

INFORMATION MEMORANDUM

THE AWARD OF 1800 MHZ SPECTRUM FOR NEXT GENERATION MOBILE SERVICES (NGMS)

Pakistan, 31st March 2017

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1 Executive summary

1.1 Preamble and Purpose

Pakistan Telecommunication Authority (PTA), established under Section 3 of the Pakistan Telecommunication (Reorganization) Act, 1996 ("The Act"), in compliance with the policy directive from the Federal Government, is proceeding to award License for use of spectrum in the 1800 MHz band and to grant the successful bidders the right to establish, maintain and operate Next Generation Mobile Networks (NGMN) and to provide Next Generation Mobile Services (NGMS) across Pakistan. The process of the award is titled as Next Generation Mobile Services Award (NGMSA).

This Information Memorandum (IM) sets out the rules, process, planned timetable and other background information to help prospective Applicants to decide if they wish to apply to participate in the NGMSA. An overview of the Pakistan's telecommunication sector is given in **Annexure A**.

Prospective applicants are advised to seek their own expert advice on whether or not to participate in the award process and on any other matters concerning financial, legal, technical or other implications of the award process and associated policies.

PTA may also conduct an information session for prospective Applicants to explain the auction process and rules and to respond to all Applicants' questions and concerns. This information session may take place after the IM is published and its only purpose will be to clarify any questions that prospective Applicants may have about the application process and auction itself.

While the information contained in this IM is accurate as at the time of posting on PTA's website, Neither PTA, nor GoP or any of their respective officers or employees or advisers make any representation or warranty to have any liability in relation to the accuracy or completeness of the information contained in this IM or any other written or oral information made available to any interested party or its advisers. PTA and GoP expressly disclaim any responsibility or liability in respect of any such information or any inaccuracy in this IM or omission from this IM.

Note that specialist terms used in this IM are defined in Section 7.

1.2 Legal Framework

The legal framework applicable to all Applicants is:

- The Pakistan Telecommunication (Re-Organization) Act 1996, including all Rules and Regulations made thereunder from time to time.
- All relevant policies / directives of GoP.
- All PTA determinations/directives/guidelines/SOPs issued from time to time.
- For information, the key organizations of the institutional framework, in addition to PTA, are the Ministry
 of Information Technology (MoIT) and the Frequency Allocation Board (FAB). The functions of these three
 organizations are described on their respective websites.

PTA: http://www.pta.gov.pk
MOITT: http://www.moitt.gov.pk
FAB: http://www.fab.gov.pk/

All documents relevant to the legal framework are available on the PTA website. For convenience, some are listed below, with a hyperlink to their location on the website:

• Telecommunications Policy 2015

• Policy Directive for the Spectrum for Next Generation Mobile Services in Pakistan 2017

1.3 Overview of the Spectrum Included in the Award

The NGMSA is for Licenses to use spectrum from internationally harmonised band in 1800 MHz band. The spectrum included in the NGMSA comprises:

• 10 MHz of paired spectrum in the 1800 MHz band

The current allocation of spectrum bands is defined in the Pakistan Table of Frequency Allocations¹ which is consistent with the International Telecommunications Union (ITU) allocations for Region 3. The Table of Frequency Allocations provides for all of these bands to be allocated to mobile services on a primary basis in Pakistan.

1.4 Award Process

The 15 years' License to use the NGMS spectrum will be awarded by means of a two stage auction process. The draft license template is attached as **Annex-F** to this IM.

1.4.1 Stage-1 of Auction (Prequalification Stage Including a Pre-Bid Offer)

In this stage, Applicants will be required to provide information as per the application form given in **Annex B**. Each Applicant will also be required to submit along with its application an irrevocable Pre-bid Deposit Form. The Pre-bid Offer shall comprise of 2x10 MHz of spectrum in the 1800MHz band. Applicants will be required to submit a Pre-bid Deposit at this stage for 15% of the base price as per **Annex E**.

The information submitted by Applicants will be assessed by PTA and those considered suitable for participation and have submitted the correct Pre-bid Deposit will be informed as per the timelines set, that they have qualified for the next Stage.

1.4.2 Stage- 2 of Auction

In this stage, if only one application is received from bidder, PTA will award the spectrum rights to the qualified Applicant directly on the base price. However, PTA reserves the right to modify, amend, supplement, cancel, annul or replace any or all of the auction process at any stage without incurring any liability to the affected bidders or any obligations thereunder what so ever.

Where multiple bidders have submitted the applications, PTA will conduct bidding to assign the spectrum rights. Section 4 describes this process in detail.

1.4.3 With reference to Section 3.5, License will be awarded to successful bidder subject to completion of stage-1 or stage-2 (whichever is applicable) as mentioned above.

1.5 Overview of Time Scales

PTA reserves the right to determine the overall timetable of the NGMSA process, taking account of the circumstances prevailing at the time. However, in order to assist potential bidders in the preparation of their applications,

Table 1 below provides an indication of the intended process timetable:

¹ See http://www.pta.gov.pk/media/Pakistan_Table_of_Frequency_Allocations.pdf

Table 1: Timeline for the NGMSA Process

Process step	Timeline (T0* + No of Days)	
Publication of Information Memorandum	Т0	
Consultation period ends	T0 + 15	
Notification of changes to the NGMSA rules and procedures if any.	T0 + 20	
Information session for prospective bidders (last opportunity for bidders to ask questions and get clarification on specifics of the auction.) (If required)	T0 + 24	
Deadline for Prospective applicants to submit Application form with Pre-	T0 + 31	
Bid deposits(Annex B and Annex E)	(4 pm Pakistan Standard Time)	
PTA notifies pre- qualified applicants	T0 + 35	
Information package containing confidential information and instructions to participate in the auction is provided to qualified applicants	T0 + 37	
Mock Auction for Qualified Bidders (if required)	T0 + 38	
Bidding starts	T0 + 42	
Provisional winners announced	On completion of the auction	
Written intimation to winners	Within seven days of announcement of provisional winner	
License payments due	According to the schedule established in Section 2.9 of this IM.	
Granting of Licenses/Assignment of right to use spectrum	Within 30 days of having received the 50% or 100% payment of the Initial Spectrum Fee as appropriate	
*T0 is 4th April 2017 subject to confirmation of publication of last advertisement		
These dates are subject to change as deemed necessary by PTA.		

