



PAKISTAN TELECOMMUNICATION AUTHORITY  
Headquarters, F-5/1 Islamabad  
[www.pta.gov.pk](http://www.pta.gov.pk)

No. 15-46/09(CA)/PTA

July 31, 2009

**CONSULTATION PAPER ON  
IDENTIFICATION OF RELEVANT MARKETS AND  
SIGNIFICANT MARKET POWER (SMP) OPERATORS**

*This Paper intends to seek opinion of all stakeholders including telecom operators and general public. The stakeholders are requested to provide their comments, preferably through e-mail, latest by 31<sup>st</sup> August 2009. The data in the prescribed formats (attached as Annexes to this Paper) should reach this office by 17<sup>th</sup> August 2009. This Paper does not convey, in any sense, any decision of the Authority in respect of the issues discussed in this Paper.*

*Your comments may be addressed to Mr. Zeeshan Gul, Director (Commercial Affairs), PTA Building, F-5/1, Islamabad. Fax: 2878133. E-mail: [zeeshan@pta.gov.pk](mailto:zeeshan@pta.gov.pk)*

**1. INTRODUCTION**

(1) The Pakistan Telecommunication Authority was established under section 3 of the Pakistan Telecommunication (Re-organization) Act 1996 with the objective to regulate the establishment, operation and maintenance of telecommunication systems and the provision of telecommunication services in Pakistan. Under section 4(d) and 6(e) of the Act, the Authority is required to promote the availability of competitive telecommunication services throughout Pakistan and to encourage fair competition in the telecommunication sector.

(2) In order to promote fair competition in the sector, it is essential that operators with Significant Market Power (SMP) status should be identified with respect to each relevant market in order to prohibit them from abusing their dominant positions through anti-competitive practices.

(3) The Pakistan Telecommunications Rules, 2000 have laid down the criteria for determination of SMP operators in the relevant markets. Rule 17 of these Rules states as follows:

“17.— (1) An operator shall be presumed to have significant market power when it has a share of more than twenty-five percent of a particular telecommunication market. The relevant market for these purposes shall be based on sectoral 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 size of the relevant market, its control on the means of access to customers, its access to financial resources and its experience in providing telecommunication services and products in the relevant market.”

(4) In this regard, the Authority declared the following relevant markets along with the operators who have SMP status in these markets vide its Determination No. 15-46/01(Tariff)/PTA dated 25<sup>th</sup> August 2004:

S. No.	Relevant Markets		SMP Operators
	Product / Service Market	Geographical Market	
1.	Local Loop Fixed Line Telecommunications	All Telecom Regions	PTCL
		AJK & NAs	SCO
2.	LDI Fixed-Line Telecommunications	Pakistan	PTCL
		AJK & NAs	SCO
3.	Mobile Cellular Telecommunications	Pakistan	PMCL
		AJK & NAs	SCO
4.	Leased Lines	Pakistan	PTCL
5.	National Interconnection	Pakistan	PTCL & PMCL

(5) Since the issuance of said Determination, the telecommunication markets have changed considerably regarding the size, scope, diversity and dynamics. Keeping this in view, the Authority initiated the consultation process on review of relevant markets in August 2006, however the same could not be concluded due to number of factors including delayed submission of comments, delayed/non-submission of required data

from operators especially for AJK & NA regions and the likeliness that SMP operators determined earlier by the Authority would maintain their SMP status.

(6) In order to assess the recent market conditions, the Authority considers it appropriate to review the existing and other possible relevant markets in consultation with all stakeholders. This Paper is intended to seek opinions of stakeholders on the existing and new possible relevant markets along with the criteria to be used by the Authority for determination of SMP operators in these markets.

