will be on commercially negotiated terms between PTCL and the licensees, subject to PTA monitoring.
- 4.1.6 LL licensees will have the right to geographic and non-geographic numbers, as well as short codes (for example, for operator services). PTA will be the number issuing authority. PTA will organise and manage numbering in order to ensure contiguous numbering for new entrants, wherever practicable. PTA will set a nominal charge for

numbering to discourage misuse, and a procedure for taking back numbering ranges not used within a reasonable period of time.

- 4.1.7 LL licensees will have the right and, be exempted from the requirement to offer Indirect Access (carrier selection) to their subscribers, until such time as they enjoy Significant Market Power (SMP) as determined by PTA..
- 4.1.8 Both types of licensees will have the right to co-locate in PTCL local and transit exchange buildings, and to connect their own fibre and own radio links to PTCL buildings.
- 4.1.9 There will be no obligation on licensees to open ducts, poles or other such facilities to competitors until they enjoy Significant Market Power.
- 4.1.10 LL licensees who opt for wireless solutions may provide limited mobility within a cell, but not beyond local call charging radius. No inter-cell handovers and roaming to other networks will be allowed.

4.2 Obligations of the New Licensees for Fixed Line Telecommunications

4.2.1 LDI Licensees

LDI licensees will have the following key obligations:

- a. Start roll-out by building at least one Point of Interconnect in five of PTCL regions within one year of award of license and in all thirteen PTCL regions within 3 years.
- b. The licensees will be permitted to lease infrastructure from PTCL or any other infrastructure owner on mutually agreed commercial terms, non-discriminatory to other licensees seeking the same facility. The licensee must own a proportion of the transmission system and cables comprising its network. The proportion will be 10% in year 1, rising to 30% in year 2 and 50% in year 3 measured in 2 Mbit/s x km. A long-term lease of 5 years or more will be acceptable in lieu of ownership. The licensee will provide a performance bond of US \$ 10 million in respect of infrastructure and roll-out targets in the form and substance acceptable to the Government and provide incoming and outgoing interconnection services, both for voice and data traffic, to all who may request it.

4.2.2 LL Licensees

LL licensees will have the following key obligations:

- a) Start operations with building and operating one Point of Interconnect within the prescribed period and in each licensed PTCL Region where they operate (*"Points of Interconnect" are premises at which other licensed operators can send to or receive from the LL licensee voice or data traffic originated by or destined for the LL licensee's customers*) at acceptable technical and quality standards.
- b) In the event that another licensee considers that an LL licensee's termination prices are inappropriate, PTA has the power to resolve the dispute and impose cost-based prices.
- c) Provide free of cost directory assistance services to its own customers, access to emergency services, operator assistance and any other similar support services as required by PTA.
- d) LL licensees will not be permitted to carry voice calls between PTCL Regions (other than metro regions) or long distance / international traffic. They may carry voice calls between municipalities, but only within a single region.

4.2.3 Both Licensees

4.2.3.1 Both types of licensees will be required to provide regular reports to PTA on quality and network implementation. These will include, but will not be limited to, the number of voice lines and revenues from line rentals. They will also provide details of revenues and minutes from local, long-distance and outgoing / incoming international calls separately. LL licensees will file separate reports for each PTCL region in which they operate.

4.2.3.2 Both types of licensees will be penalised for failing to (a) meet license obligations, (b) make use of allocated radio spectrum. If no roll-out is made within eighteen months of grant of license, it may result in cancellation of license and / or withdrawal of allocated radio spectrum. In addition, the licensees may be obliged to provide all services as may be mandated to achieve defined policy objectives.

4.2.3.3 Both licensees shall meet the requirements of authorized security agencies for interception of calls and messages as detailed in the Telecom Act 1996. Further, the Government

of Pakistan would have the right to cancel any license to safeguard national security interests.

- 4.2.3.4 Licensees will pay to PTA a fixed annual fee, approved by the Government, to reasonably cover the cost of regulation. The annual fee shall not exceed 0.5% of last year's gross revenue minus inter-operator and related PTA / FAB mandated payments.
- 4.2.3.5 Licensees will devote 1% of gross revenue minus inter-operator and related PTA / FAB mandated payments to Research and Development Fund.
- 4.2.3.6 The Government believes that the success of market liberalization depends on the development of a fair competitive environment for all licensees. In this regard, PTCL and other SMP licensees that may emerge, shall be prohibited from abusing their dominant positions through anti-competitive conduct. At present, PTCL's license contains prohibitions against anti-competitive conduct. These prohibitions shall be updated, incorporated in the Rules and made applicable to all such licensees that are determined by the PTA to possess SMP.
- 4.2.3.7 PTA shall have the responsibility of promptly investigating allegations of anti-competitive conduct and taking remedial measures against such conduct.

4.3 Access Promotion Contribution

- 4.3.1 At present, net incoming international traffic generates a financial premium over the cost of conveying and terminating the traffic into Pakistan. Although historically this premium has been large, it has been steadily reducing, in-line with global trends.
- 4.3.2 As long as the premium continues to exist, a reasonable portion of the premium is proposed to be used to promote infrastructure expansion. The portion of the premium applied to promoting infrastructure expansion is referred to as the "Access Promotion Contribution" ("APC").
- 4.3.3 The design and implementation of APC program will be guided by the following principles:
 - a) The APC shall be used to foster new infrastructure development to increase teledensity.

- b) The distribution of funds between LDI and LL licensees shall be done in a transparent and non-discriminatory manner.
- c) The APC program shall be under the regulatory supervision of PTA, which shall also regulate international traffic agreements.
- d) For the period leading upto policy review, the LDI licensees would be permitted to retain a fixed share (upto 6 US cents per minute) of termination charge paid by international carriers for termination of international incoming calls. The remaining amount called "Access Promotion Contribution" (APC) will be passed on to local loop licensees to encourage them to foster new infrastructure development and increase tele-density. In case of windfall profits (profits not in-line with telecom industry profitability trends) accruing to LDI licensees for factors not attributable to their efficient performance, PTA would have the right to intervene, in public interest, following a fair, transparent and open public process. After the policy review period, the sharing of revenues from incoming international calls, between LDI / LL licensees would be determined through a formula to be specified by PTA. The APC derived from the formula would be reviewed and notified atleast once every six months. Long Run Incremental Cost ("LRIC") based transmission / termination charges would form the basis of such formula.

4.3.4 The APC shall not be available to cellular operators. Premium of APC on current cellular termination rates would be mopped up and diverted to Universal Service Fund, with effect from a future date to be notified by the Government.

4.3.5 No LL licensee may claim APC payments without first actually delivering the telephone calls to the customer premises in respect of which it is claiming APC payment.

4.3.6 In order to secure the effective collection of APC, negotiations of bilateral accounting rates will be supervised by PTA, although it is expected that PTCL will lead the consortium of LDIs who would undertake negotiations on bilateral accounting rates with foreign carriers. The principle of "one country one rate" will be implemented. It will also be ensured that symmetry between incoming and outgoing international termination rates between carriers is maintained. All licensees will be obliged to file reports on the volumes, sources and destinations of international incoming

minutes, and allow PTA to audit their call detail records and billing systems with the objective of detecting and eliminating fraud. The LDI licensees will also be obliged to provide real time, on-line traffic information for monitoring and mirroring of international traffic data, for PTA.

4.4 Radio Spectrum

- 4.4.1 Radio spectrum is a valuable public resource belonging to the State and must be used in the public interest. The FAB is responsible for properly managing radio spectrum.
- 4.4.2 Wherever possible and consistent with good spectrum management practices, licensees shall be required to share spectrum with other licensees.
- 4.4.3 Licensees shall relinquish rights to spectrum that is no longer needed for their operations, and allow sharing of the bands they currently occupy where such sharing is technically feasible, and subject to management by FAB of frequency re-use in the band in accordance with best international practices. Un-used spectrum allocated for operations of LL / LDI licensees may be withdrawn if the licensees fail to begin operations within eighteen months of award of radio spectrum. The Licensees may not assign, lease or sell the rights of use of spectrum allocated to them in the first place.
- 4.4.4 All entities using spectrum shall be charged a fee for spectrum. The fee will be approved by the Government of Pakistan and recovered by Frequency Allocation Board from users of frequency spectrum. The factors to be considered in setting fees shall include but not limited to coverage, scarcity and value of the spectrum. The spectrum will be allocated for a definite time.
- 4.4.5 Where demand exceeds available frequency spectrum, it shall be allocated by auction or other transparent, non-discriminatory, open and competitive process.
- 4.4.6 Pakistan plans to follow ITU specified radio frequency bands specific for the purpose of operations of WLL, point to point microwave and backbone / transmission services.
- 4.4.7 Information about available radio spectrum for telecommunication services would be placed in the public domain for the prospective users to apply for allocation on nation-wide or regional basis.

- 4.4.8 The FAB shall deal with the requests for radio spectrum, within the framework of Telecom Act 1996 and Rules thereunder, and process applications within a target of 30 days. FAB will streamline and proactively coordinate the process of site clearance for licensees who have been allocated frequency spectrum, to expedite rollout of wireless based networks.
- 4.4.9 LDI licensees will be entitled to radio spectrum (where available) for point-to-point / and backbone links, within the parameters of their licenses, on payment of spectrum charges.
- 4.4.10 LL licensees will be entitled to radio spectrum for WLL systems, and also spectrum for point-to-point links, where available, and on payment of spectrum charges.
- 4.4.11 LL and LDI licensees that receive spectrum shall meet defined usage milestones, failing which they must relinquish their rights to use the assigned spectrum.

4.5 Interconnection

- 4.5.1 Both types of licensees will have the right to interconnection, leased lines and co-location facilities from the incumbents. Pricing of the incumbent services will be determined in accordance with the notified Rules, and subject to monitoring by PTA.
- 4.5.2 Pending the development by PTCL of unbundled cost accounts of services that are approved by PTA, incumbent's interconnection prices shall be based on international benchmarks.
- 4.5.3 The initial interconnection prices will be notified by PTA by October 2003. Lead times for provision of interconnect facilities to new-entrants by PTCL (inter-alia) shall be set out in a "Reference Interconnect Offer" to be made available by PTA, and will be in accordance with international benchmarks.

4.6 Obligations on PTCL

- 4.6.1 In order to facilitate market liberalization, PTCL, within a stipulated time frame, is obliged to:
 - a) Prepare all transit and tandem switches for interconnection. Implement within six months after policy approval, all needed upgrades in the transit switches to the capacity orders submitted by new entrants. PTCL shall not be required to implement upgrades in respect of orders not accompanied by

pre-payment of 3 months port cost. PTCL shall pay needed penalties in case of delay in providing ordered PoIs, to be determined by PTA.

- b) Prepare 50% (measured by lines in service) of local Main Switching Units ("MSU") for interconnection within one year. The remainder to be done in two equal stages within the subsequent two years.
- c) Enable subscriber lines on all digital local switches to perform Indirect Access (call-by-call carrier selection) for 22 digit numbers within one year.
- d) Enable all subscriber lines to perform Indirect Access
- e) Enable all subscriber lines to perform carrier pre-selection

4.6.2 PTCL shall upgrade all local switch software to allow automatic insertion of Access Code before the numbers dialed by customers of LDI licensees (carrier pre-selection).

4.6.3 PTCL shall publish cost-based price for restoration, in the event of fault on the non-self-healing cable, to the same availability standards as it currently enjoys.

4.6.4 Unbundling of service and cost accounting information should be done based on the principles of transparency, orientation, and allocation based on activities and related cost drivers. They shall be sufficiently detailed to allow clear identification of (a) activities related to interconnection - covering both interconnection services provided internally and interconnection services provided to others; and (b) other activities, so as to identify all elements of costs and revenues. Details of the basis of their calculations and the allocation methods used shall be provided, including an itemized breakdown of fixed assets and structural costs. Sufficient records must be kept to allow independent audit of these cost accounts.

4.6.5 PTA will issue a "Reference Interconnection Offer" (RIO) to be used as the default interconnection offer for interconnection with PTCL pending determination of LRIC based pricing. PTCL can implement amendments to the interim RIO, subject to the prior approval of PTA.

4.6.6 PTCL shall continue to be obliged, until end 2008, to install exchanges and lines in rural / under-served areas at the same annual average rate as it achieved during the exclusivity period, and in any

case no fewer than 83,000 new lines per annum. PTA will verify this on year-by-year basis.

- 4.6.7 Wherever PTCL faces competition and when the competitors price their services below the PTCL regulated rate, PTCL will be at liberty to offer discount in the region / area concerned to meet the challenges of competition.

4.7 Pricing Regime

- 4.7.1 PTA will continue to regulate PTCL's rates and services in the public interest, as per the notified Rules. As the market for particular services become effectively competitive, PTA shall reduce the regulatory burden on PTCL in respect of such services, while maintaining appropriate anti-competitive safeguards.
- 4.7.2 PTA will prepare detailed pricing framework for new fixed-line telephony licensees. PTA will also have the power to determine as to which of the licensees hold Significant Market Power (SMP). Licensees who are not SMP's will not be subjected to any tariff regulations. It may be noted that competitive telecom market may result in differential regional prices as against current uniform rates for various fixed-line services across the country.
- 4.7.3 Further, as already stated, under the APC regime, a significant portion of settlement rates for international traffic will be transferred to Local Loop licensees.

5. Universal Service

- 5.1 The Government has designed the market liberalization policy to maximize the commercial availability and coverage of telecommunication networks and services in Pakistan. The Government recognizes, however, that even with market liberalization, and under strict commercial considerations, there may exist certain populations or geographic areas that would remain un-served or relatively underserved. The Government's Universal Service policy is designed to ensure that these designated populations and geographic areas receive adequate service in a sustainable manner as resources permit.
- 5.2 The PTA is required under section 4(e) of the Telecom Act 1996 to "promote the availability of wide range of high quality, efficient, effective and competitive telecommunication services throughout Pakistan". In furtherance of the policy objective, the Government intends to amend the Telecom Act 1996 and Rules, as appropriate, to establish a Universal Service Fund ("USF").

- 5.3 The main financing mechanism to promote Universal Service in Pakistan will be the USF. The precise form and working of USF including USF rules will be determined by PTA with the approval of the Government.
- 5.4 The USF policy framework will be prepared and approved by the Federal Government. Once approved, it will be administered by PTA/Government. It shall include collection of the funds, within specified policy framework, from the licensees and disbursement within approved USF framework. The amounts and usage of the USF will be made public, and shall be subject to independent audit.
- 5.5 The USF will be used to finance the expansion of basic services (including access to the Internet), both on individual and community basis. Under USF rules, there will be a determination about the level and types of services to be financed by the USF, the designated populations or geographic areas eligible to receive subsidized services from the USF, and the level of available financing and actual subsidies.
- 5.6 Disbursement of USF funds shall be made through a transparent, non-discriminatory and competitive process.
- 5.7 The USF will be predominantly financed by revenues collected from all telecommunication licensees through a Universal Service Fund charge (the "USF Charge"). Premium of APC on current cellular termination rates would be mopped up and diverted to USF with effect from a future date to be notified by the Government. The USF may also receive contributions from the Government, and also funding from international or bilateral development agencies.
- 5.8 The USF Charge shall be paid by all licensees, licensed to provide basic telecommunication services, except those subject to roll-out obligations in lieu thereof. USF charge will be levied on new basic telecommunication services licensees after completion of first full year of operations and audit of operational results.
- 5.9 The USF Charge will be limited to a maximum of 1.5% of gross revenue minus inter-operator and related PTA / FAB mandated payments as determined by the Government.

6. Grant of Licenses

- 6.1 PTA shall prepare the requisite applications, license templates, information package and other necessary measures with the approval of Government to facilitate the licensing process. Issuance of licenses will commence as soon as possible after the approval of this Policy.

7. Cellular Mobile Operators

- 7.1 The Government recognizes that mobile cellular operators have an important role to play in sector development and improving access to telecommunication networks in Pakistan. There is evidence that some customers in Pakistan already rely on mobile cellular phones as an alternative to fixed line telephones. Moreover, the experiences in other developing countries show that mobile cellular technology can be cost effectively employed as an access solution.
- 7.2 The cellular mobile sector is already operating in a competitive scenario with four licensees providing cellular mobile services. At the time of award of existing cellular licenses, a liberal policy regime was followed and licenses were given to these operators to develop the market. Since the sector has matured over time, policy framework for additional licensing and enhancing competition in the cellular sector is under review. For the future, a uniform framework for existing and new cellular licensees addressing issues such as spectrum allocation and pricing, roll-out obligations, Quality of Service standards, license terms & conditions and performance benchmarks will be separately announced. Under the proposed new policy framework, in order to ensure that fixed line telephony licensees are not placed in a position of disadvantage, the cellular licensees would also be required to contribute towards R&D and USF funds in the same manner as fixed line licensees. The number of new licenses may be restricted due to limited availability of frequency resource. The present policy of nation-wide cellular mobile service licenses will continue.