1.6 Measures to Promote Market Entry, Innovation and Competition

The NGMSA will promote market entry, innovation and competition through a number of GoP policies and directives. These include, but are not limited to:

Market Entry 1.6.1

All the existing telecom operators and new entrant(s) can participate in the auction process.

A Potential New Entrant in the Cellular Mobile Market gaining spectrum in the NGMSA shall have the right to negotiate national roaming with existing Operators. A NGMS licensee that is a New Entrant in the Cellular Mobile Market will also have a longer period to fulfil rollout obligations.

1.6.2 National Roaming

All Operators are permitted to negotiate national roaming agreements with one or more Operators as per Telecommunications Policy 2015.

1.6.3 International Roaming

Operators shall use their best efforts to enter into the necessary agreements with foreign operators in order to enable and provide international roaming. Operators must follow PTA guidelines on international roaming which may be issued from time to time.

1.6.4 Infrastructure Sharing and Spectrum Trading

Infrastructure sharing shall be considered as a matter of first priority by the Operators at the time of roll out. The NGMS Licensees are required to share infrastructure with other operators as per PTA's directives and guidelines. Licensees may enter into commercial arrangement with each other for active sharing and spectrum sharing or trading however, such arrangement shall take effect in the light of Telecommunications Policy 2015 and subject to the formal approval and comprehensive framework of PTA.

1.6.5 Mobile Virtual Network Operators (MVNOs)

Commercial arrangements for MVNOs will be in line with the Framework for MVNO Services in Pakistan, as revised by PTA from time to time.

1.6.6 Numbering

If NGMS spectrum rights are awarded to an existing Operator, then numbering resources already allocated to that Operator may also be used for NGMS. If an Operator instead wishes to have separate numbering series for NGMS, the same shall be allocated to it from the National Numbering Plan relating to mobile cellular services. New Operator can request numbering series as per the procedure and regulations devised by PTA.A New Entrant in the Cellular Mobile Market shall be provided a unique network identity code.

1.6.7 Mobile Number Portability (MNP)

The Licensee shall implement MNP with all Mobile Cellular Operators as it is implemented in Pakistan. For this purpose, all Operators are required to contribute to the Pakistan Mobile Database (PMD) Company in accordance with MNP Regulations 2005.

1.6.8 Quality of Service (QoS)

Winner of the spectrum for NGMS shall provide services with QoS standards defined in section 2.3.

1.7 Structure of the Information Memorandum

The remainder of this IM is structured as follows:

Section 2 – Description of spectrum available and the License templates

Section 3 – Description of the Award Process

Section 4 - Overview of the bidding procedure

Section 5 - Legal terms & conditions, including payment terms, relating to the NGMSA

Section 6 – Detailed application instructions

Section 7 - Definition of terms

2 License Description

2.1 License Structure

2.1.1 Overview

A License for spectrum awarded in the NGMSA provides exclusive right for use of the frequencies assigned to that Operator. The services permitted are governed by each specific License (see 2.1.3 below). The territorial extent of each License is the whole of Pakistan **excluding** Azad Jammu & Kashmir (AJ&K) and Gilgit Baltistan (GB).

2.1.2 License Duration

The duration of the License shall be fifteen (15) years from the License Effective Date, renewable on terms & conditions applicable under GoP policy applicable at the time of renewal.

2.1.3 NGMS License

See **Annex F** for NGMS License template. If there are any differences between the Licensee's rights and obligations described in this IM and Annex F, then the definition in Annex F shall prevail.

2.2 Definition of Spectrum Being Offered

Pakistan's current frequency assignments are available on FAB website (www.fab.gov.pk). Offered Spectrum for the auction is given in Section 1.3 of this IM.

2.2.1 Limitations on Use

The successful bidder of the spectrum will be given a License to establish, maintain and operate a technologyneutral network and offer licensed services.

In Pakistan excluding Azad Jammu & Kashmir (AJ&K) and Gilgit Baltistan (GB)to consumers for meeting the roll out and QoS obligations for the Next Generation Mobile Services. The licensee shall ensure compliance with 3GPP standards and will have to take all possible measures while installing its network to ensure that the out-of-band emissions are under the permissible limits defined by ETSI, ANSI, ITU, IEC standards. The licensee will have to take all possible measures while installing its network that ensures that there is no harmful interference to other licensees' networks. In case there is any interference experienced by other operators, the licensee will have to make adjustments to its network for elimination of interference as per the above referred standards.

The licensee will have to inform PTA about the technology being deployed for provision of next generation mobile services before commencement of commercial services.

The assigned spectrum must not be used to provide Fixed Services² or any services not explicitly authorized under the license conditions.

The License shall be personal to the licensee and shall not be assigned, sub-licensed to, or held on trust for another person, without the prior written approval of PTA.

² The provision of telecommunications services by means of a fixed connection or a wireless system providing public fixed network connections to

2.2.2 The Lot Definition

As part of the consultation process to determine the number and bandwidth of the spectrum lot that should be made available, PTA took into account a number of factors, including but not limited to the following:

Competition - Competition is essential to ensure service quality and value within Pakistan.