## **2. ASSESSMENT OF POSSIBLE RELEVANT MARKETS FOR THE PURPOSE OF DECLARING SMP OPERATORS**

(1) The telecom sector of Pakistan including AJK & NAs can be divided into different relevant markets on the basis of (i) geographical area and (ii) products/ services offered in that particular market segment. Geographic market may continue to be based on the area where an operator is authorized to operate under its respective license. Regarding product/service markets, the Authority in this Paper has proposed few new markets in addition to the earlier determined markets and will assess as to whether these markets should be considered as relevant markets for the purpose of determining SMP operators. Below is the list of product/service markets which shall be discussed as potential relevant markets for the purpose of declaring SMP operators.

<b>S. No.</b>	<b>Product / Service Market</b>
<b><i>Retail Level Markets:</i></b>	
1.	Local Loop Fixed Line Telecommunications Market
2.	LDI Fixed-Line Telecommunications Market
3.	Mobile Cellular Telecommunications Market
4.	Retail Broadband Market
<b><i>Wholesale Level Markets:</i></b>	
5.	Domestic Leased Lines Market
6.	International Leased Lines Market
7.	National Interconnection Market
8.	Call Transit Services Market
9.	Wholesale Broadband Access Market

### ***Retail Level Markets:***

#### **(1) Local Loop Fixed-line Telecommunications Market**

(2) Local Loop Fixed-line Telecommunications Market includes provision of access and call services to end-users (whether through PSTN or WLL) in the Region for which the Local Loop license has been granted by the Authority. Geographically, this product/service market can be further sub-divided into fourteen (14) Regions in Pakistan and three (3) Regions in AJK & NAs.

(3) The Authority vide its above-referred Determination declared PTCL and SCO as SMP operators in all telecom regions of Pakistan and AJK & NAs respectively. The Authority has observed that new entrants have emerged in this segment, especially in WLL, however, lack of competition has been observed in this area as business volume of new entrants is considerably low as compared to incumbent operator(s). Keeping this into consideration, the Authority is of the view that this market should continue to be identified as relevant market for the purpose of declaring SMP operators.

(4) For the purpose of determining the total market size and the market share of a particular operator in Local Loop Fixed-line Telecommunications Market, only the revenues from the provisioning of licensed Local Loop telecommunication services (including WLL) to the subscribers shall be taken into account. Such revenues may include installation/shifting charges, line rental, call charges, etc. For the avoidance of doubt, interconnection revenues from call termination services shall not be included in the total revenue base.

#### **(2) LDI Fixed-line Telecommunications Market**

(5) LDI Fixed-line Telecommunications Market includes provision of long distance and international call services on national basis to end-users. Geographically, this product/service market can be further sub-divided into two (2) markets; Pakistan and AJK & NAs markets.

(6) The Authority vide its above-referred Determination declared PTCL and SCO as SMP operators in LDI fixed-line telecommunication market of Pakistan and AJK & NAs respectively. With the entrance of new LDI operators in the market, the monopoly of

incumbent(s) has ended. However, keeping in view the criteria for measuring the market size for determining SMP, it is expected that still more than 25% of market share belongs to already declared SMP operators. The Authority, therefore, intends to identify this market as relevant market for the purpose of declaring SMP operators.

(7) For the purpose of determining the total market size and the market share of a particular operator in LDI Fixed-line Telecommunication Market, only the revenues from the provisions of licensed LDI telecommunication services shall be taken into account. Such revenues may include call charges for long distance and international outgoing calls, whether collected from the customers directly or from other operators (excluding call transit charges). Revenues generated from calling cards shall also be considered while assessing the market share. However, revenues from international incoming calls shall not be included in the total revenue base.

**(3) Mobile Cellular Telecommunications Market**

(8) Mobile Cellular Telecommunications Market includes provision of wireless-based telecommunication services (other than WLL) on national basis. This product/service market can be further sub-divided into two (2) geographic markets; Pakistan and AJK & NAs markets.