8. Existing Organizations

- 8.1 Special Communications Organization ("SCO") will continue to operate exclusively in its territory as now.
- 8.2 SCO and NTC will have the right to continue with the existing revenue sharing agreements they have with PTCL and cellular operators. They are encouraged however, to migrate these revenue sharing agreements to interconnection agreements in accordance with this policy at the earliest practical time.
- 8.3 This policy will be without prejudice to the purpose specific licenses given to Government / Semi-Government and Autonomous organizations, but which will not allow them to become commercial operators without obtaining either an LL or LDI or both licenses from PTA under the approved framework.

9. Continuity of IT Policy

- 9.1 PTCL will be obliged to continue offering '131' Internet access as at present, and to continue to extend the service to PTCL exchanges not currently served, at the same average annual rate (measured in exchanges) as achieved during the exclusivity period.
- 9.2 New entrants will also be required to offer '131' Internet access services at standard '131' prices applicable to incumbents.
- 9.3 The Internet bandwidth prices will not be allowed to be increased from the current levels.

10. Policy Tenure

- 10.1 The Policy would be valid for five years from date of implementation and will be subject to review after this period. The licenses awarded to LL / LDI operators will be valid for 20 years.

11. Regulatory Changes

- 11.1 Appropriate changes in the regulatory framework would be made expeditiously to support the policy.

12. Technology Neutral Licensing

- 12.1 The policy and licensing regime are proposed to be technology neutral.
- 12.2 LL / LDI licensees may employ any technology such as IP, VoIP, DWDM, CDMA and so forth within flexibility of license.

13. Miscellaneous

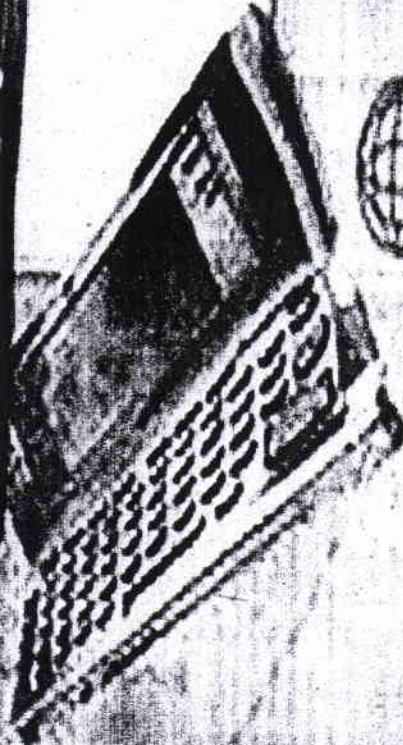
- 13.1 Class licensing regime is proposed to be enforced based on templates to be approved as part of policy process.
- 13.2 Corporations that wish to establish intra-corporate networks will be facilitated. New operators and PTCL will be obliged to provide infrastructure and services for corporate networks at cost oriented prices.
- 13.3 Open regime will be enforced for companies desirous of providing value added services such as Broadband, pre-paid calling cards, premium rate services and the new value added services that become available.

14. **De-Regulation Facilitation Unit**

- 14.1 In order to facilitate the implementation of the de-regulation policy, a deregulation facilitation unit will be set up in the Ministry of Information Technology comprising of senior professionals. This unit would ensure that all actions in pursuance of the policy are being undertaken by agencies concerned and entrepreneurs are facilitated.

Annex-1

Cellular Mobile Policy



January 28, 2004
IT and Telecommunication Division
Ministry of Information Technology
Government of Pakistan



Annex-B

Mobile Cellular Policy



January 28, 2004

IT and Telecommunication Division
Ministry of Information Technology
Government of Pakistan



Table of Contents

1	Introduction	4
2	Mobile Policy Objectives	4
3	Mobile Cellular Sector of Pakistan	4
3.1	Mobile Licensees	4
3.2	Market	5
4	Radio Spectrum	5
4.1	Telecom De-Regulation Policy	6
4.2	Current assignment of Mobile cellular spectrum	6
4.3	Available spectrum for mobile cellular	6
4.4	Spectrum Pricing	7
4.5	Management of fixed link spectrum	8
4.6	Use of Spectrum	8
5	Mobile Sector Roadmap	9
5.1	Number and Tenure of Mobile Cellular Licenses	9
5.2	Allocation of Mobile Cellular Spectrum	9
5.3	Payment Schedule	10
5.4	Renewal of existing licenses	10
5.5	LDI and LL Licenses	11
5.6	International Connectivity	11
5.7	Technologies	11
5.8	3G Spectrum	12
5.9	Retail Prices	13
5.10	Significant Market Power (SMP)	13
6	License Conditions	13
6.1	Self provision	13
6.2	Coverage and roll-out requirements	14
6.3	Quality of Service	14
6.4	Infrastructure Sharing	15
6.5	National Roaming	15
6.6	International Roaming	16
6.7	Interconnection	16
6.8	Mobile Number Portability	16



6.9	Customer Charter	17
6.10	Standard Contract.....	17
6.11	Protection of the customer from unsolicited fraudulent communications.....	17
6.12	Mobile Virtual Network Operator (MVNO).....	17
6.13	Legal Intercept.....	18
6.14	PTA License Fee	18
6.15	R&D Fund	18
7	Obligations on PTCL.....	18
8	Universal Service & Access Promotion Contribution	19
9	Incentives for Investors	20
10	Legal and Regulatory Framework.....	20
11	Review of Policy.....	20



1 Introduction

This document presents the policy of the Ministry of Information Technology (MoIT) for the Mobile Industry. The Mobile Policy presented is consistent with the De-Regulation Policy for the Telecommunication Sector approved by the cabinet on January 10, 2004.

This Mobile Policy is set out in the following sections:

- Section 2 – Mobile Policy Objectives
- Section 3 – Mobile Sector of Pakistan
- Section 4 – Radio Spectrum
- Section 5 – Mobile Sector Roadmap
- Section 6 – License Conditions
- Section 7 – Obligations of PTCL
- Section 8 – Universal Service
- Section 9 – Investment incentives
- Section 10 – Regulatory Reform
- Section 11- Policy Review

2 Mobile Policy Objectives

In addition to the broad Telecom sector objectives, as outlined in the Telecom Deregulation policy, the following objectives specific to mobile cellular sector are expected to be achieved through this policy:

- i. Promotion of efficient use of radio spectrum;
- ii. Increased choice for customers of Cellular mobile services at competitive and affordable price;
- iii. Private investment in the cellular mobile sector;
- iv. Recognition of the rights and obligations of mobile cellular operators;
- v. Fair competition amongst mobile and fixed line operators;
- vi. An effective and well defined regulatory regime that is consistent with international best practices;

3 Mobile Cellular Sector of Pakistan

3.1 Mobile Licensees

Currently, four operators (2 GSM, 1 D-AMPS, 1 AMPS (migrating to GSM) are providing services to just under 3 million cellular subscribers all over the country. The



number of customers has more than tripled in the past two years. The table below provides an overview of the current subscriber base of the operators.

	Mobilink	Ufone	Paktel	Instaphone
Technology	GSM	GSM	AMPS, migrating to GSM	D-AMPS
No of Active mobiles Nov. 2003	1,675,000	552,000	255,000	478,261

Source: Figures stated by Operators as of Nov 2003

3.2 Market

The Pakistani economy throughout 2003 has continued to post strong results with inflation under control at approximately 3% per annum and GDP growth at 5%. All the macro economic indicators have shown very healthy trends in the last four years. Forecasts suggest that the economy will continue to develop at even higher rates for the next few years.

The cellular industry in Pakistan registered significant growth when the tariff mechanism changed from Mobile Party Pays to Calling Party Pays regime in year 2000. At approximately the same time Ufone, a subsidiary of the state owned PTCL, launched its commercial service.

Pakistan has experienced sizable population growth over the last few decades. Its current population of around 150 million is expected to grow to 190 million by 2018 according to UN forecasts.

The province of Punjab accounts for 26% of the land mass and accommodates 56% of the population creating a population density of 402 people per square kilometre. This compares to Balochistan which covers almost 50% of the country's geography but has a small population, around 5% of the total, where the population density is only 19 people per square kilometre.

Current coverage is a constraining factor in the growth of mobile penetration. Since the existing operators have essentially built their networks in the cities and towns, current policy aims to accelerate coverage for rural areas by putting coverage obligations and by creating a Universal Service Fund.

Assuming that future cellular coverage reaches 95% of all urban population and 30% of rural population and taking into account the relative geography and population density of each Province, there is a potential demand of approximately 25 million cellular subscriptions by 2018.

4 Radio Spectrum

Crucial to the development of the mobile cellular market is the availability of spectrum and its most optimal and efficient use for which a basic frame work was defined in the Telecom Deregulation policy as below:



4.1 Telecom De-Regulation Policy

With regards to radio spectrum, Telecom Deregulation Policy states at Section 4.4:

- 4.4.1 Radio spectrum is a valuable public resource belonging to the State and must be used in the public interest. The Frequency Allocation Board (FAB) is responsible for properly managing radio spectrum.
- 4.4.2 Wherever possible and consistent with good spectrum management practices, licensees shall be required to share spectrum with other licensees.
- 4.4.3 Licensees shall relinquish rights to spectrum that is no longer needed for their operations, and allow sharing of the bands they currently occupy where such sharing is technically feasible, and subject to management by FAB of frequency re-use in the band in accordance with best international practices. Unused spectrum allocated for operations of Local Loop (LL) & Long Distant International (LDI) licensees may be withdrawn if the licensees fail to begin operations within eighteen months of award of radio spectrum. The licensees may not assign, lease or sell the rights of use of spectrum allocated to them in the first place.
- 4.4.4 All entities using spectrum shall be charged a fee for spectrum. The fee will be approved by the Government of Pakistan and recovered by Frequency Allocation Board from users of frequency spectrum. The factors to be considered in setting fees shall include but not limited to coverage, scarcity and value of the spectrum. The spectrum will be allocated for a definite time.
- 4.4.5 Where demand exceeds available frequency spectrum, it shall be allocated by auction or other transparent, non-discriminatory, open and competitive process.
- 4.4.6 Pakistan plans to follow ITU-R specified radio frequency bands specific for the purpose of operations of Wireless in the Local Loop (WLL), point-to-point microwave and backbone / transmission services.
- 4.4.7 Information about available radio spectrum for telecommunication services would be placed in the public domain for the prospective users to apply for allocation on nation-wide or regional basis.
- 4.4.8 The FAB shall deal with the requests for radio spectrum, within the framework of Telecom Act 1996 and Rules thereunder, and process applications within a target of 30 days. FAB will streamline and proactively coordinate the process of site clearance for licensees who have been allocated frequency spectrum, to expedite rollout of wireless based networks.
- 4.4.9 LDI licensees will be entitled to radio spectrum (where available) for point-to-point / and backbone links, within the parameters of their licenses, on payment of spectrum charges.
- 4.4.10 LL licensees will be entitled to radio spectrum for WLL systems, and also spectrum for point-to-point links, where available, and on payment of spectrum charges.
- 4.4.11 LL and LDI licensees that receive spectrum shall meet defined usage milestones, failing which they must relinquish their rights to use the assigned spectrum."

4.2 Current assignment of Mobile cellular spectrum

Currently assigned mobile cellular spectrum and deployed technologies in Pakistan are shown in Appendix A, together with the international allocation of particular bands to different mobile cellular technologies.

4.3 Available spectrum for mobile cellular

Based on the foregoing assignments, the availability of spectrum in Pakistan in internationally designated mobile cellular bands is shown in the Table below:

¹ The ITU defines Wireless Access as "end user radio connection(s) to core networks". Bands used for FWA include 3.4 - 3.6 GHz, 3.6 - 3.8 GHz, 10.15 - 10.3 & 10.5 - 10.65 GHz. Bands between 24.5 and 29.5 GHz are also used. In addition there are the license exempt bands where Radio Local Area Networks (RLANs) have been implemented using 802.11 or HIPERLAN technology the former and its derivatives in the 2.5 and 5.8 GHz ISM bands and Hiperlan in the range 5 - 5.7 GHz. DECT 1880-1900 MHz and cdmaOne frequency bands e.g. 850 and 1900 MHz.



Band (MHz)	Uplink (MHz)	Downlink (MHz)	Total Available	Recognised Standards	Notes
800	835 - 845	(none)	(10 + 0) MHz	GSM 850 CDMA 800 AMPS/DAMPS 800	Corresponding band not available
900	890 - 895	935 - 940	5 + 5 MHz	GSM 900	Additional 5 MHz is likely to be available, exact details will be mentioned in IM document.
1800	1710 - 1740	1805 - 1835	30 + 30 MHz	GSM 1800	Potentially more. Under re-farming.
1900	1900-1910	1980-1990	10 + 10 MHz	GSM 1900 CDMA 1900 (IMT 2000)	Small encroachment on lower IMT 2000 guard band. Under re-farming.
2100	Currently fixed links (PTCL, SSGC)			IMT 2000	Under re-farming

Table A- Available mobile cellular bands and spectrum

In summary it can be concluded that:

- i. In the 800 MHz band, Paktel AMPS uplink assignment will eventually be returned to FAB for re-use. However there is no available downlink due to its utilisation by Paktel for GSM uplink channels.
- ii. In the 900 MHz band there is only 2x5 MHz remaining from the total international band assignment of 2x35 MHz. (Additional 5 MHz is likely to be available in near future)
- iii. In the 1800 MHz band there is currently 2x30 MHz available, with the potential for more being freed in future under current re-farming initiatives by FAB.
- iv. In the 1900 MHz band there are currently 2 lots of 5 MHz available, one or two of these lots will be available for WLL services depending on the outcome of the auction for mobile cellular spectrum.
- v. The 2100 MHz band is currently under re-farming. FAB is scheduled to complete this by the end of 2005.

4.4 Spectrum Pricing

The GoP wishes to encourage efficient use of the radio spectrum. As such the frequency usage charge will be set at such a price so as to encourage effective use.

For Mobile Cellular Licenses, where the assignment of spectrum is linked to a set of license conditions, the associated fees will consist of two parts:

Cellular Spectrum Price.

The Spectrum price for national mobile cellular licenses will be determined through auction.



The Spectrum Price resulting from the auction will also be used as benchmark to determine price per MHz per annum for the existing operators, once they come under the purview of this policy.

Spectrum Administrative fees

Administrative fees for radio spectrum will be set to recover the cost of administration of that spectrum. The total income generated from administrative fees for the whole spectrum should recover the reasonable operational costs of FAB incurred whilst managing, licensing and policing that spectrum.

Interim fees for the mobile licensees for first year of operation on the assumption of no change in allocated spectrum for existing operators are detailed in Appendix B. The fees may be adjusted in case the existing operators exchange some of their 900 MHz frequency with 1800 MHz band. Spectrum price for line of site links will be limited to the Administrative fees

The mobile licensees will pay the Pakistan Telecommunication Authority (PTA) – the regulator, in addition to the Spectrum Administration fee and the Spectrum Price, an annual license Administration fee (Regulatory fee), to reasonably cover the cost of regulation. The annual Regulatory fee shall not exceed 0.5% of last year's gross revenue minus inter-operator and related PTA / FAB mandated payments.

4.5 Management of fixed link spectrum

Assignment of spectrum to all fixed links will preferably be on a link-by-link basis.

The current practice of making nationwide fixed link assignments is inefficient and may result in the appearance of scarcity of spectrum when in reality this is not the case. FAB shall assign spectrum based on optimal utilisation of scarce resources.

4.6 Use of Spectrum

Unused spectrum allocated to any licensee may be withdrawn if the licensee fails to begin operations within eighteen months of award of radio spectrum. The Licensees may not assign, lease or sell the rights of use of spectrum allocated to them.

To support the promotion of efficient use of spectrum for national benefit it is important that spectrum which has not been used is returned to FAB for reallocation. Frequencies not used by Licensees will be returned to FAB if the Licensee does not make active or effective use of them. The use would be confirmed by monitoring. Licensees shall allow sharing of the bands they currently occupy where such sharing is technically feasible, and subject to management by FAB in accordance with best international practices.



5 Mobile Sector Roadmap

5.1 Number and Tenure of Mobile Cellular Licenses

The PTA will issue new national, technology neutral, Mobile Cellular Licenses for 15 years tenure. Existing mobile cellular licensees will not be permitted to bid for these licenses.

GoP has decided to grant new 15 year technology neutral National Mobile Cellular Licenses. Existing mobile cellular licensees will not be allowed to bid for these licenses. As further spectrum is cleared, frequency bands may be made available to licensed mobile cellular operators and WLL operators.

Pre-qualified bidders will receive the Information Memorandum (IM), which will include the License template and other relevant material. The currently licensed mobile operators and their substantial shareholders (10% or more) will not be eligible to bid for the new mobile cellular licenses. Applicants must also demonstrate that they have no substantial ownership/interest (10 percent or more) in more than one of the bidding companies or consortia.

5.2 Allocation of Mobile Cellular Spectrum

The mobile cellular spectrum will be auctioned in blocks. The size of these blocks will be sufficient to support the creation of commercially viable services.