Market Demand – The Telecommunications market in Pakistan is highly competitive and it is PTA's goal to release the necessary spectrum to the mobile operators for the continuation of quality services and expansion of their networks for provision of high quality Next Generation Mobile Services.

Efficiency – PTA seeks to ensure that spectrum is granted to those who value it the most and who will make the most efficient and effective use of it. Awarding the spectrum via auction for the next generation services ensures that parties placing the most commercial value on the spectrum acquire it.

Investment — GoP wishes to encourage the maximum possible investment in Next Generation Mobile Services across Pakistan, as it will help drive improved economic and social conditions across the country.

GoP has decided to assign 2x10 MHz from the 1800 MHz band. Spectrum will be assigned as specific lot, structured on the following basis:

Table 2: Frequency lot included in the NGMSA

Spectrum Band	Spectrum Quantity	Spectrum Range in Band 3
1800 MHz	2x10 MHz	Exact lot details will be finalized later as per the re-farming plan

Hence, applicants are required to make Initial Pre-Bid Deposits at the time of application for a lot of 2x10 MHz of 1800 MHz spectrum.

2.2.3 Technical Requirements

The spectrum in the NGMSA will be assigned on a technology neutral basis for next generation mobile services; however some constraints are required for spectrum management reasons.

Technologies implemented shall use the Frequency Division Duplex (FDD) access method and be compliant with the out-of-block (OOB) emission limits stipulated in the relevant ETSI, ANSI, ITU, 3GPP, 3GPP2, IEC standards. The Licensee shall be solely responsible for meeting all regulatory obligations and preventing any harmful radio frequency interference caused by its network to other users of the radio frequency spectrum. The Licensee will also be required to make all reasonable efforts to coordinate use of the spectrum with operators using adjacent frequencies as identified by the FAB.

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, base station site clearance, technical characteristics, power and aerial characteristics.

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

2.3 Coverage and Quality of Service Obligations

PTA is keen to encourage the provision of NGMS throughout Pakistan. Operator that obtains spectrum in the NGMSA will be obliged to roll out its network as defined in the License, a license template is attached at Annex F.

The successful applicant shall provide the quality of service defined in its License within the geographic areas and meet the rollout schedule detailed in Table 3 below:

Table 3: Minimum rollout obligations associated with the 1800 MHz spectrum

Phase	Time from the License Effective Date		Coverage requirements*
	For a New Entrant	Existing NGMS Operator	
First phase	1 year and six months	1 year	Provide NGMS presence in 5 cities i.e. 4 Provincial and Federal Capital.
Second phase	3 years and 6 months	3 years	Coverage of 10 further cities, minimum one in each province
Third phase	6 years	5 years	Provide coverage of 50% of District headquarters
Fourth phase	8 years	7 years	Provide coverage of 25% of Tehsil headquarters
*all timelines are from the effective date of the license			

The Licensee shall maintain the quality of service throughout the coverage area as defined in the License. This will include Key Performance Indicators (KPIs) to ensure that voice and data performance levels achieve the desired standards. KPI thresholds must be achieved as summarised in Table 4.

Table 4: Quality of Service Requirements /KPIs

QOS parameter	Requirements		
General network requirements			
Network down time	Less than 1% of time (excluding forced shutdown)		
Voice requirements			
Grade of Service (end to end blocking)	Must not exceed 2%		
Call connection time	Less than or equal to 6.5 seconds		
Call completion ratio	At least 98% of call shall complete without being dropped.		
Mean Opinion Score (Average of, Average A2B plus Average B2A)	Better than or equal to 3. As recommended by ITU-T in recommendation number P.862.2 (PESQ), P.862.3 (POLQA) or latest ITU/Relevant forum recommendation		
SMS			
SMS success rate	Greater than 99%		
End to end SMS delivery time	Less than or equal to12 seconds		
Broadband data service	performance		
RAB setup success rate	Greater than 97% for three years from the date of commencement and 98% thereafter		
Session abnormal release rate	Less than 2%		
Inter System Handover (ISHO) success rate for CS Voice (only)	Greater than or equal to 94% for three years from the date of commencement and 98% thereafter		
Broadband data service requirements for NGMS licensee with LTE technology (4G)			
Data throughput	A minimum user data rate of 2 Mbps typical		
Signal Strength (RSRP)	A minimum outdoor signal strength of -100 dBm must be achievable with 90% confidence within the defined LTE coverage area		

A full list of performance requirements is defined in the NGMS License template in $\mathbf{Annex}\ \mathbf{F}$ and may be amended from time to time by PTA as deemed appropriate.

2.4 Other Obligations

2.4.1 National Roaming

Any Operator is free to negotiate a commercial arrangement with one or more other Operators for national roaming. Clause 7.6 of the Telecommunications Policy 2015 encourages national roaming as a means of creating nationwide services as expeditiously as possible at mutually acceptable terms to the Operators involved.

2.4.2 International Roaming

Operators shall use their best efforts to enter into the necessary agreements with foreign operators in order to enable and provide international roaming. Details will be provided to PTA as and when required. Operators must follow PTA guidelines on international roaming as may be issued from time to time.

2.4.3 Infrastructure Sharing

A NGMS Licensee is required to share its existing and future infrastructure with other NGMS Licensees. At minimum, the infrastructure to be shared shall be: site sharing and mast sharing, as defined by the GSM Association.

The precise commercial structure of any bilateral or multilateral infrastructure sharing is to be agreed between the Operators involved and then presented to PTA for approval. By way of non-binding illustration, such a structure could possibly be outsourced to a third party, a separately-run joint venture of the Operators, a regional division of lead responsibility by Operators, or a site-by-site commercial arrangement, or some other agreement. However, such arrangement shall take effect in the light of Telecommunications Policy 2015 and subject to the formal approval and comprehensive framework of PTA.