(9) Previously, the Authority declared PMCL (Mobilink) as SMP operator in mobile cellular telecommunication market of Pakistan. The market, with total of five (5) cellular mobile operators seems fairly competitive. However, the determination of this market as relevant or otherwise will be depending on the actual market share of all mobile operators. For this purpose, the Authority will collect data from mobile operators and will assess whether this market should be declared as relevant market or not. Regarding AJK & NAs, four (4) new mobile licenses have been awarded to existing mobile operators of Pakistan i.e. PMCL (Mobilink), PTML (Ufone), Warid Telecom and Telenor besides SCO. The Authority is of the opinion that with the issuance of the new licenses in this region, the dynamics of the market have changed considerably. SCO who was earlier declared as SMP operator might not currently have the majority share in mobile segment of AJK & NAs. The Authority will, therefore, seek fresh data from all mobile operators of AJK & NAs to determine the latest position of market shares and declare SMP operator accordingly.

(10) For the purpose of determining the total market size and the market share of a particular operator in Mobile Cellular Telecommunications Market, only the revenues from the provisions of licensed mobile telecommunication services to subscribers shall be taken into account. Such revenues may include line rental, outgoing airtime, roaming charges, revenue from data services, etc.

**(4) Retail Broadband Market**

(11) Broadband services include the provision of always-on internet connection with a download speed of at least 128kbps connectivity. The broadband services are provided to end-users by means of various technologies like DSL, Cable, WiMax, FTTH, EVDO etc, however the most common technologies in Pakistan are DSL, Cable and WiMax whereas FTTH and EVDO are still in the infancy stage. This product/service market can be further sub-divided into two (2) geographic markets; Pakistan and AJK & NAs markets.

(12) The Authority, while reviewing the markets in 2006, observed that although a company might hold market share above 25% of total broadband market, the total market size was not significant enough for a single operator to dominate this market. Keeping in view the low penetration of broadband in the country and the fact that the market was in a pre-mature stage, the Authority proposed that declaring an operator as SMP in this market would hamper the growth of the broadband in the country. However, after the launch of broadband services by PTCL in 2007, the Authority observed that other broadband service providers, who were also dependant on PTCL for provision of access lines, now came into direct competition with PTCL. Further, the Authority was also approached by DSL operators many times for intervention to address the issue of anti-competitive practices by PTCL i.e. reduction of retail prices, increase in download speeds and undue increase in wholesale broadband prices. Keeping in view concerns of DSL operators and the market position of PTCL, the Authority is of the opinion that retail broadband market should be declared as relevant market for the purpose of determining SMP operators.

(13) For the purpose of determining the total market size and the market share of a particular operator in Broadband Market, all revenues from the provision of broadband

services to subscribers using DSL, Cable and WiMax shall be taken into account. This will include installation charges, monthly rental charges, bandwidth capacity charges etc. For clarification purpose, revenues from sales of consumer premises equipment shall not be included in the total revenue base.

### ***Wholesale Level Markets:***

#### **(5) Domestic Leased Lines Market**

(14) Domestic Leased Lines Market includes provision of wholesale domestic leased line services to other operators. These services can offer point-to-point connectivity and bandwidth or simply dark fibre, and can therefore be used by operators either to provide retail leased line services to end-users or to augment their existing networks. This product/service market can be further sub-divided into two (2) geographic markets; Pakistan and AJK & NAs markets.

(15) Earlier PTCL was the only operator providing domestic leased lines services to other private operators in Pakistan. However, in last few years, new operators have emerged in this segment such as Wateen, Linkdirect, Multinet etc. and the state of monopoly has ended. However, the determination of level of competition in this segment is dependant on the market shares captured by these companies, for which the Authority will collect data and will then declare the SMP operator, if any, accordingly. Regarding, AJK & NAs, SCO is still the main operator providing domestic leased lines services to other private operators in that area.

(16) For the purpose of determining the total market size and the market share of a particular operator in domestic leased lines market, only the revenues from the provisions of domestic leased lines services shall be taken into account. For the purpose of clarification, only the revenues from the original rental or sale by the operator, and not the revenues from reselling of domestic leased lines shall be considered.