The spectrum will be auctioned in blocks/packages keeping in mind the most effective use of the spectrum as a whole. At the same time the blocks of spectrum allocated will have sufficient bandwidth to enable economic use. PTA and FAB will define the Blocks in an Information Memorandum (IM) and will set the detailed method for the auction well in advance of the auction date.

The auction rules to be formulated by the PTA shall ensure that the auction process:

- Be fair and transparent;
- Provides a fair basis for competition among the pre-qualified bidders;
- Encourages the maximum number of potential investors;
- Establishes a fee which is economically justified when balanced with the investment required to meet the roll-out obligations specified with the license;
- Be simple to execute;
- Discourages collusion and predatory bidding that may block entry of potential bidders into the auction process.

The standards employed for licensed blocks of Spectrum shall conform to recognized international standards.

The standardization process has resulted in some technologies being associated with specific spectrum. To date GSM and CDMA are two such technologies. In such circumstances the cellular License should be linked to the associated recognised



standard. Where more than one standard could be adopted in any given block of spectrum the licensee shall have the right to choose which standard to employ.

The licensees will also be entitled to bid for additional spectrum in the 2100 MHz (3G) band when it becomes available.

In the context of 2100 MHz band, the GoP recognises its importance to enable mobile licensees to upgrade technology as spectrum becomes available. For this reason it is providing a degree of certainty in respect to the third generation mobile cellular technology.

While auctioning spectrum in 2100 MHz band, the reserve price per MHz per annum will be set by reference to the 2004 auction price

If there is additional spectrum which is not required by licensees and if any other applicant requests its use for non-cellular services, subject to confirmation of spectrum by FAB, PTA may announce an auction within a reasonable time of the formal request.

5.3 Payment Schedule

After an initial payment of 50% of bid price as down payment on acceptance of bid, the Spectrum Price will be paid by the licensee(s) in equal annual instalments over next ten years.

All licensees will make Spectrum Price payments on per MHz basis of the frequency allocated to them.

5.4 Renewal of existing licenses

The Mobile Cellular License under this policy will replace the existing licenses as soon as possible or at latest upon expiry of the current licenses.

The existing operators will be encouraged to come under the purview of Mobile Cellular policy even before the expiry of their existing License. This would mean that all Mobile Cellular Operators would have the same license terms. The licenses would vary only by their terms of coverage obligations, frequency assignments and level of performance bond. The coverage terms will be adjusted to take account of the existing deployed network. Total coverage required of each network will be equivalent after four years.

The advantage to existing mobile operators in changing would be to gain such benefits as:

- Certainty of 15 years renewal on expiry of their current tenure;
- Additional rights to self-build of regional backbone within each of the defined PTCL regions;
- Allocation of additional frequencies in the 1800 MHz band in exchange for a lesser amount of spectrum in the 900 MHz band;



- Rights in respect to bidding for additional 2100 MHz (3G) spectrum as and when available
- Access to Universal Access Fund (USF)

The fees for the renewed licenses will also be paid using the same payment profile and be based upon the same per MHz per annum price as determined in the auction

5.5 LDI and LL Licenses

Mobile Operators will be eligible for LDI and LL Licenses.

Commercial benefit could accrue to mobile operators also holding licenses to provide other types of services. Where an operator does hold a number of licenses the Licensee will have to meet the requirements of the PTA of accounting separation and for setting up separate legal entities for reasons of transparency and non-discrimination.

5.6 International Connectivity

International connectivity currently provides significant revenue to the telecommunications industry. The GoP recognises that high international rates may not be sustainable in the long run. However, as long as the premium continues to exist, a reasonable portion of the call termination premium is proposed to be used to promote infrastructure expansion. The portion of the premium applied to promoting infrastructure expansion is referred to as the "Access Promotion Contribution" ("APC").

If the Mobile Operator does not hold an LDI license then international connectivity will have to be obtained from an LDI operator.

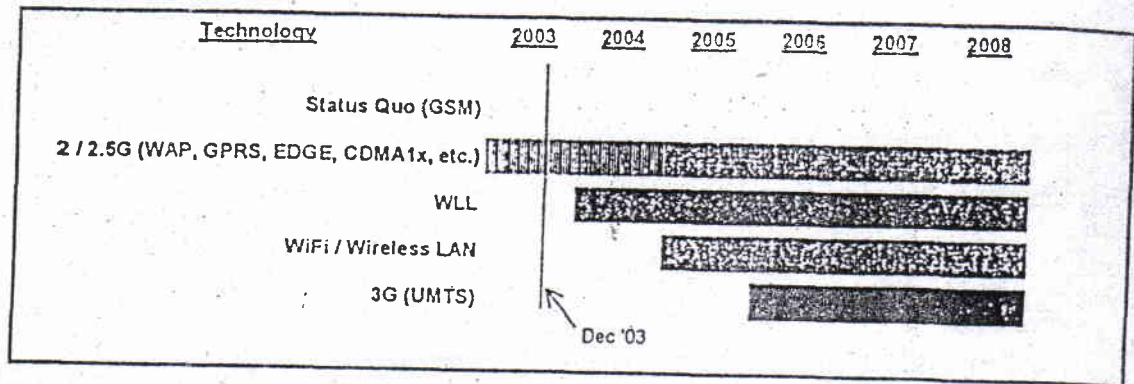
5.7 Technologies

The allocation of spectrum to mobile cellular licenses must take account of international standards and the need to encourage national harmonisation, the adoption of global standards and mass-market technology with associated social benefits.

Further, FAB is working to clear the spectrum in the 2100 MHz bands for IMT-2000 which is scheduled to be completed by the end of 2005.



The figure below indicates an anticipated time line for the introduction of new technologies in Pakistan.



5.8 3G Spectrum

The 3G spectrum will be sold by auction. Both the Licensed mobile cellular operators and the new parties interested in 3G licenses will be able to participate in the process.

IMT2000² (UMTS) is becoming the de facto migration path from GSM to 3G in many countries. Internationally agreed bands are assigned for 3G implementation based on W-CDMA / UMTS technology.

Since GSM is currently the main cellular technology in use in Pakistan, it is likely that the preferred technology for 3G will be UMTS.

The FAB is clearing the 3G spectrum and will complete this task by the end of 2005. Thereafter, spectrum in the 3G Bands of 2100 MHz will be made available for auction.

The 3G licenses will include a minimum urban coverage requirement and performance bond to ensure the spectrum is utilised in a manner beneficial to the country. The PTA will specify the License conditions.

Frequency in the 3G FDD/TDD bands will be divided into Lots of 5 MHz + 5 MHz with coverage specified in the License. Interested parties will be able to bid for more than one Lot. Failure to launch commercial service within a specified period of time will result in the unused frequency being recovered by FAB (through PTA). If there is 3G spectrum not taken up then as the demand rises further auction dates will be set.

² Covers FDD/TDD frequencies

⁵ Market will be considered sufficiently competitive when PTA determines that the cellular user has a real choice in terms quality of service, pricing and coverage.



5.9 Retail Prices

The retail price cap on mobile Licensees, fixed from time to time, by PTA will continue till such time the market, in the view of PTA, becomes sufficiently competitive⁵.

5.10 Significant Market Power (SMP)

The PTA will regularly undertake a review to determine the relevant markets for the telecom Industry and in turn the SMP operators for the relevant markets. PTA should complete the first review within six months from the policy notification.

The Government believes that the success of market liberalization depends on the development of a fair competitive environment for all licensees. In this regard, Mobile and fixed line licensees who emerge with Significant Market Power (SMP) shall be prohibited from abusing their dominant positions through anticompetitive conduct. PTA will incorporate provisions of anti-competitive practices in the licenses for SMP(s).

Operators with SMP will also have to produce a Reference Interconnection Offer (RIO) detailing the services and tariffs they provide to other Licensed operators.

Section 17 of the Pakistan Telecommunications Rules defines Significant Market Power (SMP).

(1) An operator shall be presumed to have significant market power when it has a share of more than twenty-five per cent of a particular telecommunication market. The relevant market for these purposes shall be based on sector revenues.

(2) The Authority may, notwithstanding sub-rule (1), determine that an operator with a market share of less than twenty-five per cent of the relevant market has significant market power. It may also determine that an operator with a market share of more than twenty-five per cent of the relevant market does not have significant market power. In each case, the Authority shall take into account the operator's ability to influence market conditions, its turnover relative to the size of the relevant market, its control of the means of access to customers, its access to financial resources and its experience in providing telecommunication services and products in the relevant market.

6 License Conditions

6.1 Self provision

The mobile licensees will have the right to provide their own infrastructure within a PTCL Region and to also provide their own interconnection circuits to other operators.

The GoP fully recognises that international best practice permits the Mobile operators to have the right to provide their own fixed links between all elements of their network. The key problems are timeliness of delivery and circuit availability for termination at suitable base station sites.



In the event that an LDI operator is unable to provide a circuit within 3 months from request or the Quality of Service (QoS) falls below international standards the mobile operators will have the right to self provide inter regional circuits.

Between Regions the GoP wishes to limit mobile operators to using leased circuits from an LDI operator to assist the development of the competitive LDI market. In the event that there are no LDI operators able to supply interregional leased circuits within 3 months from a formal order to meet the operational requirements of a Mobile Cellular Licensee then self provision will be permitted. It should be noted that the Mobile operators have the opportunity to apply for and hold an LDI license as well. In this case they will be able to self provide intra and inter regional circuits.

Licensees will have the right to contract for the "Right of Way" (RoW) they need to construct their networks, subject to conditions laid down by the concerned agencies.

6.2 Coverage and roll-out requirements

The Mobile Cellular Licenses will include a coverage obligation against which a licensee will be obliged to submit a Performance Bond with the PTA. The performance bond will be linked to the rolling annual capital investment requirements to meet the coverage obligations over a 4 year period.

A major objective of the GoP is to ensure, over a reasonable time, that there are services in the underserved and rural areas. The Mobile Cellular policy includes obligation to roll out coverage to at least 70% of Tehsil headquarters in four years with a minimum of 10% Tehsil coverage in all the provinces. Licensees would be required to deposit a performance bond to be redeemed against achievement of coverage targets. The value of the bond for the first year is set at USD 15 Million for new entrants and the value for existing operators will be set depending on the difference between their current level of coverage and the coverage targets in the license. Specific annual coverage targets will be included in the license.

6.3 Quality of Service

The Licensee will provide a set of reasonable QoS measures against which the performance of licensee will be measured on a regular basis.

The GoP intends to ensure that licensees provide a good quality of service. The following table is indicative of the QoS measures to be included as an Annex to the Mobile Cellular Licenses. The PTA will set the QoS parameters after consultation with the Licensees before final issue of the license.



Indicator	Short Term (first 3 years)	Long Term (3 years on)
Air Interface Blocking	<= 4% in busy hour	<= 2% in busy hour
Call Completion Rate	> 96%	> 98%
Call Connection Time	<= 7 seconds	<= 5 seconds
Call Quality	MOS ³ Score > 3	MOS Score > 3
Network Down-time (averaged across all sites) ⁴	< 2% in any 1 calendar month < 1% over a 1 rolling year period	< 1% over a 1 month period
Cell-site Down-time (for each site) ⁵	Not longer than 48 hours	Not longer than 24 hours

In addition to the above QoS measures a limited number of targets will be set for service covering such areas as:

- Customer service time to answer
- Time to resolve complaints
- Billing accuracy
- Provision of interconnect ports
- Repair of interconnect ports

The PTA will after due consultation prepare a set of criteria which will be attached to the License. The Mobile Cellular licensees will be required to provide regular reports to PTA on quality of service.

6.4 Infrastructure Sharing

All Licensees are encouraged to implement infrastructure sharing in accordance with the guidelines issued by PTA and FAB.

It is important to encourage Infrastructure sharing as a matter of policy and keeping in view environmental issues related with towers and masts. Infrastructure sharing includes a requirement to lease facilities on a non-discriminatory basis, to such other service providers. The facilities provided may include space, electrical power, air conditioning, security, cable ducts, space on antenna masts or towers, rooms etc. Infrastructure sharing, including co-location and facility sharing, shall be provided based on the guidelines established by PTA/FAB on the principles of neutrality, non-discrimination, equal access and commercial arrangements.

³ Bit Error Rate measurements can be used as a proxy

⁴ Outages caused by third parties (such as PTCL) are not included in this figure

⁵ Outages caused by third parties (such as PTCL) are not included in this figure



6.5 National Roaming

Licensees are encouraged to offer National Roaming with other licensees offering reciprocal services in accordance with the guidelines issued by PTA.

In order to implement the policy objectives of the GoP, Licensees are encouraged to offer nationwide service as expeditiously as possible at mutually acceptable terms. It is expected that national Roaming will remain a useful facility in order to promote competition in rural areas where it may well be the case that all operators will not have a presence.

6.6 International Roaming

All mobile operators are encouraged to negotiate International Roaming Agreements with foreign operators.

6.7 Interconnection

The new licensee(s) will have the right to interconnect its network with other licensed mobile and fixed networks in Pakistan.

It is important to enable customers to dial from one mobile network to customers on either another mobile network or customers on a fixed network at reasonable retail rates. To achieve this the mobile operators must be free to decide and make connection to, the most economic point of interconnection with other operators. Mobile operators will have the right to request leased lines from LDI operators.

Interconnection with PTCL will be covered by the Reference Interconnection Offer (RIO) being developed by PTCL under the interconnection guidelines.

Mobile Interconnection termination charges will not exceed the existing level until cost-based rates are available for both fixed and mobile operators. PTA will set rates before the end of 2004 based upon its view of termination costs by existing operators.

Interconnection charges will move to a cost plus normal return basis for all mobile operators on the basis that each operator has a monopoly on termination of calls to customers connected to its own network.

All operators should provide the PTA with evidence of cost for interconnection termination rates within 12 months of beginning their operation.

6.8 Mobile Number Portability

PTA will immediately undertake a consultation process on the implementation of Mobile Number Portability with the aim to implement number portability within two years of policy notification.

A major drawback to switching mobile operators is that, at present, customers need to change their mobile telephone numbers. In order to establish market conditions that



provide maximum choice, consumers should be able to switch operators in order to take advantage of attractive service offerings, lower prices or improved quality.

PTA will determine, in consultation with the industry, the most appropriate method of implementing number portability and establish rules for its implementation. To provide flexibility to consumers, all mobile licensees shall implement number portability, according to the PTA's requirements and guidelines. Although there may be a one-off charge for porting a number, there should be no additional on-going charges related to porting the number.

6.9 Customer Charter

All Licensees are encouraged to publish a Customer Charter, to be approved by the PTA.

The GoP wishes to see a significant improvement in the availability and quality of mobile services. The Customer Charter should provide commitments by the Licensee to Customers in respect of the standard and quality of the Licensed Service.

6.10 Standard Contract

The Mobile Cellular Licensee shall submit a Standard Customer Contract before the commencement of its services to the PTA for approval.

The Licensee shall prepare a standard contract of service for use with its customers. The Licensee shall file the standard contract, and amendments thereto from time to time, with the Authority for its approval.

The standard contract, as approved by the Authority, shall apply to all customers that obtain Mobile communications services from the Licensee.

6.11 Protection of customer from unsolicited fraudulent communications

Operators should put in place mechanisms to prevent abuse of the systems which result in customers receiving unsolicited or fraudulent communications.

The international growth in unsolicited and fraudulent use of the mobile networks enticing customers to make high priced calls ("Scamming") is a matter of concern. PTA after consultation with the industry will establish a code of practice for Mobile Operators to prevent such use. The code of practice will be produced before the end of 2004.

6.12 Mobile Virtual Network Operator (MVNO)

All Operators will be permitted to support MVNO services, a detailed framework for which is to be prepared by PTA within two years of the policy notification.

The concept of MVNO supports and encourages an open and competitive market in telecommunications. All Operators will be permitted to support MVNO services, a detailed framework for which is to be prepared by PTA within two years of the notification of the policy.



6.13 Legal Intercept

Licensees shall meet the requirements of authorized security agencies for legal interception of calls and messages. Further, the Government of Pakistan would have the right to either suspend the service or cancel any license to safeguard national security.

6.14 PTA License Fee

Licensees will pay to PTA a fixed annual fee, to reasonably cover the cost of regulation. The annual fee shall not exceed 0.5% of the previous year's gross revenue minus inter-operator and related PTA / FAB mandated payments.

6.15 R&D Fund

Mobile Licensees will contribute 0.5% of gross revenue minus inter-operator and related PTA / FAB mandated payments to the Research and Development Fund.

Detailed guidelines for the R&D Fund's utilization for IT & Telecom sector development and HRD etc will be proposed separately.