2.4.4 Local Manufacturing, Assembly, Transfer of Technology and Research & Innovation

The NGMS Licensee should encourage local manufacturing, assembly, Transfer of Technology and Research & Innovation by ensuring that an adequate percentage of the equipment (both on the network side and devices) used is locally manufactured.

2.4.5 Mobile Virtual Network Operators (MVNOs)

Commercial arrangements for MVNOs will be in line with the Framework for MVNO Services in Pakistan, as revised by PTA from time to time.

2.5 License Terms and Conditions

The service obligations defined in the License templates are summarised in Table 5. These are presented in detail in the License template in $\mathbf{Annex}\ \mathbf{F}$.

Table 5: Other service obligations

Obligations	Requirements
Emergency services	Provision of mandatory emergency services as determined by PTA.
Lawful interception	Cooperation with Law Enforcement and Security Agencies under the provisions of Pakistan Telecommunication (Re-Organization) Act 1996 amended in 2006.
Non-discrimination	The services shall not discriminate between end-users, in particular with regard but not limited to, quality, availability and reliability of the service.

Obligations	Requirements
Tariffs	Tariffs must be offered in accordance with Telecom Consumer Protection Regulations 2009 and other related regulations/determinations available or issued from time to time. The Tariffs shall not be unfair, burdensome or anti-competitive.
Billing	Provision of detailed and precise billing to end-users upon request.
Data protection	Compliance with laws regarding privacy and data protection.
Provision of information	The licensee shall provide technical details for the deployed network equipment upon request. The licensee shall provide up to date information regarding network coverage.
Interconnection	The licensee shall provide interconnection for voice services as defined in the License and data connection to the public internet.
Site clearance	Obligations with regard to clearance of cell sites as per Standard Operating Procedure of PTA/FAB. In addition to SOP for BTS site clearance, the licensee shall follow "Protection from Health Related Effects of Radio Base Station Antennas Regulation 2008" and its amendment thereto, while installing and operating radio base station antennas.
Access for inspection	The licensee shall provide access to all radio equipment for inspection upon request.
National security	Obligations with regard to national security including but not limited to provision of Lawful Interception System, CDRs, IPDR.
Relations with customers	Requirements for the Licensee to submit standard service contracts and Code of Commercial Practice to PTA for approval and establishment of complaint system.
Network Coverage	The Licensee shall identify its coverage area to its customers.
Privacy of Communication	The licensee shall not disclose the contents of the communication made over its network except for conditions mentioned in the license and shall follow "Protection from Spam, Unsolicited, Fraudulent and Obnoxious Communication Regulations 2009" and relevant license conditions to ensure and protect interest of telecom consumers.
Quality of Service	The Licensee shall at all times meet or exceed the Quality of Service standards described in Appendix-3 of the Licence template. In addition, any QoS KPIs devised in future and regulations made thereto by the Authority for the Licensed Services shall be strictly followed by the Licensee.

2.6 Tariffs

2.6.1 Price Regulation of Operators with SMP

If PTA determines that the Licensee possesses SMP in a relevant market, the Authority may regulate Licensee's prices, terms and conditions for those Licensed Services in the SMP market 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 Authority for any price, term or condition, or the maximum or minimum price, or both, for the Licensed Services.

2.7 Interconnection

- 2.7.1 The telecommunication system of the licensee is deemed to be connectable system for the purpose of the Interconnection.
- 2.7.2 Interconnection between the telecommunication system of the licensee and the telecommunication system of other operators is governed by the Interconnection Guidelines 2004.

2.8 General Conditions

2.8.1 Operation of Licensed Services

- 2.8.1.1 The Licensee shall ensure that the Licensed System and the Licensed Services do not cause any damage to, or interference with, any Telecommunications System or Telecommunications Services of any other operator or any other radio frequency spectrum not assigned to the Licensee.
- 2.8.1.2 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 relevant law, rule or regulation.

2.8.2 Discontinuation of Services

The Licensee shall not discontinue providing a category of Licensed Services in any area 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.

2.8.3 Monitoring

The Licensee shall provide, at its own cost, suitable equipment at premises designated by the Authority and will ensure its upgrading, security and safety, in order to monitor the communications for the purpose of; measuring and recording traffic; call detail records; curbing of Grey International Telephony Services including SIM box Detector 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.

2.9 Fees

Table 6 below describes the relevant fees associated with the NGMS License. In addition to Table 6 all relevant taxes, fees, levies imposed by GoP shall be applicable.

Table 6: Fee structure

Fee/charges	Amount due
Initial Spectrum Fee (ISF)	Initial Spectrum Fee (ISF) shall be the auction winning price in NGMSA process.
	Initial Spectrum Fee shall be paid in US Dollars or its equivalent in Pak Rupees to be converted at the National Bank of Pakistan (NBP) Telegraphic Transfer (TT) selling rate prevailing on the day preceding the date of payment.
	The Licensee may opt for 100% payment of the ISF given in clause 4.1.1 of the License as a onetime upfront amount within 30 days of the Auction.
	OR
	Pay 50% payment of the ISF given in clause 4.1.1 of the License within 30 days of the Auction and the remaining 50% of the ISF is payable in 5 years in 5 equal annual instalments with cumulative mark up rate at the rate of one year LIBOR rate + 3% for the period from the Effective Date of the License to the payment date. Additionally, if auction winner intends to pay the remaining balance liability on account of ISF at any time before the end of 5 years, it would be acceptable and without any pre payment penalties. However, mark up at LIBOR + 3% shall be payable on the balance amount till the date the payment is made. In case of delay in payment to the Authority, the Licensee shall pay Late Payment Additional Fee @ 2% per month or part thereof from the due date till the date of payment. The license shall be suspended / terminated on account of non-payment of any instalment of ISF, the outstanding amount shall be recovered as arrears of land revenue in addition to any other penalties to which the licensee may be liable under the Act/Rules/Regulations and terms and conditions of the license.
	In case the 100% ISF (if it is opted to be paid 100% upfront), or first 50% payment (if it is opted to be paid in instalments) or any of its instalments becomes overdue, the Authority may serve upon