#### **(6) International Leased Line Market**

(17) International Leased Lines Market includes provision of wholesale international leased line services to other operators through submarine as well as terrestrial cable system and by other means.

(18) The Authority is of the view that as this market is not fully competitive at this stage and only two operators namely PTCL and TWA are offering international leased circuits to other operators, hence this market should be identified as a relevant market for the purpose of declaring SMP operators.

(19) For the purpose of determining the total market size and the market share of a particular operator in international leased line market, only the revenues raised by the operator from the provisions of international leased lines services shall be taken into account. For the purpose of clarification, only the revenues from the original rental or sale by the operator, and not the revenues from reselling of international leased lines shall be considered.

**(7) National Interconnection Market**

(20) National Interconnection Market includes provision of call termination services to other operators (fixed and mobile), for local, long distance, and/or international calls that terminate on an operator. This product/service market can be further sub-divided into two (2) geographic markets; Pakistan and AJK & NAs markets.

(21) The Authority, vide its Determination No. 15-46/01(Tariff)/PTA dated 25<sup>th</sup> August 2004, identified National Interconnect Market as a relevant market for the purpose of declaring SMP operators and declared PTCL and PMCL as SMP operators in this market. The Authority has observed that although new entrants have emerged in this segment, yet a major portion of total minutes are being terminated on few operators on which other operators are dependant for interconnection purposes. Keeping this into consideration, the Authority is of the view that this market should continue to be identified as relevant market for the purpose of declaring SMP operators.

(22) For the purpose of determining the total market size and the market share of a particular operator in the interconnection market, revenues from call termination of all types of calls, (local, long distance and/or international from fixed and mobile networks) that terminate in the territory of Pakistan or AJK & NA, as the case maybe, shall be taken into account. This calculation shall include revenues from termination of interconnection



traffic received from other networks and a notional value for self-terminated own-network traffic. The notional value for self-terminated own-network shall be calculated by multiplying the number of on-net minutes terminated on the network by the relevant interconnection charge for call termination. However, revenue from traffic carried by LDI operators, that merely transport calls and do not terminate them, would not be included. Moreover, the interconnection revenue shall not include the excess of Access Promotion Contribution over the termination charge received by LL operator on international incoming traffic.

**(8) Call Transit Services Market**

(23) Interconnection always comprises of call origination and call termination; and in some cases call transit, when traffic is carried through the network of a third party. Call transit service means transmission of switched voice service originating from another telecom network. This includes transmission of traffic through the network of a third party both inside a Telecom Region (i.e. Metropolitan Transit) and between Telecom Regions. A third party means a network operator that conveys switched voice services, which does not originate from or terminate on this operator's network.

(24) In Pakistan, there are several LDI operators throughout all Telecom Regions and in most cases they have direct interconnection with other operators. However, if an operator wants to provide voice transmission services within a Telecom Region or between Telecom Regions by means of transit services, then LDI operators in some cases and LL operators in most of the cases are required to acquire the transit services from the incumbent operator. Keeping this into consideration, the Authority is of the view that this market should be declared as relevant market for the purpose of declaring SMP operators.

(25) For the purpose of determining the total market size and the market share, revenues generated from the provisions of call transit services to other operators shall be taken into consideration.

**(9) Wholesale Broadband Access Market**

(26) Wholesale broadband access is composed of the wholesale broadband service provided by the network operator to the broadband service operator. Wholesale broadband access service (also know as local loop transmission capacity) means

provision of network access service to broadband service providers, through technical equipment (e.g. splitter and DSLAM), that enable them to provide broadband services. Alternatively, Optical Fiber Access Networks (OFAN) may also be used for the enhanced transmission capacity.