7 Obligations on PTCL

In order to facilitate market liberalization, PTCL, is obliged to:

- a) *Prepare all transit and tandem switches for interconnection and implement within six months of policy notification, all needed upgrades in the transit switches to the capacity orders submitted by new entrants. PTCL shall not be required to implement upgrades in respect of orders not accompanied by pre-payment of 3 months port cost. PTCL shall pay needed penalties in case of delay in providing ordered Poles, to be determined by PTA.*
- b) *Prepare 50% (measured by lines in service) of local Main Switching Units ("MSU") for interconnection within one year. The remainder to be done in two equal stages within the subsequent two years.*
- c) *Unbundling of service and cost accounting information should be done based on the principles of transparency, orientation, and allocation based on activities and related cost drivers. They shall be sufficiently detailed to allow the clear identification of (a) activities related to interconnection - covering both interconnection services provided internally and interconnection services provided to others; and (b) other activities, so as to identify all elements of costs and revenues. Details of the basis of their calculations and the allocation methods used shall be provided, including an itemized breakdown of fixed assets and structural costs. Sufficient records must be kept to allow independent audit of these cost accounts.*
- d) *PTCL will issue a "Reference Interconnection Offer" (RIO) to be used as the default interconnection offer for interconnection with PTCL pending*



determination of LRIC based pricing. PTCL can implement amendments to the interim RIO, subject to the prior approval of PTA.

8 Universal Service & Access Promotion Contribution

Mobile licensee shall pay a USF Charge limited to 1.5% of gross revenue minus inter-operator and related PTA / FAB mandated payments as determined by the Government.

The importance of funding telecommunication infrastructure in the rural areas cannot be underestimated for the long-term economic benefit and to avoid a 'digital divide' between rural and urban areas. The establishment of the USF and the allocation of funds to operators is an important factor in accelerating the availability of telecommunication services in rural areas. Mobile operators can play an important role in providing coverage to rural areas in particular where there is no fixed line service. The USF will be financed by revenues collected from all telecommunication licensees through a universal service fund charge (the "USF Charge"). The USF may also receive contributions from the Government, and also funding from international or bilateral development agencies.

Mobile operators shall be eligible to apply for money from the USF in order to cover rural and under-served areas as per guidelines for utilisation of USF to be notified separately.

The Government has designed the market liberalization policy to maximize the commercial availability and coverage of telecommunication network and services in Pakistan. The Government recognizes, however, that even with market liberalization, and under strictly commercial considerations, there may exist certain populations or geographic areas that would remain un-served or relatively underserved. The Government's universal service policy is designed to ensure that these designated populations and geographic areas receive adequate service in a sustainable manner as resources permit.

Fees collected by PTA and FAB from telecommunications licensees, which are in excess of administrative costs, shall be deposited into the Universal Service Fund.

The USF policy framework will be prepared and approved by the Federal Government. It shall include collection of the funds from the licensees and its disbursement within approved USF framework. The amounts and usage of the USF will be made public, and shall be subject to independent audit. Disbursement of USF funds shall be made through a transparent, non-discriminatory and competitive process.

The APC shall not be available to cellular operators. Premium of APC on current cellular termination rates would be mopped up and diverted to Universal Service Fund (USF).

Premium of APC on current cellular termination rates would be mopped up and diverted to USF with effect from a future date to be notified by the Government.



9 Incentives for Investors

The Telecom sector, including mobile cellular operations, will be classified as an Industry.

The Mobile operators have to date been classed as a Service and not as an Industry. Reclassification of mobile operators to the Industrial Sector will reduce operational costs.

10 Legal and Regulatory Framework

Appropriate changes in the legal and regulatory framework will be made expeditiously to support the Mobile Cellular Sector Policy. Changes may result in amendments in Telecom Reorganisation Act of 1996 and corresponding rules and regulations. Such changes shall be effected expeditiously after the notification of the policy.

11 Review of Policy

This policy will not be reviewed before five years of notification date.



Appendix A – Currently assigned mobile cellular spectrum

Operator	Technology	Up-Link	Down link	Comments
Instaphone	D-AMPS	825-835 MHz	870-880 MHz	2 x 10MHz
Paktel	AMPS	835-845 MHz	880-890 MHz	2 x 10MHz
Paktel (migration)	GSM 900	880-890 MHz	925-935 MHz	2 x 10MHz: (under implementation)
Mobilink	GSM 900	905-915 MHz	950-960 MHz	2 x 10MHz
Ufone	GSM 900	895-905 MHz	940-950MHz	2 x 10MHz

Table 1 Current mobile cellular spectrum assignments

Each operator is currently assigned 2x10MHz, with Paktel in the process of migrating its network from AMPS technology to GSM⁶. This migration is utilising the AMPS downlink assignment for the GSM uplink, with a new assignment having been made for the GSM downlink. On completion of migration, Paktel's AMPS uplink assignment will be released to FAB.

Three operators in Pakistan, Mobilink, Ufone and Paktel (currently migrating customers to GSM from its AMPS service), have implemented GSM technology. Standardised under the auspices of ETSI⁷, GSM is used by over 1.2 billion subscribers on every continent of the world, with 550 operators supplying GSM services in 193 territories.

The international allocation of particular bands to different mobile cellular technologies Table 2 above and also in the 800, 900 and 1800 MHz band plans in Figure 1, Figure 2, and Figure 3 below. The band plans are illustrated in relation to current assignments in Pakistan.

⁶ Global System for Mobile communication

⁷ European Telecommunications Standards Institute

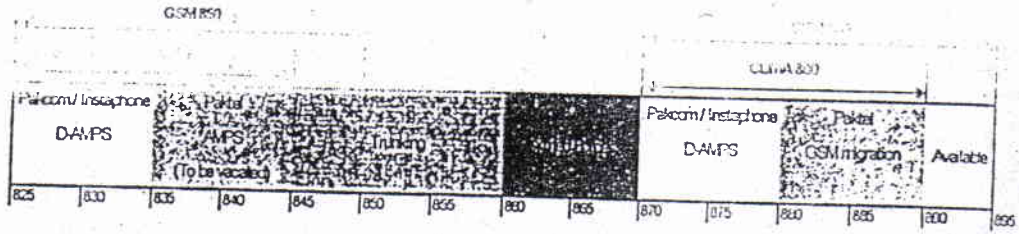


Figure 1: 800 MHz band plan

Source: FAS

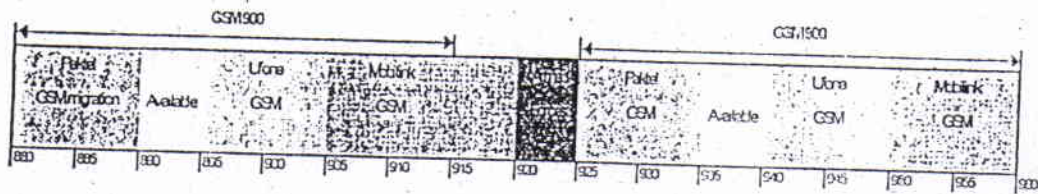


Figure 2: 900 MHz band plan

Source: FAS

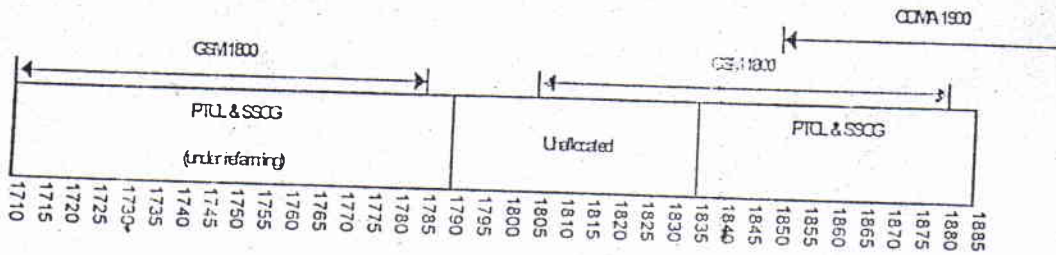


Figure 3: 1800 MHz band plan

Source: FAS



Appendix B
Spectrum Administrative Fees

Table of Spectrum Administrative Fees for Mobile operators assuming two new National Mobile Licenses.

Operator	Scenario A			Scenario B		
	Spectrum	% of total	Annual fee (Rs)	Spectrum	% of total	Annual fee (Rs)
Mobilink	2 x 10 MHz	15.4%	34.65m	2 x 10 MHz	17.4%	39.15m
Paktel	2 x 10 MHz	15.4%	34.65m	2 x 10 MHz	17.4%	39.15m
Ufone	2 x 10 MHz	15.4%	34.65m	2 x 10 MHz	17.4%	39.15m
Instaphone	2 x 10 MHz	15.4%	34.65m	2 x 10 MHz	17.4%	39.15m
New A	2 x 12.5 MHz	19.2%	43.2m	2 x 12.5 MHz	21.7%	48.83m
New B	2 x 12.5 MHz	19.2%	43.2m	2 x 5 MHz	8.7%	19.57m
Total	2 x 65 MHz	100%	225m	2 x 57.5 MHz	100%	225m

Assumptions made in setting the interim Administrative Fees

- i. For the financial year 2003, the budget for FAB was Rs300 million. This included the funds assigned for the maintenance of the new spectrum monitoring equipment recently acquired by FAB through World Bank funding (the World Bank loan itself is being repaid by the PTA).
- ii. FAB has estimated that around 75% of the resources of FAB are employed in managing the spectrum allocated to the mobile operators.
- iii. As all the mobile licences are national in scope, the issue of determining a geographic component for the spectrum administrative fee does not come into play, as all licences have the same geographic coverage.
- iv. How much mobile spectrum is deployed, depends upon which of the proposed Lots is successfully won. Scenario A is that Lots 1&2 are chosen; scenario B is that Lot 1 or 2, together with Lot 3 are chosen. The total spectrum deployed, the proportion of that total used by each operator, and the equivalent annual fee is shown in the table for each of the two scenarios.
- v. Fees include all direct line of site links.

Fee Structure License Template



Pakistan Telecommunication Authority

Fee Structure

Licenses are required to pay various fees to the Authority. The following table summarizes the fee structure. Detail description is given in the license template.

<u>FEE/CHARGE</u>	<u>AMOUNT</u>
Initial License Fee	(a) 50% of the value of the highest auction winning price in US \$, or equivalent in Pakistan Rupees as per clause 9 k of IM. (b) Remaining 50% amount to be 10 equal installments payable in US \$, or equivalent in Pak Rupees at start of years 2 to 11 as per clause 9 l of the IM..
Annual License Fee	Calculated on the basis of 0.5 % of the Licensee's annual gross revenue from Licensed Services minus inter-operator payments and PTA/FAB related payments. However license fee installments shall not be deducted from the gross revenue.
Universal Service Fund Contribution	Calculated on the basis of 1.5 % of the Licensee's annual gross revenue from Licensed Services minus inter-operator payments and PTA/FAB related payments. However license fee installments shall not be deducted from the gross revenue.
Annual R&D Fund Contribution	Calculated on the basis of 0.5 % of the Licensee's annual gross revenue from Licensed Services minus inter-operator payments and PTA/FAB related payments. However license fee installments shall not be deducted from the gross revenue.
Annual Fee - Radio Frequency Spectrum	Spectrum Administrative fee shall be charged as reflected at para 1.4 of the IM.

Addendum to Draft Mobile Cellular License

Page 1 of the Draft License

1. Clause 1.1.3 deleted.
2. Clause 1.2.3 replaced as under:-

“with in 3 month after the receipt of the licensee’s request pursuant to Condition 1.2.2, the Authority shall either:

- a) renew the License on such terms and conditions as are consistent with the policy of the Federal Government at that time to come into effect at the conclusion of the initial term, or
- b) Give written notice to the licensee stating that the Authority may not renew the licence and provide reasons therefore, which reasons may include the licensee’s repeated, grave or continuing violations of the terms and conditions of this licence, the Act, Rules or Regulations during the initial terms and conditions of this licence. The licensee shall be given 60 days to make written representations in response to the Authority’s show cause notice. Within 30 days after the conclusion of such 60 days period, the Authority shall hold a hearing at which the licensee may make representations in response the Authority show cause licence conditions it is prepared to accept to reduce the likelihood of continued or further violations of the terms and conditions of this licence, the Act, Rules or Regulations. Following such hearing, the Authority shall, within 15 days, give its determination either.

(i) that the Authority has determined not to renew the ;license at the expiration of the initial term, and provide its reasons for making such a determination, or

(ii). To renew the license on such terms and conditions as are consistent with the policy of the Federal Government at the time, to come into effect at the conclusion of the initial term, or

(iii). To renew the license on such terms and conditions as are consistent with policy of Federal Government at that time, to come into effect at the conclusion of the initial term, and including such additional terms as the Authority considers appropriate to reduce the likelihood of continued or further violations of the terms and conditions of this license, the Act, Rules or Regulations.

3. Clause 1.2.4 and 1.2.5 deleted.

Page 4 of the Draft License

4. Clause 2.3.1 replaced by “The Licensee shall implement Mobile Number Portability within 2 years from the Effective Date according to the regulations

/ guidelines issued by the Authority from time to time. The Authority shall prepare the Regulations in consultation with Cellular Mobile Operators.”

5. Clauses 2.4.1.2, in the existing sentence replace “an LDI operator is” with “all LDI operators are”.
6. Clause 2.5 with 2.5.1 deleted.
7. Clause 2.7.1 word “shall” replaced with “may”.

Page 5 of the Draft License

8. Clause 3.4.1 replaced with “During each financial year of the Licensee, the Licensee shall devote to research and development activities in Pakistan, an amount calculated on the basis of 0.5% of the Licensee’s Annual gross revenue from Licensed Services minus inter-operator payments and PTA/FAB related payments. However, license fee installments shall not be deducted from the gross revenue”.

Page 6 of the Draft License

9. Clause 3.6.1. The word “shall” after “The Licensee” in 1st line replaced by “may”.
10. Clause 3.6.3. The word “shall” after “The Licensee” in 1st line replaced by “may”.

Page 7 of the Draft License

11. Clause 4.1.2 replaced by “The Licensee shall pay the following annual fees to the Authority within 120 days of the close of financial year of the licensee:

4.1.2.1 an amount calculated on the basis of (i) the Licensee's annual gross revenue from Licensed Services minus inter-Operator payments and PTA/FAB related payments, provision of the Licensed Services, determined for the most recently completed Financial Year of the Licensee, (ii) by 0.5%, or such lesser amount as the Authority may, by Regulation, determine from time to time. However license fee instalments and other operating expenses like co-location charge shall not be deducted from the gross revenue”.
12. Clause 4.1.2.2.replaced with “For each number allocated to the Licensee at commencement of the Licensee’s each financial year, the Licensee shall pay the following amount or any other fees as determined by the Authority, from time to time”.
13. Clause 4.2.1 replaced by “In addition to the payments under clause 4.1, the Licensee shall pay annual fees to the Authority within 120 days of the close of financial year of the licensee of an amount calculated on the basis of 0.5% of the Licensee’s Annual gross revenue from Licensed Services minus inter-

operator payments and PTA/FAB related payments. However, license fee instalments shall not be deducted from the gross revenue”.

Page 13 of the Draft License

14. Clause 7.1.2 and 7.1.3, The word “Access” deleted and word “non-commercial customers” in 7.1.2 replaced by “Consumers”.

Page 19 of the Draft License

15. Clause 12.4.1 replaced with “Notwithstanding any thing contrary to the one contained in this license, if the Licensee shall be rendered unable to carry out the whole or any part of its obligations under this License for any reason beyond the control of the Licensee, including but not limited, to acts of God, strikes, war, riots etc, then the performance of the obligations of the Licensee as it is affected by such cause shall be excused during the continuance of any inability so caused , provided that the licensee has taken all appropriate precautions and reasonable measures to fulfil its obligation and that it shall within 14 days of its first occurrence notify to the Authority the same and cause of such inability and its effects to remove such cause and remedy it’s consequences”.

Page 20 of the Draft License

16. Clause 13.2.1. Add “The words and expressions used herein but not defined shall have the same meaning as are respectively assigned to them in the Act, the Rules and Regulations and Licenses issued thereunder” before “unless the context otherwise”.

Page 21 of the Draft License

17. Definition of “Long Distance “ Replaced with “**“Long Distance”** means end to end communication between points that are (i) located in different Regions or (ii) such other distance apart as the Authority may by Regulations specify”,
18. Add new definition as “**Long Distance and International Licensee** means a licensee licensed to offer end to end communication between points that are (i) located in different Region or (ii) located in Pakistan and outside of Pakistan or (iii) such other distance apart as the Authority may by Regulations, specify”.
19. Add new definition as “**“Mobile Numbering Portability”** means a facility provided by any licensed provider of Mobile Services to another which enables any User to whom a telephone number has been assigned to continue to be provided with Mobile Services using the same number irrespective of the identity of the service provider providing the service”

20. Add new definition “**Mobile Virtual Network Operator (MVNO)**” means a person who has no license to operate a mobile Telecommunication Network and no frequency assignments , but who will provide Mobile Services to his own users by means of entering into arrangements with a Licensed Operator of a mobile Telecommunications Network for the provision to him of capacity and facilities on that network”.