Fee/charges	Amount due
	the Licensee a show cause notice stating the default and seeking explanation, allowing it not less than 7 days, as to why its license shall not be suspended or revoked. On considering the Licensee's explanation the Authority may suspend or revoke the License as deemed appropriate. The Authority and the Licensee have agreed to this term in the light of the spirit of Section 28 of the Contract Act, 1872 and despite Section 23 of the Act read with Rule 9 of the Pakistan Telecom Rules, 2000.
	Note: For the purpose of clarity, calculation of mark-up for the 1st instalment, the one year LIBOR rate prevailing at the date of issuance of license shall be used and for subsequent years the one year LIBOR rate prevailing on the due date of previous (last year's) instalment shall be used.
Annual License Fee (ALF)	The Licensee shall pay Annual License Fee (ALF) to the Authority, an amount equivalent to 0.5% of the Licensee's annual gross revenue from Licensed Services minus inter operator payments and related PTA / FAB mandated payments. In the case of PTA / FAB mandated payments, this deduction will be allowed if these amounts have actually been paid and not on accrual basis. However, Initial Spectrum Fee, Initial License Fee leased line charges, late payment additional fee, penalties, collection charges, and other expenses imposed by PTA, if any, shall not be deducted from the gross revenue.
Universal Service Fund (USF) Contribution	The Licensee shall pay annual Universal Service Fund contribution to the Federal Government, an amount equivalent to 1.5% of the Licensee's annual gross revenue from Licensed Services minus inter operator payments and related PTA / FAB mandated payments. In the case of PTA / FAB mandated payments, this deduction will be allowed if these amounts have actually been paid and not on accrual basis. However, Initial Spectrum Fee, Initial License Fee, leased line charges, late payment additional fee, penalties, collection charges, and other expenses imposed by PTA, if any, shall not be deducted from the gross revenue.
R&D Fund Contribution	The Licensee shall pay Annual R&D Fund contribution to the Federal Government, an amount equivalent to 0.5% of the Licensee's annual gross revenue from Licensed Services minus inter operator payments and related PTA/FAB mandated payments for Research and Development Fund managed by the Federal Government. In the case of PTA / FAB mandated payments, this deduction will be allowed if these amounts have actually been paid and not on accrual basis. However, Initial Spectrum Fee, Initial License Fee, leased line charges, late payment additional fee, penalties, collection charges, and other expenses imposed by PTA, if any, shall not be deducted from the gross revenue.
Annual Spectrum Administrative Fee (ASAF)	The Licensee shall pay to the Authority Annual Spectrum Administrative Fee (ASAF), an amount calculated on the basis of the proportion of spectrum allocated to the Licensee out of the total spectrum allocated to all Cellular Mobile Operators and NGMS licensees to recover 75 % of FAB's total budgeted expenditure for the next Financial Year. The ASAF will fall due on 1st of June every year for the next financial year and is payable in advance latest by 30th June of every year. Any change in payment mechanism of ASAF in future in light of Telecommunication Policy 2015 will be applicable. Any change, in payment mechanism of Annual Spectrum Administrative Fee (ASAF) will be carried out in light of Telecommunication Policy 2015.
Annual Numbering Charges	For each number allocated to the Licensee, the Licensee shall pay to the Authority at commencement of each financial year the Annual Number Charges as mentioned in the Numbering Allocation and Administration Regulations, 2011, as amended from time to time. The annual Numbering Charges will fall due on the first of June every year and are payable latest by 30th of June every year.

2.10 Base Price

The Base Price for the lot is detailed in Table 7. This Base Price will be the starting price for the lot offered in the auction as specified below:

Table 7: Base price

Spectrum Band	Spectrum quantity	Base Price
1800MHz	2x10 MHz	USD 295 Million (USD 29.5 Million /MHz)

Spectrum lot will not be sold at a price lower than the Base Price shown in Table 7:

3 Award Process

3.1 Overview of the NGMSA Process

The award process will consist of the following steps:

The consultation period will start with the publication of the Information Memorandum ("IM") on the date indicated in the award timetable of Section 1.5. During this period prospective bidders will be allowed to submit comments and questions to PTA. PTA may respond to questions and comments and publish the sameon the website without providing the identity of the party making the question or comment. No prospective applicant will receive special treatment or receive special information from PTA in this process.

PTA reserves the right to determine what comments are relevant and require modification of the Award process.

All questions and comments can be submitted by email and/or in writing to the following addresses:

In writing: in a sealed envelope labeled "NGMSA-Consultation Process" and send to

Director (Wireless)

Pakistan Telecommunication Authority

H/Qs F-5/1, Islamabad 44,000

Pakistan

Phone: (+92 51) 2878111

Fax: (+92 51) 2878129

By email: "NGMSA-Consultation Process" as Subject and send to:

ngmsauction2017@pta.gov.pk

Queries received 24 hours before the end of the consultation period will be responded by publishing on PTA's website.