(27) PTCL, in spite of deregulation in the sector, enjoys a considerable competitive advantage in the provision of network access services to other operators. It is not desirable to build several parallel networks, as it is not economically feasible due to high costs and long construction time. Therefore, operators wishing to have access to wholesale broadband networks do not have other alternatives but to lease the same from PTCL. Keeping this in view the Authority intends to identify this market for the purpose of declaring the SMP operators.

(28) For the purpose of determining the total market size and the market share, revenues generated from the provisions of access services to broadband service providers shall be taken into consideration.

### **3. PROPOSED RELEVANT MARKETS FOR THE PURPOSE OF DETERMINING SMP OPERATORS**

(1) In view of the above, the Authority intends to identify the following markets for the purpose of declaring SMP operators:

S. No.	Relevant Markets	
	Product / Service Market	Geographical Market
<b><i>Retail Level Markets:</i></b>		
1.	Local Loop Fixed-line Telecommunications Market	(i) 14 Regions of Pakistan (ii) 3 Regions of AJK & NAs
2.	LDI Fixed-line Telecommunications Market	(i) Pakistan (ii) AJK & NAs
3.	Mobile Cellular Telecommunications Market	(i) Pakistan (ii) AJK & NAs
4.	Retail Broadband Market	(i) Pakistan (ii) AJK & NAs

S. No.	Relevant Markets	
	Product / Service Market	Geographical Market
<i>Wholesale Level Markets:</i>		
5.	Domestic Leased Lines Market	(i) Pakistan (ii) AJK & NAs
6.	International Leased Lines Market	(i) Pakistan
7.	National Interconnection Market	(i) Pakistan (ii) AJK & NAs
8.	Call Transit Services Market	(i) Pakistan (ii) AJK & NAs
9.	Wholesale Broadband Access Market	(i) Pakistan (ii) AJK & NAs

#### **4. CRITERIA FOR DETERMINING SMP OPERATORS**

(1) Regarding the criteria used for determining SMP operators, the Rules have given the primary criteria i.e. share of more than twenty-five per cent (25%) of a particular telecommunication market in terms of revenues. The Rules have also provided other measures, on the basis of which the Authority may determine that an operator with a market share of less than twenty-five per cent (25%) of the relevant market has significant market power status, or the operator with a market share of more than twenty-five per cent (25%) of the relevant market does not have significant market power status.

(2) The Authority intends to use the primary criteria for the purpose of determining SMP operators, however, if the market share of any operator is close to the threshold value of 25% then the Authority may consider other factors, as given in the Rules, for the determination of SMP operators.

#### **5. PROVISION OF INFORMATION**

(1) The Authority is empowered under the Act to collect information from the licensees for the purpose of carrying out its functions. In order to calculate the total market size and individual market share of each operator in the identified relevant markets, all telecom operators are required to provide information to the Authority in the formats, as set out in Annexes to this Paper.

(2) The Authority is of the view that for the purpose of comparability, the reports from all operators should cover the same period, therefore, the operators should send requisite data (preferably audited) for the period of **July 1, 2008 to June 30, 2009**. This will also help the Authority in considering the latest market conditions while determining the SMP operators.

**DATA FOR DETERMINATION OF SMP OPERATORS**  
**IN**  
**LOCAL LOOP FIXED-LINE TELECOMMUNICATIONS MARKET**  
**(Telecom Region: \_\_\_\_\_)**  
**(For the period \_\_\_\_\_ to \_\_\_\_\_)**

<b>Revenue</b>	<b>Rs.</b>
Installation/Shifting	
Line Rent	
Local Calls	
Intra-Region Calls	
Others (if any)	
<b>Total</b>	

*Note:* The data shall be provided for each Telecom Region (e.g. ITR, KTR etc.) separately, irrespective of number of LL licensees held by an operator. PTCL and SCO shall provide data for each of fourteen (14) Regions and three (3) Regions respectively.