Page 23 of the Draft License

21. Deleted “Video Communication Services” definition.

Page 26 of the Draft License

19. Appendix – 3, Condition 1.3. under heading “Minimum targets”, Short Term “One Year” replaced by “3 years” and Long Term “1-2 years” replaced by “3 years on”

Annex -IInvestors Queries And Pakistan Telecommunication Authority Replies

Query 1 The Telecom sector, including mobile cellular operations, has already been reclassified by a decision of the Federal Cabinet as an "Industry" as opposed to as a "Service", PTA will follow up with the Board of Investment to have the change notified formally. As a consequence, 100% foreign investment with 100% repatriation rights as to capital and dividend will be allowed in respect of investments in the new mobile cellular license. Please confirm our understanding.

PTA Response. *Telecom Sector has been classified as industry under para 9 of Mobile Cellular Policy January 28, 2004, and PTA will pursue its early notification by the Government of Pakistan through Ministry of IT which is responsible for the subject matter. On declaration of telecom sector as industry the associate benefits shall be admissible.*

Query 2 Currently, Telenor's mobile company, Telenor Communications AS (TMC) is the legal entity which has registered its interest for the license via the EoI. Telenor's plan is that TMC shall transfer the bid earnest money and participate in the auction, but on behalf of a Pakistani limited liability company to be incorporated in the event TMC is one of the successful contenders in the auction. The license would in such event be issued directly to the newly incorporated Pakistani company. We understood from our meeting that PTA agreed with such a procedure and that this complies with the bidding and auction rules.

PTA Response *PTA has no objection in issuance of license to the newly formed company under the Pakistan law if 100% ownership is retained by the TMC/(Consortium) provided a board resolution of TMC/ (Consortium) board of Director(s) is provided to this effect to the satisfaction of PTA..*

Query 3 Further, in the event Telenor does not team up with a local partner in a consortium prior to the auction, we would most likely want to do so at some point after

the auction. Please confirm that as long as Telenor teams up with a reputable local partner and as long as Telenor remains in control, you will not have any problems in approving such a change in ownership percentage.

PTA Response. *The license shall be issued to Telenor(Consortium) or company register by Telenor (as refer in Query 2 above). However, after initial license issuance you may apply for change.*

Query 4 PTA's deletion of optional services, (section 1.1.3) in the license, does not limit the rights of the licensee. PTA's intent was only to make sure that the licensee also will be permitted to offer new services if and when such services becomes available due to technological developments in the mobile cellular industry. However, based on advice from Mr. Kairas N. Kabraji, our legal counsel in Pakistan, that such services could not be provided without express inclusion in the License because of Section 20(2) of the Pakistan Telecommunications (Re-organization) Act, 1996 read with Rules 6 and 7 of the Rules and Article 1.1.5 of the License. In this connection we would also point out an apparent contradiction between Article 1.1.8 of the License and the definition of "Licensed Services" which notwithstanding the deletion of Article 1.1.3 continues to refer to "Optional Services" which definition itself has not been deleted. We would respectfully suggest that Article 1.1.3 be reinstated and that the point on new technology is effectively covered in Article 1.1.8. Telenor would also respectfully request that the term "voice services (local, national and international)" is expressly included in section 1.1.2 so as to avoid any doubt.

PTA Response. *Licensees are authorized to establish, maintain and operate Cellular Mobile Telephone systems & provide service including all optional services incidental thereto and the same will be appropriately incorporated in the license documents.*

Query 5 With respect to Wireless Local Loop licenses, Telenor is of the view that it is very important from the Mobile Cellular operator's perspective that it is clear in a legally binding manner(i.e. as a term of the WLL license) that there can be no inter-cell hand over. Please confirm.

PTA Response. *WLL licensees shall only be allowed to offer services to their subscribers within one cell or local call area defined by PTA, whichever is less.*

Query 6 Section 1.2. and definition of "Effective Date" The reference in the definition should be to sub section 4.1.1.1, and not 4.1.1.

PTA Response *Point is agreed to and the necessary correction shall be made in the documents.*

Query 7 Section 1.2.3 Renewal. We understand that a licensee will have the right to have its license renewed as long as the licensee has not, during the initial license period repeatedly, gravely or continuingly violated the terms and conditions of the license.

PTA Response. *Clause 1.2.3 of license is elaborated and specifies the procedure for renewal of the license.*

Query 8 Section 2.2. - Significant Market Power We understand that the PTA will issue guidelines setting out principles to determine how the "market" is to be defined for this purpose. When will such guidelines be issued ?

PTA Response. *Please refer to para 5.10 of Mobile Cellular Policy dated January 28, 2004*

Query 9 Section 2.4. Self Provisioning. In section 2.4.1.2 the words "is unable to" should be replaced with "does not"

PTA Response. *Please refer to Clause 6.1 of Mobile Cellular Policy January 28, 2004, it elaborates the issue very clearly.*

Query 10. Section 2.5. Right of Way. We understand that PTA will provide new wording on this shortly.

PTA Response. Earlier deleted clause 2.5 and 2.5.1 relating "Right of Way" is reinserted as under:

2.5. Right of Way

2.5.1. The licensee will have the right to contract for the "Right of Way" (ROW) To Construct Its Network Subject To Conditions Laid Down By Concerned Agencies".

Query 11 Section 2.6. Infrastructure Sharing. It is stated that the Licensee shall follow the guidelines issued on the subject by the Authority, from time to time. When will such guidelines be available?. Also, will such guidelines also be binding on the other mobile operators presently in the market?

PTA Response. *The formulation of guidelines for infrastructure sharing is underway and these will be notified in near future. Please also refer to clause 5.4. and 6.4 of Mobile Cellular Policy January 28, 2004.*

Query 12 Section 3.2. Network Roll -Out. As to Appendix 1, please inform if the percentage requirements for Year 1. * Year 3 are per Province or in total. We are uncertain as no numbers have been inserted in the columns for these years.

PTA Response. *The fixed numbers have not been identified for providing the flexibility to the operators, while the total tehsils having mobile service have been identified for each year target in Appendix 1 to "Draft Cellular Mobile License"*

Query 13 Section 3.3.1 * Performance Bond. Please confirm that the performance bond will have to be issued by a bank with offices in Pakistan

PTA Response. *The Performance Bond shall be accepted from Scheduled Banks having presence in Pakistan.*

Query 14 Section 3.4. * Research and Development Fund. What kinds of activities will qualify as "research and development activities" in relation to this section.

PTA Response. *The Federal Government will provide detailed guideline for the R&D Fund's utilization for IT & Telecom sector development and IIRD etc will be proposed separately. Please also refer to Mobile Cellular Policy January 28, 2004.*

Query 15 Section 3.5. * Emergency Services. Please provide us with information about the level of operator standby assistance, such as response time requirements etc. In relation to the term "automated systems failure", whose system failures is being referred to?

PTA Response. *Operators are responsible for their own infrastructure.*

Query 16 Section 3.7. * Alteration of Network. Please specify in what circumstances the Authority may give such directions. It is important that we can evaluate the risk of this happening as it could lead to material costs.

PTA Response. *The Authority may direct to alter network in situations, which may cause be hazardous to human life/community and not in public interest.*

Query 17 Section 6.5. * Quality of Service. Please find attached exhibit 1 with suggested amendments to Appendix 3.

PTA Response. *Amendments to some of the service standards as referred in the questions are being examined and will be made in accordance with international best practices.*

Query 18 Section 6.6 Inspection. The wording should be qualified so that requests for information relate to information required in order to enable the Authority to assess whether the relevant technical parameters are being met by the Licensee.

PTA Response. *The required information will be intimated to the licensee well in advance and on prescribed format to the licensee.*

Query 19 Section 9.1.3. * Cost Based Rates. Are there any guidelines on "cost based rates with a reasonable margin"? For instance, which cost items can be included ?

PTA Response. *Initially the cost based rates shall be on the basis of Fully Allocated Cost (FAC) on historic cost duly audited by a cost management accountant shall be followed and there after PTA move to current cost and LRIC (Long run incremental Cost) if feasible.*

Query 20. Section 12.2.1 * Ownership and Control Reporting. Please clarify the meaning of Section 12.2.1. As drafted it appears to require a notification to the Authority if , to the knowledge of the Licensee, anything happens which results in a person who directly or indirectly controls more than 10% of the Voting Interests having direct or indirect control of 10% or more of the voting interests. Since the specified threshold is the same (10%) in both eventualities, there would be no change and hence nothing to report,. Please therefore, clarify what the intention was. This also has a consequential effect in Section 12.2.3.

PTA Response. *Section 12.2.1 Ownership and Control Reporting: This is related to change of Management, a person or company having 10% or more shares in the Cellular Mobile licensed company shall not transfer its shares without prior approval of the Authority. However, appropriate reframing of the clauses 12.2.3, 12.1.1 & 12.2.1 shall be made in the license documents accordingly.*

Annex -IIInvestors Queries and Pakistan Telecommunication Authority RepliesInformation Memorandum Specific Issues

Query 1. In the policy there is no discussion on the number of licenses being issued whereas the IM (Clause 1.2) mentions the issuance of two (2) Mobile Cellular Licenses. Clause 9 (i) of the IM however mentions that if no one is willing to match the auction winning price determined in the second round then the bidding session will be closed and only one license will be awarded:-

- a. The PTA to confirm in writing if needed only two (2) new licenses are to be issued as per the IM. In our last meeting with the PTA dated February 24, 2004 it was verbally communicated to us that a comfort letter confirming the same would be provided to all pre-qualified bidders. We await the issuance of such a letter.
- b. Under such an instance (as mentioned in clause 9 (i) of the IM) what will be the timeline for the issuance of the 2nd license? Will the auction winning price determined for the 1st license be set as the reserve price for the auction of the 2nd license?
- c. Can the 2nd license be auctioned at a discount to the 1st license? If yes then the winner of the 1st license be refunded the additional amount that was paid for the 1st license?

PTA Response. Please refer the bidding document, which is self explanatory & easily understandable.

Query 2. At what price will the incumbents' license be renewed?

PTA Response. The incumbent licenses will be renewed in accordance with the Mobile Cellular Policy January 28, 2004.

Query 3. Clause 8 (g) of the IM specified that "..... Top 50% bidders subjected to a minimum of 8 will qualify for the second round of bidding". In the revisions to the IM provided to us dated March 09, 2004, ".....Subject to minimum, of 8" has been deleted. We would request that the minimum number of 8 bidders qualifying for the second round of bidding be retained.

PTA Response. The decision is well thought out and does not warrant any change.

Query 4. We are of the understanding that there is a difference in the spectrum capacity currently being to the incumbent operators and that which is being made available to the new operators. Please confirm this understanding. If yes, then this difference does not allow for a level playing field for the new operators and this disparity in the spectrum capacities should be removed.

PTA Response. In our opinion and in the light of available spectrum, best options are provided in the Information Memorandum and the bidders may make their own judgment accordingly.

Mobile Cellular License Specific Issues

Query 5. We understand that as per the Cellular Mobile Policy (Clause 5.8) the 3G licenses could be issued to parties other than the existing operators. This issue was discussed with you at our last meeting in which it was verbally communicated to us that comfort would be provided to the licensee that 3G licenses would be issued to existing operators only. We would appreciate if a comfort letter reiterating the same is issued by the PTA to pre-qualified bidders.

PTA Response. *The issues of 3G license will be dealt under provisions of the Mobile Cellular Policy January 28, 2004.*

Query 6. The tenure of the new license is set for 15 years. We would request that the effective date of the license should be from the start of the commercial operations of the new operator or 12 months from the payment of the second 25 % installment, whichever is earlier. This would allow the new operator on the same level playing field as the incumbent operator.

PTA Response. *In order to provide comfort to the potential operators, PTA is considering to grant relief of six to nine months with reference to commencement of effective date.*

Query 7. The Addendum to Draft Mobile Cellular License is still not clear as to the renewal cost of the license after 15 years.

PTA Response. *Please refer clause 1.2.3 of the license.*



PAKISTAN
TELECOMMUNICATION

AUTHORITY
PTA HEADQUARTERS BUILDING F-5/1 ISLAMABAD, PAKISTAN
(www.pta.gov.pk)

Licence No. MCT- _____

Dated: _____

**MOBILE CELLULAR LICENCE ISSUED UNDER SECTION 21 OF THE PAKISTAN
TELECOMMUNICATION (RE-ORGANIZATION) ACT, 1996**

The Pakistan Telecommunication Authority ("The Authority") hereby grants a non-exclusive
license to: [Name & Address]

("The Licensee") to provide the Licensed Services in Pakistan (excluding AJK and Northern
Areas) and to establish, maintain and operate the Licensed System, subject to the terms and
conditions contained herein.

For and on behalf of the Authority,

Director General (Licensing)

LIST OF CONDITIONS

PART 1 - GRANT OF LICENCE	1
1.1 SCOPE OF THE LICENCE	1
1.2 EFFECTIVE DATE AND TERM OF THE LICENCE	2
PART 2 - RIGHTS OF THE LICENSEE	3
2.1 NUMBERS AND SHORT CODES	3
2.2 SIGNIFICANT MARKET POWER (SMP)	3
2.3 NUMBER PORTABILITY	4
2.4 SELF PROVISIONING	4
2.5 RIGHT OF WAY	4
2.6 INFRASTRUCTURE SHARING	4
2.7 NATIONAL ROAMING	4
2.8 MOBILE VIRTUAL NETWORK OPERATOR (MVNO)	4
PART 3 - OBLIGATIONS OF THE LICENSEE	5
3.1 COMPLIANCE WITH LAW	5
3.2 NETWORK ROLL-OUT	5
3.3 PERFORMANCE BOND	5
3.4 RESEARCH AND DEVELOPMENT FUND	5
3.5 ACCESS TO EMERGENCY SERVICES	6
3.6 DIRECTORY INFORMATION	6
3.7 ALTERATION OF NETWORK	6
PART 4 - FEES AND OTHER CHARGES	7
4.1 PAYMENT OF FEES	7
4.2 UNIVERSAL SERVICE FUND	7
4.3 ACCESS PROMOTION CONTRIBUTION	8
4.4 GENERAL CONDITIONS CONCERNING FEES	8
PART 5 - RADIO FREQUENCY SPECTRUM	9
5.1 RADIO FREQUENCY SPECTRUM ASSIGNED TO THE LICENSEE	9
5.2 USE OF SPECTRUM	9
5.2.2 REASSIGNMENT OF FREQUENCIES	10
5.3 RADIO APPARATUS	10
PART 6 - GENERAL CONDITIONS	11
6.1 OPERATION OF LICENSED SERVICES	11
6.2 DISCONTINUATION OF SERVICES	11
6.3 MONITORING	11
6.4 INFORMATION	11

6.5	QUALITY OF SERVICE	12
6.6	INSPECTION	12
6.7	NATIONAL SECURITY	12
6.8	CALL RECORDS	12
6.9	NETWORK STANDARDS	12
6.10	TYPE APPROVAL OF TERMINAL EQUIPMENT	13
6.11	SERVICE COMMENCEMENT CERTIFICATE	13
PART 7 - RELATIONS WITH CUSTOMERS		13
7.1	STANDARD CONTRACT OF SERVICE	13
7.2	CONTENTS OF THE STANDARD CONTRACT OF SERVICE	14
7.3	COMPLAINT SYSTEM	14
7.4	CONTENT AND FORMAT OF BILLS	14
7.5	CODE OF COMMERCIAL PRACTICE	15
7.6	PRIVACY OF COMMUNICATIONS	15
7.7	CONFIDENTIALITY OF CUSTOMER INFORMATION	16
7.8	HARASSING, OFFENSIVE, UNSOLICITED OR UNLAWFUL COMMUNICATION	16
PART 8 - TARIFFS		17
8.1	REGULATION OF PRICES	17
8.2	PRICE REGULATION OF OPERATORS WITH SMP	17
8.3	PUBLICATION OF TARIFFS, NOTIFICATIONS AND DISPLAY OF INFORMATION	17
PART 9 - RELATIONS WITH OTHER OPERATORS		17
9.1	INTERCONNECTION	17
PART 10 - INFRACTIONS AND SANCTIONS		18
10.1	SANCTIONS FOR VIOLATIONS OF THE LICENCE	18
PART 11 - TERMINATION AND AMENDMENT		18
11.1	TERMINATION OF THE LICENCE	18
11.2	AMENDMENT	19
PART 12 - GENERAL		19
12.1	ASSIGNMENT OF RIGHTS	19
12.2	OWNERSHIP AND CONTROL REPORTING	19
12.3	NO LIABILITY BY THE AUTHORITY	19
12.4	FORCE MAJEURE	19
12.5	COMMUNICATION WITH THE LICENSEE	20

PART 13 - INTERPRETATION AND DEFINITIONS..... 20

13.1 INTERPRETATION 20

13.2 DEFINITIONS..... 20

APPENDIX 1 24

APPENDIX 2 - RADIO FREQUENCY SPECTRUM ASSIGNMENT, TERMS AND
CONDITIONS..... 25

1.1 RADIO FREQUENCY SPECTRUM ASSIGNMENT TO LICENSEE..... 25

1.2 RADIO FREQUENCY SPECTRUM PERFORMANCE REQUIREMENTS 25

1.3 FEES RELATED TO RADIO FREQUENCY SPECTRUM..... 25

APPENDIX 3 - QUALITY OF SERVICE STANDARDS 26

PART I GRANT OF LICENCE

1.1 SCOPE OF THE LICENCE

1.1.1. This Licence authorizes the Licensee

to provide the Licensed Services in Pakistan(excluding AJK and Northern Areas), and to establish, maintain and operate the Licensed System.