3.1.1 Information Session for Prospective Bidders

Following the consultation period there will be an information session for prospective applicants so that they can better understand the award process. This session would be the last opportunity for prospective applicants to ask questions and get clarification on specifics of the application process and rules. During this session PTA will only respond to clarification questions related to the award process itself and only prospective applicants will be allowed to participate.

Applicants must register with PTA prior to attending this session by sending an email to:

ngmsauction2017@pta.gov.pk

3.1.2. Application Process

The application procedure will start on the date indicated in section 1.5. This will allow sufficient time for prospective applicants to evaluate the business opportunity and to prepare the required documentation to participate in the Award process. The award process will comprise two stages. In Stage 1, applicants must submit by the date indicated in the award timetable of Section 1.5 both *Annex B "Application Form"* and *Annex E "Pre-bid Deposit"* of this IM along with all the required supporting documentation. Applicants are also required to submit a Pre-bid Deposit at this stage. PTA will review the Application Form and if PTA deems an applicant qualified to participate in the award process and it has paid the correct Pre-bid Deposit, then PTA will proceed to notify that applicant that it has qualified to proceed to the second stage.

Stage-1 of Auction: Pre-Qualification of Applicants

Application Form

On their applications forms, applicants will be asked to provide an Authorised Contact Representative for purposes of receiving all information related to the award process and also the bidder information package if qualified to participate in the second stage. Please note that this main contact person need not be the Applicant's Authorised Representative or CEO, but rather a person that can be fully available during the entire process.

Upon receipt of the application forms, PTA will review whether or not the applicant complies with all the requirements. Where an application is deficient, PTA may ask the applicant to provide any missing information or additional documentation. Applicants will provide the information requested as per timetable at section 1.5.

Pre-Bid Deposit Form

Along with their application forms, applicants must complete the *Pre-Bid Deposit Form* in *Annex E* of this IM, where applicants will be asked to state interest in 2x10 MHz lot in the 1800MHz spectrum it is willing to buy at the base price. The spectrum included in the Pre-Bid Deposit form is a binding commitment.

Applicants must also submit a Pre-bid Deposit for 15% of the base price of the amount of spectrum they stated in their Pre-Bid Deposit Form in order to qualify to participate in the auction. Pre-bid Deposits are due at the same time as the Application submission date.

The PTA will analyse the applications and decide how the process should proceed into the second stage of auction.

Stage- 2 of Auction: Qualification of Applicants to Participate in Bidding Stage OR Granting of Licenses due to single bid received

- a) In case of multiple bids, PTA will notify the pre qualified applicants for participation in the bidding process.
- b) PTA will provide authorized representatives of pre- qualified applicants with an information package to participate in the bidding.
- c) In case of single bid, PTA will declare the qualified applicant as successful bidder and notify the same as per Section 1.4 above.

3.2 Bidding

The bidding will start on the date indicated in Section 1.5 in accordance with the "Information Package" provided to the pre-qualified applicants.

3.3 Announcement of Provisional Winners

In case where bidding is not required due to receipt of single bid, applicant that submitted a Pre-bid Offer supported by a correct pre-bid deposit will be awarded the license for use of spectrum. The Government, however, reserves the right to withhold the spectrum for a future auction or award it as deemed appropriate.

In case where bidding is held, successful winning bidder will be notified in writing including spectrum won and the price payable.

3.4 License Fees

Fees will be according to the schedule established in Section 2.9 of this IM.

3.5 Grant of License

License will be offered within 30 days of having received payment of Initial Spectrum Fee in line with section 2.9 read with section 4.1.5 of the IM.

4 Overview of the Bidding Procedure

This section will explain the bidding procedure in detail.

4.1 Bidding Procedure

- 4.1.1 The process to be adopted by PTA to assign spectrum lot where multiple applications are received will be an **open out-cry auction**. However, PTA reserves the right to adopt a different bidding process or other transparent, non-discriminatory, open and competitive process if PTA considers it appropriate.
- 4.1.2 PTA shall initiate the process of conducting an open out-cry auction by sending an information package to the applicants that are eligible to participate in the open out-cry auction. The information package provided to applicants will include but not limited to the following information:
 - 4.1.2.1 Details of the auction committee formulated to conduct the open out-cry auction
 - 4.1.2.2 Identification of radio frequency spectrum for bidding.
 - 4.1.2.3 The number of eligible applicants for the auction.
 - 4.1.2.4 The time, date and venue for the auction.
 - 4.1.2.5 Such procedural information and instructions as PTA considers appropriate in order to ensure that the bidding proceeds promptly; and in a transparent, non-discriminatory, open and competitive manner
 - 4.2.2.6 Details of draw: in case situation arises where no bids are offered by bidders and PTA decides to award spectrum through draw.
 - 4.2.2.7 Details of bid increments during auction rounds.
 - 4.2.2.8 Details of recording bid amounts and bidder details.
- 4.1.3 Successful bidder shall deposit Auction Winning Price as per clause 2.9 above in the PTA designated bank account, after adjustment of the Pre-Bid deposit within thirty (30) days from the issuance date of written request by PTA, failing which the Bid Earnest Money of defaulting bidder shall stand forfeited. After making the deposit the successful bidder shall submit evidence of the deposit made to Drawing and Disbursing Officer (DDO) of PTA under intimation to Director (Wireless).
- 4.1.4 If the Successful Bidder fails to make the payment as referred above within thirty (30) days, the next highest bidder(s), in order of the bid(s), will be offered the Spectrum on the same Auction Winning Price and same terms and conditions. If none of the Bidders offers to match the Auction Winning Price, license/ spectrum will not be awarded / assigned and GoP will be informed accordingly for their advice.
- 4.1.5 The license/spectrum shall only be awarded / assigned after payment of 100% or 50% of the Auction Winning Price, whichever is applicable, within 30 days from the Auction Date.