**DATA FOR DETERMINATION OF SMP OPERATORS**  
**IN**  
**LDI FIXED-LINE TELECOMMUNICATIONS MARKET**  
**(Licensed Territory: \_\_\_\_\_)**  
**(For the period \_\_\_\_\_ to \_\_\_\_\_)**

<b>Revenue</b>	<b>Rs.</b>
Long Distance Calls (Intra-Region)	
Long Distance Calls (Inter-Regions)	
International Outgoing Calls	
Others (if any)	
<b>Total</b>	

**DATA FOR DETERMINATION OF SMP OPERATORS**  
**IN**  
**MOBILE CELLULAR TELECOMMUNICATIONS MARKET**  
**(Licensed Territory: \_\_\_\_\_)**  
**(For the period \_\_\_\_\_ to \_\_\_\_\_)**

<b>Revenue</b>	<b>Rs.</b>
Line Rent	
Domestic Calls	
International Outgoing Calls	
Roaming Charges	
Revenue from Data Services (SMS, MMS etc.)	
Others (if any)	
<b>Total</b>	

**DATA FOR DETERMINATION OF SMP OPERATORS**  
**IN**  
**RETAIL BROADBAND MARKET**  
**(Licensed Territory: \_\_\_\_\_)**  
**(For the period \_\_\_\_\_ to \_\_\_\_\_)**

<b>Revenue</b>	<b>Rs.</b>
Installation Charges	
Monthly Line Rental	
Capacity based Charges	
Others (if any)	
<b>Total</b>	



**DATA FOR DETERMINATION OF SMP OPERATORS**  
**IN**  
**DOMESTICE LEASED LINES MARKET**  
**(Licensed Territory: \_\_\_\_\_)**  
**(For the period \_\_\_\_\_ to \_\_\_\_\_)**

<b>Revenue</b>	<b>Rs.</b>
Connection Charges	
Rentals	
Others (if any)	
<b>Total</b>	

**DATA FOR DETERMINATION OF SMP OPERATORS**  
**IN**  
**INTERNATIONAL LEASED LINES MARKET**  
**(Licensed Territory: \_\_\_\_\_)**  
**(For the period \_\_\_\_\_ to \_\_\_\_\_)**

<b>Revenue</b>	<b>Rs.</b>
Connection Charges	
Rentals	
Others (if any)	
<b>Total</b>	

**DATA FOR DETERMINATION OF SMP OPERATORS**  
**IN**  
**NATIONAL INTERCONNECTION MARKET**  
**(Licensed Territory: \_\_\_\_\_)**  
**(For the period \_\_\_\_\_ to \_\_\_\_\_)**

Rs.

<b>Revenue from terminating calls</b>	<b>Fixed-to-Fixed/Mobile</b>	<b>Mobile-to-Fixed/Mobile</b>	<b>Self-terminated Own-network</b>	<b>Total</b>
Local Calls				
NWD Calls				
International Incoming Calls				
Others (if any)				
<b>Total</b>				

*Note:* The notional value for self-terminated own-network shall be calculated by multiplying the number of on-net minutes terminated on the network by the relevant interconnection charge for call termination.

**DATA FOR DETERMINATION OF SMP OPERATORS**

**IN**

**CALL TRANSIT SERVICE MARKET**

**(Licensed Territory: \_\_\_\_\_)**

**(For the period \_\_\_\_\_ to \_\_\_\_\_)**

<b>Revenue</b>	<b>Rs.</b>
Metropolitan Transit	
Long Distance Transit	
<b>Total</b>	

**DATA FOR DETERMINATION OF SMP OPERATORS**  
**IN**  
**WHOLESALE BROADBAND ACCESS MARKET**  
**(Licensed Territory: \_\_\_\_\_)**  
**(For the period \_\_\_\_\_ to \_\_\_\_\_)**

<b>Revenue</b>	<b>Rs.</b>
Monthly Rentals	
Others (if any)	
<b>Total</b>	