1.1.2. The Licensee shall provide the following Mandatory Services throughout Pakistan. Mobile Communication Service, including;

1.1.2.1 emergency services,

1.1.2.2 directory enquiry services,

1.1.2.3 operator assistance services, and

1.1.2.4 national and international long distance services through LDI operators.

such other Telecommunications Services as the Authority may, by Regulation, require.

1.1.3. The Licensee may provide the following Optional Services:

1.1.3.1 international roaming,

1.1.3.2 mobile data services,

1.1.3.3 mobile internet services,

1.1.3.4 public mobile payphone services,

1.1.3.5 short message service,

1.1.3.6 freephone service,

1.1.3.7 premier rate services

1.1.3.8 value added services, including voice mail, call barring, call waiting etc that are incidental to the Mandatory Services,

1.1.3.9 such other Mobile Services as the Authority may authorize in writing,

1.1.4. The Licence does not authorize the following :

Formatted: Bullets and numbering

Formatted: Indent: Left: 1.5", First line: 0", Tabs: 1.5", List tab 1 Not at 1.99"

1.1.4.1 the provision of Mobile Cellular Telecommunication Services in AJK and Northern Areas

1.1.4.2 the interconnection of the Licensed System to the telecommunication system of a service provider that provides telecommunications services outside Pakistan.,

1.1.4.3 Such other activities or Telecommunication Services as the Authority may by Regulation ,prohibit.

1.1.5. The Licensee shall not provide any Telecommunication Service or install, maintain or operate any Telecommunication System that is not authorized in this Licence, except pursuant to a separate licence or other proper authorization from the Authority.

1.1.6. The Licensee shall not authorize or facilitate the Terminal Equipment used by a fixed line customer in connection with the Limited Mobility Communication Service, to be authenticated or used with the Mobile Communication System.

1.1.7. The Licensee shall provide access to national and international Long Distance Public Voice Telephone Services only through the interconnection of the Licensed System with the Telecommunication System of another Operator duly licensed by the Authority to provide national and international long distance services.

1.1.8. The Licensee shall notify the Authority at the time that the Licensee wishes to begin to offer a new category of Licensed Services not previously offered by the Licensee. In its notice, the Licensee shall describe the new category of Licensed Services and the expected date that they will begin to be offered commercially by the Licensee.

1.1.9. Upon being notified by the Authority that an Operator's licence is suspended or terminated, the Licensee shall as promptly as practical in the circumstances, disconnect the Licensed System from the Telecommunication System of that operator, and discontinue using the Telecommunication Service of that operator, until such time the Authority restores or renews such license.

1.2 EFFECTIVE DATE AND TERM OF THE LICENCE

1.2.1. This Licence shall come into force on the Effective Date and shall be valid for a term of 15 (fifteen) years.

1.2.2. If the Licensee wishes to renew the term of the Licence at the expiration of the initial or any renewal term, it shall submit to the Authority a written request for renewal at least 30 months prior to the expiration of the current term.

1.2.3. Within 3 months after the receipt of the Licensee's request pursuant to Condition 1.2.2, the Authority shall either:

(a) renew the License on such terms and conditions as are consistent with the policy of the Federal Government at that time to come into effect at the conclusion of the initial term, or

(b) Give written notice to the licensee stating that the Authority may not renew the licence and provide reasons therefore, which reasons may include the licensee's repeated, grave or continuing violations of the terms and conditions of this licence, the Act, Rules or Regulations during the initial terms and conditions of this licence. The licensee shall be given 60 days to make written representations in response to the Authority's show cause notice. Within 30 days after the conclusion of such 60 days period, the Authority shall hold a hearing at which the licensee may make representations in response the Authority show cause licence conditions it is prepared to accept to reduce the likelihood of continued or further violations of the terms and conditions of this licence, the Act, Rules or Regulations. Following such hearing, the Authority shall, within 15 days, give its determination either.

(i) that the Authority has determined not to renew the license at the expiration of the initial term, and provide its reasons for making such a determination, or

(ii). To renew the license on such terms and conditions as are consistent with the policy of the Federal Government at the time; to come into effect at the conclusion of the initial term, or

(iii). To renew the license on such terms and conditions as are consistent with policy of Federal Government at that time, to come into effect at the conclusion of the initial term, and including such additional terms as the Authority considers appropriate to reduce the likelihood of continued or further violations of the terms and conditions of this license, the Act, Rules or Regulations.

PART 2 RIGHTS OF THE LICENSEE

2.1 NUMBERS AND SHORT CODES

- 2.1.1 The Licensee has the right to request geographic and non-geographic numbers, as well as short codes, in accordance with the national numbering plan developed by the Authority, for use in the provisions of the Licensed Services.
- 2.1.2 The Licensee shall allocate individual numbers to customers from the blocks allocated to it by the Authority and shall maintain suitable records of its utilisation of numbering capacity, subject to the following:

The blocks of numbers and short codes allocated to the Licensee and the individual numbers allocated by the Licensee to its customers are a national resource; and

Allocation of a number does not confer ownership of the number by the customer. However, an allocation conveys an ongoing right of use and an expectation of at least a three month notice period should it be necessary to withdraw or to change allocated numbers.

2.2 SIGNIFICANT MARKET POWER (SMP)

2.2.1 If the Authority determines that a Licensee possesses SMP in a relevant market, the Licensee shall comply with orders / decisions of the Authority that are intended to prohibit abuse of its dominant position through anti-competitive conduct or to promote competition in respect of that relevant market or markets ancillary thereto, including without limitation orders to produce a Reference Interconnection Offer (RIO) detailing the services and tariff they provide to other licensed operators.

2.3 MOBILE NUMBER PORTABILITY

2.3.1 The Licensee shall implement Mobile Number Portability within 2 years from the Effective Date according to the regulations / guidelines issued by the Authority from time to time. The Authority shall prepare the Regulations in consultation with Cellular Mobile Operators.

2.4 SELF PROVISIONING

2.4.1 The licensee will have the right to provide its own infrastructure;

2.4.1.1 within a Region and to also provide circuits to other operators ,

2.4.1.2 between Regions in the event that all LDI operators are unable to provide a circuit within three months from request, or

2.4.1.3 in the event of quality of service falls below international standards for inter-regional circuits as determined by the Authority

2.5 Right of Way

2.5.1. The licensee will have the right to contract for the "right of way" (row) to construct its network subject to conditions laid down by concerned agencies".

2.6 INFRASTRUCTURE SHARING

Deleted: 5

2.6.1 The Licensee is encouraged to share infrastructure with other telecom service providers on the principles of neutrality, non discrimination, equal access and commercial arrangements. The sharing includes collocation and facility sharing. Infrastructure

Deleted: 5

sharing includes leasing facilities for space, electrical power, air conditioning, security, cable ducts, space on antenna masts or towers, rooms etc. Licensee shall follow the guidelines issued on the subject by the Authority, from time to time.

2.7 NATIONAL ROAMING

Deleted: 6

2.7.1 The Licensee may enter into commercial contract with other Mobile Service providers as expeditiously as possible, at mutually acceptable terms and on reciprocal basis, to offer national roaming in order to promote competition in rural areas.

2.8 MOBILE VIRTUAL NETWORK OPERATOR (MVNO)

2.8.1 The Licensee is permitted to support MVNO Services under the framework to be prepared by the Authority within two years from the Effective Date.

PART 3 OBLIGATIONS OF THE LICENSEE

3.1 COMPLIANCE WITH LAW

3.1.1 This Licence is subject to the terms and conditions contained herein and to the Act, Rules and Regulations. In the event of any conflict or inconsistency between the provisions of this Licence, and the provisions of the Act, Rules or Regulations, the provisions of the Act, Rules and Regulations shall prevail.

3.1.2 The Licensee shall establish, maintain and operate its Licensed System, and shall provide the Licensed Services, in compliance with the laws of Pakistan.

3.1.3 The Licensee shall at all times co-operate with the Authority and its authorized representatives in the exercise of the functions assigned to the Authority under the Act. The Licensee shall comply with all orders, determinations, directives and decisions of the Authority.

3.2 NETWORK ROLL-OUT

3.2.1 The Licensee shall within 4 (four) years provide coverage within 70% of the Tehsil Headquarters from the Effective Date. Appendix - 1 provides a minimum 4 year target. In summary the 4 year target is:

3.2.2.1 at least 70% of Tehsil Headquarters;

3.2.2.2 with a minimum of 10% of Tehsil Headquarters in each province.

3.3 PERFORMANCE BOND

3.3.1 As continuing guarantee for the performance of Licensee's obligations in clause 3.2 above herein, the Licensee shall deliver to the Authority an irrevocable Performance Bond acceptable to the Authority for the amount of US\$15,000,000 (fifteen million US dollars) or its equivalent in Pakistan Rupees of the value prior to Effective Date.

- 3.3.2 At the each anniversary of the Effective Date for next four years the licensee shall be entitled to release and exchange the irrevocable Performance Bond as stated in sub clause 3.3.1, proportionate to the rollout obligation met by the licensee.

3.3.2.1 Where the Licenses delivers a performance bond to the Authority denominated in Pakistan Rupees, the rate of exchange for determining the equivalent amount of Pakistan Rupees shall be the T.T. Selling rate/announced by the National Bank of Pakistan on the preceding working day of the conversion date.

3.4 RESEARCH AND DEVELOPMENT FUND

- 3.4.1 During each financial year of the Licensee, the Licensee shall devote to research and development activities in Pakistan an amount calculated on the basis of 0.5% of the Licensee's Annual gross revenue from Licensed Services minus inter-operator payment and PTA/FAB related payments. However, license fee instalments shall not be deducted from the gross revenue.
- 3.4.2 In any financial year of the Licensee, the Licensee may satisfy its requirements under Sub - Clause 3.4.1. by making a contribution to the Research and Development Fund established by the Federal Government.

3.5 ACCESS TO EMERGENCY SERVICES

- 3.5.1 The Licensee shall provide its customers with access to government emergency services, including automatic connections to local police, fire and ambulance assistance by means of a simple telephone number with operator standby assistance available in case of automated systems failure. The Licensee shall comply with other requirements imposed by the Authority in relation to emergency services.

3.6 DIRECTORY INFORMATION

- 3.6.1 The Licensee may provide directory enquiry service to its customers, consisting of access to current information as the telephone numbers of its customers and the customers of other cooperating Operators, except for those customers that request not to have such information publicly disclosed. The Licensee shall not charge customers for directory assistance service on a call by call basis.
- 3.6.2 The Licensee may, on an annual basis, provide printed directories to its customers. Printed directories shall contain information regarding the names and telephone numbers of the Licensee's customers and the customers of other cooperating Operators, except for those customers that request not to have such information publicly disclosed.
- 3.6.3 The Licensee may permit other Operators to access its directory information, consisting of customer name, address and telephone number, except for those customers that request not to have such information publicly disclosed, in order to permit such Operators to offer their own directory enquiry service and to print telephone directories. The Licensee shall negotiate the pricing, terms and conditions of such access with other Operators that

request the same. If the Licensee and other Operator are unable to agree on the pricing, terms and conditions of such access, either Operator may refer the matter to the Authority as a dispute relating to interconnection.

3.7 ALTERATION OF NETWORK

3.7.1 The licensee shall, within such reasonable time and in such manner as may be directed by the Authority, and at its own expense, alter the course, depth, position or mode of attachment of any apparatus forming part of its Licensed System.

PART 4 FEES AND OTHER CHARGES

4.1 PAYMENT OF FEES

4.1.1 The Licensee shall pay the following initial license fees to the Authority:

4.1.1.1 50 % of the Auction Winning Price in US\$ or equivalent Pakistan Rupees prior to the Effective Date;

4.1.1.2 Remaining 50 % amount to be in 10 equal instalments payable in US \$ or equivalent in Pakistan Rupees. For the purpose of conversion of payable fee into Pakistan Rupees, NBP TT selling rate of the business day preceding the date of payment. In absence of NBP TT selling rate any other exchange rate mutually agreed by the Authority and the Licensee shall be used. However, this payment being the initial license fee will not be excluded from the gross revenue for the purpose of calculation of annual license fee (at the rate of 0.5%), USF contribution (at the rate of 1.5%) and R&D contribution (at the rate of 0.5%).

4.1.2 The Licensee shall pay the following annual fees to the Authority within 120 days of the close of financial year of the licensee:

4.1.2.1 an amount calculated on the basis of (i) the Licensee's annual gross revenue from Licensed Services minus inter-Operator payments and PTA/FAB related payments, provision of the Licensed Services, determined for the most recently completed Financial Year of the Licensee, (ii) by 0.5%, or such lesser amount as the Authority may, by Regulation, determine from time to time. However license fee instalments and other operating expenses like co-location charge shall not be deducted from the gross revenue.

4.1.2.2 For each number allocated to the Licensee at commencement of the Licensee's each financial year, the Licensee shall pay the following amount or any other fees as determined by the Authority, from time to time.

4.1.2.2.1 seven (or higher) digit number (including Freephone Service and Premium Rate Service numbers) Rs.0.5 (Half Rupee per number)

4.1.2.2.2 six digit number Rs 5 (Five Rupees per number)

4.1.2.2.3 five digit number Rs 50 (Fifty Rupees per number)

4.1.2.2.4 four digit number Rs 500 (Five hundred Rupees per number)

4.1.2.2.5 three digit number and short codes Rs 5,000 (Five thousand Rupees per number)

4.2 UNIVERSAL SERVICE FUND

4.2.1 In addition to the payments under clause 4.1, the Licensee shall pay annual fees to the Authority within 120 days of the close of financial year of the licensee of an amount calculated on the basis of 0.5% of the Licensee's Annual gross revenue from Licensed Services minus inter-operator payments and PTA/FAB related payments. However, license fee instalments shall not be deducted from the gross revenue.

4.2.2 The Licensee shall be eligible to apply for money from the Universal Service Fund in order to cover rural and under served areas as per guidelines, notified, for utilization of Universal Service Fund.

4.3 ACCESS PROMOTION CONTRIBUTION

4.3.1 Access Promotion Contribution shall not be available to the Licensee. Premium of APC on current cellular termination would be mopped up and diverted to Universal Service Fund. However, the licensee will be entitled to receive the termination charges as determined by the Authority from time to time.

4.4 GENERAL CONDITIONS CONCERNING FEES

4.4.1 The Licensee shall pay all annual fees to the Authority within 120 days of the end of the financial year to which such fees relate.

4.4.2 In addition to any other remedies available to the Authority, late payment of all fees including initial license fee shall incur an additional fee calculated at the rate of 2% per month on the outstanding amount, for each month or part thereof from the due date until paid.

4.4.3 The Licensee shall provide the evidence of cost for Interconnection Termination rates within 12 months of Commencement of the services. The cost accounts so provided should be certified by practicing Cost and Management Accountant firm of Pakistan

4.4.4 The Licensee shall annually submit to the Authority audited financial statements in support of its calculations of annual fees payable pursuant to this clause 4.

- 4.4.5 The License may be suspended, in case the Licensee fails to make payment of initial license fee/annual license fees within 180 days of due date for the payment.
- 4.4.6 Where the Licensee is required under the Licence to make a payment of fees to the Authority that is denominated in a currency other than Pakistan Rupees, the Licensee may make such payment in the equivalent amount of Pakistan Rupees. The rate of exchange for determining the equivalent amount of Pakistan Rupees shall be the TT selling rate of National Bank of Pakistan for the business day preceding the rate of payment.

PART 5 RADIO FREQUENCY SPECTRUM

5.1 RADIO FREQUENCY SPECTRUM ASSIGNED TO THE LICENSEE

- 5.1.1 From the Effective Date, radio frequency spectrum described in Appendix 2 is assigned to the Licensee pursuant to the terms and conditions of this Licence, including any terms and conditions appearing in Appendix 2.
- 5.1.2 Notwithstanding anything contained in clause 1.2, the assignment of radio frequency spectrum to the Licensee pursuant to this Licence terminates upon the expiry of 15 (fifteen) years from the Effective Date. Such assignment of frequencies may be extended if the license is renewed for another terms as may be fixed by the Authority from time to time clause 1.2.
- 5.1.3 Upon termination of the assignment to the Licensee of those radio frequencies listed in Appendix 2, the Licensee shall cease using any apparatus or device that emits or receives any radio communication at those radio frequencies and shall cause its customers to discontinue using any such apparatus or device.
- 5.1.4 Further to any rights derived from sub clauses 5.1.1 and 5.1.2 and Appendix 2, the Licensee shall retain during the term of this licence a non-exclusive and non-revocable right to apply for the rights to use such other radio frequencies, and in particular those frequencies most suitable for the provision of third generation (3G) mobile services, that the Licensee may reasonably require to provide the Licensed Service. Such application being made in accordance with any procedures that the Authority or the Board or both may require and stipulate at that time.
- 5.1.5 Existing GSM operators (Mobilink and Ufone shall vacate 2.4 MHz band in 900 MHz band by 30th September 2004.)