5 Legal terms and conditions

5.1 Important Notice

This Information Memorandum ("IM") is for information purposes only. It does not form part of any contract, whether explicit or implied. Terms and conditions in a NGMS License will prevail if there is a discrepancy between the License and this IM. Applicants are advised to seek their own expert advice on whether or not to participate in the award process and on any other matters concerning financial, legal, technical or other implications of the award process and associated policies.

PTA does not warrant the accuracy of the information herein, and PTA reserves the right to update or amend or modify or add or omit any information in this IM before the auction commences. Any such change, alteration, modification, amendment, addition, omission, supplemental or replacement or any deletion will be communicated to the prospective Applicants via PTA website or any other mode of communication and shall become an integral part of the IM and the auction process.

PTA reserves the right, in its sole discretion, to take any action, including amendment of this IM, which it considers necessary to ensure that the award process is carried out in a fair, open and transparent manner, in accordance with law and in a manner that discourages and strongly penalises any attempted collusion or predatory bidding that may block the entry of potential Applicants into the bidding process or otherwise inhibit an efficient outcome.

PTA reserves the right to add, modify, amend, supplement, cancel, annul or replace any or all of the auction process at any stage without incurring any liability to the affected bidders or any obligations thereunder. PTA further reserves the right to modify or terminate the auction process at any time in its sole discretion and in such an event Pre-Bid Deposit defined in Section 5.3 below, would be returned to the Applicant within thirty (30) days without bearing any liability, unless the amount is otherwise required to be forfeited, or invite the next bidder to submit the auction winning price thereafter, if deemed appropriate.

This IM and any License or spectrum issued pursuant to the auction process described in the IM shall be exclusively subject to, and interpreted in accordance with, the provisions of the Pakistan Telecommunication (Re-Organization) Act, 1996, and the Rules and Regulations and Policies of GOP issued thereunder.

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 PTA and its decision shall be final and binding.

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

No suit, prosecution or any other legal proceedings shall lie against PTA or any Member or employee or consultant or contractor of PTA or any other Government functionary in respect of anything done or intended to be done in good faith in connection with this IM.

5.2 Conditions of Participation in the Award Process

5.2.1 Company Registration

Each Applicant must be a company registered with SECP in Pakistan.

5.2.2 Ownership Disclosure Requirements

All Applicants must disclose their complete ownership information with details of shareholding on the Application Form.

5.2.3 Changes in Composition of Applicants

No change in the composition of an Applicant is allowed following submission of the Application Form and at least up to the date that the License is awarded.

5.2.4 Collusion

All Applicants are warned not to indulge in collusion. In case there is any evidence of collusion, PTA reserves the right to disqualify that Applicant from the Auction process. If PTA confirms evidence of collusive bidding before or during the auction, PTA has the right to cancel the auction and for all colluding Applicants to forfeit their Pre-Bid Deposits, and claim damages from them.

5.2.5 Confidential Information

Confidential Information means any information which, if known to other Applicants, would be likely to affect the price that other Applicants would be prepared to bid in the Auction. Such information would include, but not necessarily be limited to, the Applicant's business case, auction strategy and the highest price it is willing to bid for the Spectrum. Any party to whom Confidential Information in relation to an Applicant is disclosed is deemed to be an "Insider" in relation to that Applicant. Applicants and Insiders must not convey Confidential Information to any other Applicant or Insider. In case of such evidence, PTA reserves the right to exclude these Applicants from the bidding process and to retain their Pre-bid Deposits. PTA also reserves the right to exclude these applicants from further participation in the Auction.

5.2.6 Disqualification

Without prejudice to any other remedy that may be available to it, PTA reserves the right to disqualify any Applicant and forfeit its pre-bid deposit for any of the reasons set out below:

- 5.2.6.1. If a Successful Applicant abandons the bid or fails to pay Initial Spectrum Fee as per 2.9 above within thirty (30) days of the written notification.
- 5.2.6.2. Inaccuracy or misrepresentation of any facts in any part of the Application Form.
- 5.2.6.3. Illegal conduct, disruption during the auction, or indulgence in improper attempts to influence the outcome, or delay the process, or collusion.
- 5.2.6.4. Any "corrupt practice" meaning undue influence, personating, aiding, abetting, counselling or the offering, giving, receiving or soliciting of anything of value to influence a public official in relation to auction process.
- 5.2.6.5. Any fraudulent practice or misrepresentation of facts in order to influence the results of the auction process established by the IM.
- 5.2.6.6. In the event of an Applicant being disqualified from the process, PTA reserves the right to impose a penalty on the Applicant which will result in forfeiture of its full Pre-Bid Deposit and damages.

5.3 Payment Terms

5.3.1 Pre-Bid Deposit

Each applicant shall submit a Pre-Bid Deposit defined as 15% of the Base Price for the quantity of spectrum detailed in the Pre-Bid Deposit Form in US Dollars or its equivalent in Pak Rupees to be converted at the National Bank of Pakistan (NBP) Telegraphic Transfer (TT) selling rate prevailing on the day preceding the date of payment along with the application.

If the payment of Pre-Bid Deposit to PTA is being remitted from abroad, it should be remitted through SWIFT Telegraphic Transfer in PTA's Collection Account Number NIDA-11-1 being maintained at National Bank of Pakistan, Jinnah Avenue Branch Code 1628, Blue Area, Islamabad, Pakistan (Swift code NBPAPKKA02I Routing No. 026004721 of National Bank of Pakistan, New York favouring NBP Head Office Karachi

A/C No. 005640-4607) under intimation to PTA and reference "NGMSA". If the payment of Pre-Bid Deposit is being made from sources in Pakistan, it should be made only through a Pay Order or Demand Draft or by way of credit in PTA's Collection Account No. NIDA-11-1 under intimation to PTA and reference "NGMSA". The payment of Pre-Bid Deposit to PTA should be credited in PTA's bank account by the date indicated in Section 1.5 of this IM.