5.2 USE OF SPECTRUM

- 5.2.1 The Licensee shall comply with the following terms and conditions relating to radio frequency spectrum assigned to the Licensee:
 - 5.2.1.1 The Licensee shall report to the Authority and to the Board such information as each of them may require concerning the assigned radio frequency spectrum and its use.

5.2.1.2 The Licensee shall only use the assigned radio frequency spectrum in its own operations, and it shall not lease, sub-licence, allocate, assign or otherwise make available the use of the assigned radio frequency spectrum to another Operator.

5.2.1.3 The Authority shall have the right, exercisable at any time, to terminate the assignment to the Licensee of the radio frequency spectrum described in Appendix 2 if the Authority determines that the Licensee is not complying with the requirements applicable to such radio frequency spectrum and which are set forth in clause 1.2 of Appendix 2.

5.2.1.4 The Licensee shall use assigned radio frequency spectrum in compliance with all national, regional, intergovernmental and international arrangements in effect from time to time that are designed to reduce radio interference among service providers,

5.2.1.5 At all times, the Licensee shall implement all commercially reasonable measures to optimise the efficiency and effectiveness of its use of the radio frequency spectrum assigned to it.

5.2.1.6 Unused frequency spectrum assigned to the Licensee may be withdrawn, if the Licensee fails to commence its Services within eighteen months of award of frequency spectrum.

5.2.2 REASSIGNMENT OF FREQUENCIES

5.2.3 The Authority may, in order to comply with international radio frequency spectrum co-ordination requirements, ITU assignments or reassignments, or generally in the course of regulating the radio frequency spectrum in the best interests of Pakistan, reassign radio frequency spectrum to the Licensee or require the Licensee to surrender its rights in respect of radio frequency spectrum assigned to it and which is not reasonably required for the continued operation of the Licensed Services. In such cases, the Licensee shall be entitled to consult with the Authority before any such action is taken and the Licensee shall be entitled to reasonable time and, where applicable, the assignment of appropriate alternative radio frequency spectrum, to permit the Licensee to carry on its business without unreasonable costs or disruptions.

5.2.4 If, pursuant to sub clause 5.3.1, the Authority requires that the Licensee change the radio frequency spectrum assigned to it, or surrender its rights in respect of radio frequency spectrum assigned to it, and the Authority re-assigns the radio frequency spectrum to another Operator within three years after the date established by the Authority as the last date that the Licensee may use any apparatus or device that emits or receives any radio communication in the band of the radio frequency spectrum, the Authority shall require the other Operator to compensate the Licensee for

5.2.4.1 its reasonable costs incurred as a result of such change or surrender, as determined by the Authority, and

5.2.4.2 the fraction of the initial fees referred to in Appendix 2 in respect of the re-assigned radio frequency spectrum, where the fraction is calculated by the following formula: $(15-TT)$ divided by 15 (fifteen), where TT is the period of time, expressed in years (rounded up if not a whole number of years) between the Effective Date and the date established by the Authority as the last date on which the Licensee may use any apparatus or device that emits or receives any radio communication in the band of the radio frequency spectrum.

5.3 RADIO APPARATUS

- 5.3.1 The Licensee shall operate radio communication apparatus and devices in compliance with all requirements of the Authority and the Board pertaining to emissions, frequencies of operation, technical characteristics, power and aerial characteristics.

PART 6 GENERAL CONDITIONS

6.1 OPERATION OF LICENSED SERVICES

- 6.1.1 The Licensee shall ensure that the Licensed System and the Licensed Services do not cause any damage to, or interference with, any Telecommunication System or Telecommunications Services of any other Operator.
- 6.1.2 The Licensee shall conduct its operations and shall establish its Licensed System in a manner so that it is not a safety hazard and is not in contravention of any law, rule or regulation.

6.2 DISCONTINUATION OF SERVICES

- 6.2.1 The Licensee shall not discontinue providing a category of Licensed Services unless (a) the Licensee gives the Authority and affected customers at least 90 days prior written notice of such discontinuation, and (b) Authority's prior written approval to such discontinuation is obtained. The Authority will not give its written approval to such discontinuation if the Licensee is in arrears of any fees payable to the Authority.

6.3 MONITORING

- 6.3.1 The Licensee shall provide, at its own cost, suitable equipment at premises designated by the Authority, in order to measure and record traffic, call detail records, and quality of service in a manner specified by the Authority. The Licensee shall provide the Authority with access to such equipment, and the information generated by such equipment.

6.4 INFORMATION

- 6.4.1 The Licensee shall furnish to the Authority, such information as the Authority may demand regarding the Licensee's network plan, network and terminal standards, links utilized, financial information, costs and accounts or any such other information as the

Authority may from time to time request in connection with its functions, powers and responsibilities.

- 6.4.2 The Licensee shall maintain such books and records as the Authority may require. The authority shall give the Licensee a reasonable period of time, not to exceed 120 days, to implement appropriate routines and systems to comply with any such requirement imposed by the Authority. Upon request by the Authority, the Licensee shall make its books and records available for inspection by the Authority.
- 6.4.3 The Licensee shall maintain financial records and books of accounts in accordance with the laws of Pakistan. The Licensee shall submit audited financial statements, including at a minimum statements of profit and loss and assets and liabilities, to the Authority within 120 days of the closing date of Financial Year of the Licensee.
- 6.4.4 The Authority shall take reasonable steps to maintain the confidentiality of information in writing that is disclosed to it by the Licensee and which is clearly indicated as confidential, except that the Authority may disclose information where the Authority determines that the public interest in disclosure outweighs the Licensee's interest in maintaining the confidentiality of such information.

6.5 QUALITY OF SERVICE

- 6.5.1 The Licensee shall at all times meet or exceed the quality of service standards described in Appendix-3 and such other quality of service standards as the Authority may, by regulation, require. The Licensee shall maintain records of its performance in meeting these quality of service standards, and shall submit them to the Authority on a quarterly basis in such format as the Authority may require. The Licensee shall maintain supporting records for inspection and technical audit as and when required by the Authority. The Licensee shall maintain all such records for a period of three years.
- 6.5.2 The Authority may carry out tests on the quality of the Licensed Services and the Licensed System and the Licensee shall extend full co-operation and assistance for the purpose including provision of test instruments and equipment.

6.6 INSPECTION

- 6.6.1 The Licensee shall allow inspection of any premises by a representative of the Authority at any time and furnish to the representative such information as may be required by such representative.

6.7 NATIONAL SECURITY

- 6.7.1 The Licensee shall comply with the national security and other requirements of section 54 of the Act and any other national security requirements under the law.

PART 7 RELATIONS WITH CUSTOMERS

7.1 STANDARD CONTRACT OF SERVICE

- 7.1.1 The Licensee shall submit a standard contract of service, for use with its non-commercial customers, for approval by the Authority, before commencement of its services. The Licensee shall file the standard contract, and amendments thereto from time to time, with the Authority for its approval. The Authority shall approve the standard contract if it contains the terms and conditions described in sub clause 7.2.1, and it contains the terms and conditions are not unduly burdensome on non-commercial customers.
- 7.1.2 The standard contract, as approved by the Authority, shall apply to all consumers that obtain Mobile Cellular Telephone Service from the Licensee.
- 7.1.3 Prior to providing Mobile Cellular Telephone Service to non-commercial customers, the Licensee shall enter into a contract with such customers in accordance with the standard form contract approved by the Authority.
- 7.1.4 Upon application by the Licensee, the Authority may waive compliance by the Licensee with the provisions of sub clause 7.1.3 above herein subject to such terms and conditions as the Authority may impose.
- 7.1.5 The Licensee may enter into agreements with commercial customers for the provision of Licensed Services on terms that are negotiated between the Licensee and such customers.

7.2 CONTENTS OF THE STANDARD CONTRACT OF SERVICE

- 7.2.1 The standard contract shall include, at a minimum, the following terms and conditions:

7.2.1.1 Deposits and alternative methods of providing security for payment where reasonably required, provided that in no circumstances may such deposits or security exceed the charges reasonably anticipated to be incurred by the customer within a three (3) month period,

7.2.1.2 Pricing or mechanisms by which prices are determined,

7.2.1.3 Confidentiality of customer information,

7.2.1.4 Refunds or other rebates for service problems or over-billing,

7.2.1.5 Payment terms, including any applicable interest or administration charges,

7.2.1.6 Minimum contract period, and

7.2.1.7 Customer and Licensee rights of termination.

7.3 COMPLAINT SYSTEM

- 7.3.1 The Licensee shall establish an efficient and easy-to-use system to promptly receive, process and respond to complaints, claims or suggestions by customers of Licensed Services.
- 7.3.2 The Licensee shall make all reasonable efforts to resolve consumer complaints or disputes without delay and without recourse to the Authority.
- 7.3.3 If a complaint is filed with the Authority in connection with any dispute between the Licensee and a customer regarding any activity that is the subject of this Licence, the Authority may settle the dispute. Without prejudice to the appeal and revision rights established in section 7 of the Act, the Licensee shall abide by any resulting decision of the Authority.

7.4 CONTENT AND FORMAT OF BILLS

- 7.4.1 The Licensee may determine the content and format of its bills to customers provided that:

- 7.4.1.1 in relation to a customer, the bill reflects the types of service and the units for which charges are made including, but only to the extent requested by the customer, the starting time of each connection, the number called and the duration and number of units for each call; and

- 7.4.1.2 the Licensee retains in its records information sufficient:

- 7.4.1.2.1 to identify for customers the basis of the amount charged for use of its Telecommunication Services; and

- 7.4.1.2.2 to provide the Authority with an independent quality assurance that the billing process complies with the requirements set out above

- 7.4.2 The Licensee shall maintain appropriate billing processes to enable the Licensee to comply with the billing requirements of conditions in clause 7.4.
- 7.4.3 The above information must be made available to pre-paid customers either in printed or electronic form upon request. The supply of such information may attract a reasonable charge

7.5 CODE OF COMMERCIAL PRACTICE (CUSTOMER CHARTER)

- 7.5.1 The Licensee shall publish within six months of the Effective Date, a code of commercial practices approved by the Authority. The code of practice shall include, at a minimum, provisions covering the following issues:

7.5.1.1 A commitment to take steps to remedy service interruptions as soon as reasonably possible and to provide reasonable credits to customers for lengthy outages,

7.5.1.2 Protection of the privacy of information transmitted over the Licensed System,

7.5.1.3 Maintenance by Licensee of the confidentiality of customer information,

7.5.1.4 Procedures for resolving disputes between Licensee and customers, and

7.5.1.5 Availability to customers of information concerning their accounts with the Licensee.

7.5.1.6 Commitment by the licensee to customers in respect of standard and quality of licensed services.

7.6 PRIVACY OF COMMUNICATIONS

7.6.1 The Licensee shall not monitor or disclose the contents of any communication conveyed over its Licensed System except to the extent necessary for the purpose of maintaining or repairing any part of the Licensed System or monitoring the Licensee's quality of service, or except as required by the Act, the Rules, Regulations and conditions of this license.

7.6.2 The Licensee shall take reasonable measures to safeguard its Licensed System from unauthorized interception of communication carried on the Licensed System.

7.7 CONFIDENTIALITY OF CUSTOMER INFORMATION

7.7.1 Except as permitted below, the Licensee shall take all reasonable measures to prevent information about its customers, including information about their business, other than directory information, from being disclosed to third parties, including the Licensee's own subsidiaries, affiliates and associated companies, except information which is required:

7.7.1.1 for the process of collection of debts owed to the Licensee,

7.7.1.2 by another Operator in relation to the provision of services to the customer, and provided that the information is disclosed in confidence to that Operator,

7.7.1.3 by the Licensee's auditors for the purpose of auditing the Licensee's accounts, or

7.7.1.4 for the prevention or detection of crime or the apprehension or prosecution of offenders or as may otherwise be authorised by or under any law of Pakistan.

7.7.2 A Licensee shall be permitted to disclose information about a customer where the Licensee has clearly explained to the customer (a) the nature of the information to be disclosed, (b) the recipients of the information to be disclosed and (c) the purpose for the disclosure, and the customer has provided Licensee with consent to such disclosure.

7.8 HARASSING, OFFENSIVE, UNSOLICITED OR UNLAWFUL COMMUNICATION

7.8.1 The Licensee shall take all reasonable steps to track and locate and prevent the source of harassing, unsolicited, offensive, fraudulent or unlawful communication. For that purpose:

7.8.1.1 Any customer of the Licensee may request (the Requesting Customer) that the Authority or other duly authorized authority in Pakistan authorize the Licensee to monitor calls to the Requesting customer's mobile handset or device.

7.8.1.2 The Authority or other duly authorized authority in Pakistan may direct a Licensee to monitor communication to and from a customer's telephone.

7.8.1.3 The Licensee shall provide to the Authority the information resulting from the monitoring of the communication to and from a customer's telephone, including the identification number or details of the party or parties that are the source of harassing, offensive fraudulent or unlawful communication and the dates of occurrence of such calls and their frequency; and

7.8.1.4 The Authority may direct the Licensee to undertake appropriate action to protect the public from harassing, offensive, fraudulent or unlawful communication. Such direction may require the Licensee to cooperate fully with and/or provide relevant information to such other parties identified as being competent authorities by the Authority in its direction.

7.8.1.5 The Licensee shall, at the request of the Authority, terminate service to any customer that is the source of harassing, offensive or illegal communication.

PART 8 TARIFFS

8.1 REGULATION OF PRICES

- 8.1.1 Retail price cap fixed by the Authority, from time to time, shall be followed by the Licensee till such time the market, as determined by the Authority, becomes sufficiently competitive.

8.2 PRICE REGULATION OF OPERATORS WITH SMP

- 8.2.1 If the Authority determines that the Licensee possesses SMP in a relevant market, the Authority may regulate Licensee's prices, terms and conditions, for those Licensed Services where the Licensee possesses SMP, and any Licensed Services incidental thereto as determined by the Authority. The method of regulation shall be determined by the Authority and may include a requirement for prior approval of the Authorities for any price, term or condition, or the maximum or minimum price, or both, for the Licensed Services.

8.3 PUBLICATION OF TARIFFS, NOTIFICATIONS AND DISPLAY OF INFORMATION

- 8.3.1 The Licensee shall comply with all requirements regarding publication of prices, terms, and conditions, notifications and display of information, as established by the Authority from time to time.

PART 9 RELATIONS WITH OTHER OPERATORS

9.1 INTERCONNECTION

- 9.1.1 The Licensee shall, within 15 business days of a written request by another licensee, enter into negotiation, in good faith, for an agreement:

9.1.1.1 to connect and keep connected to the Licensee's Mobile-Cellular System the Telecommunications Network run by the requesting operator at specified points of connection; and

9.1.1.2 to provide such other Mobile Services as are reasonably requested in order for the requesting person to provide Mobile Services to its Customers.

- 9.1.2 The Licensee may not be required to enter into an agreement as required above vide sub clause 9.1.1 where to do so would, in its reasonable opinion and with the consent of the Authority:

9.1.2.1 cause or would be likely to cause danger, damage or injury to any person or to any property;

9.1.2.2 cause damage or otherwise interfere with the running of the Licensee's Mobile System or the provision over its Mobile Services over its Mobile System; or

9.1.2.3 not be technically or economically feasible.

9.1.3 If the Authority determines that the Licensee has SMP in the relevant telecom market under the Rules issued from time to time then termination charges shall be offered at cost based rates with reasonable margin, and

9.1.3.1 transparent, non-discriminatory and objective basis; and

9.1.3.2 subject to reasonable terms and conditions.

9.1.4 Subject to any default charges which may be approved by the Authority, the Licensee shall ensure that within a reasonable specified period of time to be set by the Authority its charges for the provision of Mobile Services in accordance with the above clause shall be cost-oriented and fully justified, such charges to be calculated based on a reasonable assessment of the costs associated with establishing interconnection and providing the requested services.

9.1.5 The Licensee shall provide to the Authority all such technical, operational and accounting information as the Authority may reasonably require in order to ensure that the requirements of this Condition are met. The Authority shall ensure that any information provided to it in accordance with this Condition which is expressed to be confidential is maintained as such.

9.1.6 In the event that the Licensee and the party requesting interconnection are unable to reach an agreement between themselves then either party may refer the matter to the Authority and the Authority shall use its best endeavours to determine the matter within three (3) months of the date of referral. The rates so determined will be binding on both the parties.

PART 10 INFRACTIONS AND SANCTIONS

10.1 SANCTIONS FOR VIOLATIONS OF THE LICENCE

10.1.1 If the Authority determines that the Licensee has violated a provision of this Licence or the Act, Rules or Regulations conditions of this license or any other orders or instructions of the Authorities, the Authority may by order impose one or more of the following sanctions provided in the Act, the Rules and Regulations issued there under.

PART 11 TERMINATION AND AMENDMENT

11.1 TERMINATION OF THE LICENCE

11.1.1 The Licence shall remain in force until it is terminated by one of the following events:

11.1.1.1 The term of the Licence expires without renewal.

11.1.1.2 The Licensee agrees to the termination of this Licence, or

11.1.1.3 The Licence is suspended or terminated in accordance with the Act, Rules or Regulations, or the provisions of this Licence.

11.2 AMENDMENT

11.2.1 This Licence may be amended by written agreement between the Licensee and the Authority subject to the provisions of the Act, Rules and Regulations.

PART 12 GENERAL

12.1 ASSIGNMENT OF RIGHTS

12.1.1 The Licensee shall not assign, transfer, dispose of, or in any manner alienate this Licence or any part thereof, or any benefit or interest therein or hereunder.

12.2 OWNERSHIP AND CONTROL REPORTING

12.2.1 The Licensee shall notify the Authority of the occurrence of any act, agreement or transaction that to its knowledge, directly or indirectly, results in a person or a group acting in common who controls more than 10 per cent of the Voting Interests of the Licensee, having direct or indirect control of 10 per cent or more of those interests.

12.2.2 The Licensee shall give the notification referred to in sub clause 12.2.1 above to the Authority on the later to occur of (a) one day after the date that the Licensee becomes aware of the act, agreement or transaction, or (b) 30 days prior to the completion of the act, agreement or transaction.

12.2.3 For a period of one year following the Effective date, the Licensee shall take all necessary steps to ensure that no transaction described in sub clause 12.2.1 takes place unless the prior consent of the Authority is obtained

12.3 NO LIABILITY BY THE AUTHORITY

12.3.1 No suit, prosecution or other legal proceeding shall lie against the Authority or any member or employee of the Authority in respect of anything done or intended to be done by the Authority in the good faith exercise of its powers subject to section 33 of the Act.

12.4 FORCE MAJEURE

12.4.1 Notwithstanding any thing contrary to the one contained in this license, if the Licensee shall be rendered unable to carry out the whole or any part of its obligations under this License for any reason beyond the control of the Licensee, including but not limited, to acts of God, strikes, war, riots etc, then the performance of the obligations of the Licensee as it is affected by such cause shall be excused during the continuance of any

inability so caused, provided that the licensee has taken all appropriate precautions and reasonable measures to fulfil its obligation and that it shall within 14 days of its first occurrence notify to the Authority the same and cause of such inability and its effects to remove such cause and remedy its consequences.

12.5 COMMUNICATION WITH THE LICENSEE

12.5.1 The Licensee shall maintain on file with the Authority a current address for the Licensee, including telephone number, fax number and email address, and the name and title of a contact person, for the purposes of receiving communications from the Authority. Any notice or other communication to the Licensee permitted under this Licence may be given by hand delivering the same, or by mail, facsimile, or electronic mail addressed to the Licensee at its most recent address on file with the Authority.

PART 13 INTERPRETATION AND DEFINITIONS

13.1 INTERPRETATION

13.1.1 In this Licence, words importing the singular shall include the plural and vice versa.

13.1.2 The headings in this Licence shall not affect its interpretation.

13.1.3 Any reference, express or implied, to any legislation (including rules and regulations issued pursuant to that legislation) includes references to that legislation (and rules and regulations) as it may be amended or modified from time to time.

13.2 DEFINITIONS

13.2.1 The words and expressions used herein but not defined shall have the same meaning as are respectively assigned to them in the Act, the Rules and Regulations and Licenses issued thereunder. Unless the context otherwise requires, the following terms used in this Licence shall have the meanings indicated below:

“Act” means The Pakistan Telecommunication (Re-organization) Act 1996.

“Authority” means the Pakistan Telecommunication Authority established under section 3 of the Act.

“Basic Public Telephone Access Service” means a Telecommunications Service providing access to the PSTN and comprised of technical features which permit the establishing of a telephony channel capable of allowing users to make and receive local, long distance and international real time voice telephone calls.

“Board” means the Frequency Allocation Board.

“Control” means control in any manner that results in control in fact of more than 10% or more, whether directly through ownership of shares or indirectly through an agreement,

arrangement or otherwise, or indirectly through an agreement or arrangement involving next of kin.

"Effective Date" means the date on which this Licence is issued by the Authority and appearing on the first page of this Licence, which date may be 30 days after the Authority receives from the Licensee all initial fees described in sub clause 4.1.1.1 above.

"Federal Government" means the Federal Government of Pakistan.

"Financial Year" means the period of twelve (12) months in respect of which the Licensee is required to make up its Annual Report and Audited Accounts under the Companies Ordinance, 1984.

"Freephone Service" means the service of routing a telephone call with a non-geographic number to a hidden geographic or mobile number, with no charge to the calling party.

"Interconnection Rules" means the Rules relating to interconnection.

"ITU" means the International Telecommunications Union.

"Licence" means this Licence, the terms and conditions applicable thereto, and any amendments thereto.

"Licensed Services" means the Mandatory Services and the Optional Services.

"Licensed System" means the Telecommunication Systems which are in existence and operational or installed or otherwise provided, maintained and/or operated by the Licensee now and at any time and from time to time for the purpose of providing Licensed Services by whatever means.

"Long Distance" means end to end communication between points that are (i) located in different Regions or (ii) such other distance apart as the Authority may by Regulations specify.

"Long Distance and International Licensee" means a licensee licensed to offer end to end communication between points that are (i) located in different Region or (ii) located in Pakistan and outside of Pakistan or (iii) such other distance apart as the Authority may by Regulations, specify.

"Mandatory Services" means the Telecommunications Services that the Licensee must provide under this Licence, and which are described in sub clause 1.1.2 of the license.

"Mobile Communications Service" means a wireless-based Telecommunications Service where the Terminal Equipment may be connected to the Telecommunications System by wireless means and used while in motion.

"Mobile Numbering Portability" means a facility provided by any licensed provider of Mobile Services to another which enables any User to whom a telephone number has been assigned to

continue to be provided with Mobile Services using the same number irrespective of the identity of the service provider providing the service;

"Mobile Virtual Network Operator (MVNO)" means a person who has no license to operate a mobile Telecommunication Network and no frequency assignments, but who will provide Mobile Services to his own users by means of entering into arrangements with a Licensed Operator of a mobile Telecommunications Network for the provision to him of capacity and facilities on that network.

"National Numbering Scheme" means the scheme administered by the Authority which sets out the sequence of numbers or other characters which shall be used to route telephony traffic to specific locations;

"Network Connection Point" is a location at which other Operators can send to or receive from the Licensee voice or data traffic originated by or destined for the Licensee's customers.

"Network Termination Point" means any point or node forming part of Licensed System to which users may connect to the Licensed System by means of a wireless link and Public Telecommunication Network and are necessary at which Terminal Equipment may be connected.

"National Numbering Scheme" means the scheme administered by the Authority which sets out the sequence of numbers or other characters which shall be used to route telephony traffic to specific locations.

"Operator" means any person authorized by a licence issued by the Authority to provide Telecommunication Services or to establish, maintain and operate a Telecommunication System.

"Optional Services" means the Telecommunications Services that the Licensee is authorized to provide under this Licence, and which are further described in sub clause 1.1.3 of the licence.

"Premium Rate Service" means the service of routing a telephone calls with a non-geographic number to a hidden geographic or mobile number, with a premium rate charge to the calling party.

"Private Circuit" means a telecommunication facility that provides for transmission capacity between fixed points within a Telecommunication System and does not enable the user to control the switching functions.

"Public Mobile Payphone Services" means the commercial provision to the public of mobile Public Telephone Access Services.

"Public Voice Telephone Services" means the commercial provision to the public of the transmission and switching of voice in real time between public switched Network Termination Points, enabling any user to use equipment connected to such a Network Termination Point to communicate with a user connected to another Network Termination Point.

"PSTN" means the Public Switched Telecommunications Network in Pakistan, consisting of the telecommunications transmission and switching facilities, including any wire, cable, radio,

satellite, optical or other electromagnetic Telecommunication Systems, that are (i) owned by any Operator, (ii) used for the transmission and switching of intelligence for members of the public, and (iii) located wholly or partly in Pakistan.

“Region” means a telecommunications administrative region, as determined by the Authority.

“Regulations” means all or any regulations issued from time to time by the Authority.

“Rules” means all or any rules issued from time to time by the Federal Government under the Act.

“SMP” means significant market power as defined in the Rules.

“Telecommunication Service” means a service consisting in the emission, conveyance, switching or reception of any intelligence within, or into, or from, Pakistan by any electrical, electro-magnetic, electronic, optical or optio-electronic system, whether or not the intelligence is subjected to re-arrangement, computation or any other process in the course of the service.

“Telecommunication System” means any electrical, electro-magnetic, electronic, optical or optio-electronic system for the emission, conveyance, switching or reception of any intelligence within or into, or from, Pakistan, whether or not that intelligence is subjected to re-arrangement, computation or any other process in the course of operation of the system, and includes a cable transmission system, a cable television transmission system and terminal equipment.

“Terminal Equipment” means equipment which is directly or indirectly connected to any Network Termination Point and which is used directly by users in order to access Telecommunications Services.

“USO” means universal service obligation as defined in any Regulations issued by the Authority from time to time;

“Voting Interest” means, in respect of

- (a) a corporation with share capital, means the vote attached to a voting share,
- (b) a corporation without share capital, means an interest that entitles the owner to voting rights similar to those enjoyed by the owner of a voting share,
- (c) a partnership, a trust, an association or a joint venture, means an ownership interest in the assets of it that entitles the owner to receive a share of the profits of it, to receive a share of the assets of it on dissolution and to participate directly in the management of it or to vote on the election of the persons to be entrusted with the power and responsibility to manage it, and
- (d) a not-for-profit partnership, trust, association or joint venture, means a right that entitles the owner to participate directly in the management of it or to vote on the election of the persons to be entrusted with the power and responsibility to manage it.

"VSAT Services" means satellite communications services utilizing very small aperture terminals capable of satellite communications.

APPENDIX- 1

ROLLOUT TARGET FOR TEHSILS WITH MOBILE SERVICE

Province	Tehsil Headquarters	Tehsil Headquarters with Mobile Service				Minimum number of Tehsils with Mobile Service in Province
		Year 1	Year 2	Year 3	Year 4	
		5%	25%	50%	70%	
Punjab	109					11
BALUCHISTAN	62					6
N.W.F.P	40					4
Sindh	86					9
Total Tehsils with Mobile Service		15	74	149	208	

Details of Tehsil Headquarters are available with the Authority which will be used for reporting progress. Any relaxation in the above targets may be granted by the Authority only in case of genuine difficulties to be supported and substantiated with reasons by the licensee.

APPENDIX - 2

RADIO FREQUENCY SPECTRUM ASSIGNMENT, TERMS AND CONDITIONS

1.1 RADIO FREQUENCY SPECTRUM ASSIGNED TO LICENSEE

1.1.1. Subject to the terms and conditions of this Licence, the Licensee is assigned the following radio frequencies for use in providing the Licensed Services in the State:

- (a) 2 x 4.8 MHz in GSM900 band, and; | For GSM Operator
- (b) 2 x 8.8 MHz in GSM1800 band.

OR

- (c) 2 x 5 MHz in PCS1900 band | For CDMA Operator

OR

- (d) 2 x 1 MHz in 800 MHz band

1.2 FEES RELATED TO RADIO FREQUENCY SPECTRUM

1.2.1 In addition to any other fees payable by the Licensee under this Licence, the Licensee shall pay an annual fee within 120 days of the close of financial year to the Authority on the basis of per MHz per annum for 75% of the FAB budgeted expenditure divided by actual total spectrum allocated to all the mobile operators.

APPENDIX - 3

QUALITY OF SERVICE STANDARDS

- 1.1 The Licensee shall take reasonable and prudent measures to ensure that the Licensed System and Licensed Services are available and operate properly at all times.
- 1.2 Any fault in any component of the Licensed System or Licensed Service shall be repaired as early as possible.
- 1.3 During each calendar month, Licensee shall meet or exceed the following quality of service standards (except for causes attributable to another Operator or a service provider that provides telecommunications services outside Pakistan):

Indicators	Minimum target		Remarks
	Short term (3 years)	Long term (3 years on)	
Service Provisioning			
Service Activation Time			
Post-Paid	2hrs.	1hr.	
Pre-paid	1hr.	30 min.	
Service Quality			
Network Down-time (Average across all sites) ¹	< 2% in any 1 calendar month < 1% over a 1 rolling year period	< 1% over a 1 month period	This relates to the percentage of time network is operating. The objective is to ensure maximum operability of network to the consumers.
Grade of Service (end to end blocking)	<= 4% in busy hour	<= 2% in busy hour	
Community Isolation / Cell-Site Down Time (Average Across All Sites) ²	Not longer than 48 hours	Not longer than 24 hours	
Call Connection Time ³	<= 7	<= 5	
Call Completion Ratio ⁴	>96%	>98%	
Advanced Service Interruption Notice	>=1 day	>=3 days	This notice is normally given when planned system enhancements, updates or upgrades are to be performed.

¹ Network Down-time (Average across all sites) mentioned in MCP-MoIT and is opposite of what was previously mentioned as Network Operability in the QoS document released by PTA

² Cell-site Down-time (for each site) mentioned in MCP-MoIT and is same as what was previously mentioned as Community Isolation in the QoS document released by PTA except for the values

³ Call Connection Time mentioned in MCP-MoIT and is same as what was previously mentioned as post Dialling Delay in the QoS document released by PTA

⁴ Call Completion Ratio mentioned in MCP-MoIT and is same as what was previously mentioned as Service Reliability in the QoS document released by PTA except for the values

Call Quality ⁵	MOS ⁶ Score > 3	MOS Score > 3	This is derived from a scale of 1-5, where 1 stands for poor quality and 5 for excellent. Voice quality is determined through Mean Opinion Score methodology as recommended by ITU-T in recommendation number P.800.
Indicators	Bench Mark		Remarks
	Short term (3 years)	Long term (3 years on)	
Customer's Complaints			
Customer Complaints/100 Subscribers / Month			
Complaints Regarding Billing	<=2 %	<=1 %	
Complaints Regarding Network Operability	<=3 %	<=1 %	
Complaint Turn Around Time			
%age of Billing Complaints Resolved	95 %	98 %	
Within 24 hrs.			
Within 48 hrs.	98 %	100 %	
%age of Complaints (Regarding Network Operability) Resolved			
Within 24 hrs.	92 %	95 %	
Within 48 hrs.	95 %	100 %	
Billing Service			
Billing Complaints	0.2 per 100 bills issued	0.2 per 100 bills issued	Applies to complaints which are valid
Reconnection Time *After Clearing Arrears	30min.	15min.	The time it takes in minutes to reconnect the service once the due payment has been made by the customer
Operator Service			
Operator Assistance Response Time Within 30sec.	>=96%	>=98 %	There should be a queuing system for all operator attended calls i.e.,

⁵ Call Quality mentioned in MCP-MoT and is same as what was previously mentioned as Customer Perceived Connection Quality in the QoS document released by PTA except for the values

⁶ Bit Error Rate measurements can be used as a proxy

Customer Response Time	Complaint	>=96%	>=98%	no call should receive a busy signal; rather each call is queued and maximum calls (as shown in the given benchmark) should be answered within 30 seconds.
Within 30sec.				
Directory Response Time	Assistance	--	>=98%	
Within 30sec				
Calls to Emergency Numbers Handled		>98%	100%	
Within 30 Seconds				
Directory Assistance				
Updated Directory Assistance	Provisioning of redirect mechanism to PTCL directory		Provisioning of updated directory assistance	Cellular operators are currently not providing directory assistance to their subscribers. As cellular operators have a relatively smaller network, the provisioning of directory service is not proposed for them in the short term. However we propose that all the cellular operators should provide redirect service mechanism for accessing PTCL directory assistance to their subscribers. In the long-term period, they are required to provide their own directory assistance service
Network Management & Security				
Voice Connection	Security during	Yes		
Personal Information Security		Yes		
Provisioning of Centralized Customer Complaint Database		Yes		
Provisioning of Computerized Directory Access System		Yes		
Probability of Fraud on User's Account		No		Operator should demonstrate to PTA that fraud controlled procedures are in place.

Annex-I

The clause 12.1.1 of the draft Mobile Cellular License may kindly be read as follows:-

“This license shall not be assigned, sub-licensed to, transferred directly or indirectly, or held in trust for any person, without the prior written approval of the Authority”.

Please also refer to Section 21 of the Telecom Act 1996 and Rule 11 of notified Telecom Rules 2000.

Extracts of Rule 11 of Notified Telecom Rules 2000 are reproduced as under:-

“ Transfer of license and ownership of License:- (1) A license granted under the Act and these rules shall be personal to the licensee and shall not be assigned