PTA, after verification of applications and Pre-Bid Deposit, will inform the Applicants of the acceptance of the same as per the schedule provided in Table 1 of this IM.

The Pre-Bid Deposit of a successful Applicant(s) will be adjusted towards the Auction Winning Price (Initial Spectrum Fee), while the Pre-Bid Deposit of the unsuccessful Applicants will be returned, on request, within thirty (30) days of the conclusion of Auction process without bearing any liability towards interest, indexation, inflation or deflation.

Note: Any delays in transfer of funds should be taken up by the Applicants and enough time should be allowed to ensure that all amounts are received in PTA's bank account by the given deadline.

5.3.2 Final Payments

The winner of the award process may opt for 100% payment of the Initial Spectrum Fee mentioned in Paragraph 4.1.1 of the NGMS License (**Annex F**) as a one-time upfront amount within 30 days of the Award process. OR Minimum 50% payment of the Initial Spectrum Fee of the NGMS License within 30 days of the Award process and the remaining 50% of the Initial Spectrum Fee in 5 years in 5 equal annual instalments with cumulative mark up rate at the rate of one year LIBOR rate + 3% for the period from the Effective Date of the License to the payment date. A winner in the award process may pay the remaining balance of the Initial Spectrum Fee at any time in advance of the schedule of instalment subject to the cumulative mark-up up to such date of payment. All payments shall be made in US Dollars or its equivalent in Pak Rupees to be converted at the National Bank of Pakistan (NBP) Telegraphic Transfer (TT) selling rate prevailing on the day preceding the date of payment. Performance Bond would be required for Network rollout only as per Section 2.3.

If any of the winning Applicants fail to make the payments as referred above within the stipulated time, PTA may at its discretion offer the spectrum to the Applicant having submitted the next highest bid for that spectrum and on the same terms and conditions subject to submission of written undertaking and Deposit of their auction winning price. The defaulting Successful Applicant shall forfeit the Pre-Bid Deposit and all other amounts paid to that date to PTA and any binding penalties / damages that may be imposed by PTA.

5.4 Performance Bond

As a guarantee for the performance of Licensee's network rollout obligations as mentioned above in Section 2.3, the Licensee shall deliver to the Authority unconditional, irrevocable and continuing Performance Bonds as detailed at Table in the shape of Bank Guarantees from a local bank in Pakistan with credit rating of AA+ and above, or a foreign bank having credit rating of A1 and above, on a format acceptable to the Authority in respect of its coverage commitments.

Table 8: Description of Performance Bonds

Spectrum Band	Performance Bond
1800 MHz	USD 15 Million

In case any phased roll-out obligation is not fulfilled, Performance Bond proportionate to the roll-out obligation not met shall be encashed by the Authority. A draft template for performance bank guarantee is attached as **Annex-H**.

6 Application Instructions

An Applicant must fill out the Application Form in **Annex B** and must submit all the required supporting company documentation and a Pre-Bid Deposit. As part of its Application Form, an Applicant must declare it is willing to buy offered spectrum at the base price. This declaration will be binding on the Applicant. After submission, the application will not be modified. However, PTA reserves the right to request additional information and/or clarification from an Applicant.

The Applicant shall bear all its costs associated with the preparation and submission of its Bid and PTA shall in no case be responsible for these or any other costs, regardless of the conduct or outcome of the application process.

PTA reserves the right to accept or reject all or any application or bid without assigning any reason and incurring any liability whatsoever. However, in case of rejection of application pre-bid deposit will be returned within 30 days unless the amount is otherwise required to be forfeited.

Applicants may raise questions and queries in writing through letter (courier), fax or email to PTA concerning this IM, by the date mentioned in Section 1.5, following the date of publication of this IM. PTA may not respond to questions and queries received after end date of submission of queries as given in Section 1.5. Furthermore PTA reserves the right not to reply to questions. However, to the extent that it does, it will publish and reply to the question in writing or at PTA website without disclosing the name of the applicant.

PTA will notify the Pre-qualified Applicants by courier or letter or fax or e-mail as per the timeline mentioned in Section 1.5 that the Applicant is entitled to participate in the bidding process. Any of the above will be considered sufficient for the purpose of notice.

Contact Details for Questions

All deliveries, notices or other communications made to Applicants in connection with the Application process shall be sent by designated fax or email or letter (courier) to the contact office of the Applicant(s), as specified by the Applicant to PTA in his Application Form.

All correspondence relating to this IM, Investors' Conference, submission of Application documents, Auction procedure and issuance of License should be duly marked "NGMSA" and addressed to:

Director (Wireless)

Pakistan Telecommunication Authority

H/Qs F-5/1, Islamabad 44,000

Pakistan

Phone: (+92 51) 2878111 Fax: (+92 51) 2878129

E-mail: ngmsauction2017@pta.gov.pk

PTA will review and consider comments/correspondence on this IM submitted by the date given in Section 1.5 of the IM.

PTA may also conduct an information session for prospective Applicants to explain the auction process, rules, and respond to all Applicant questions and concerns. This information session will take place after the final IM is published and its only purpose will be to clarify any questions that prospective Applicants may have about the award process.

7 Definition of Terms

Terms used in this document shall have the meanings defined in Table 9.

Table 9: Definition of terms

Term	Definition
3GPP	3 rd Generation Partnership Project – responsible for development of GSM, EDGE, UMTS and LTE standards
3GPP2	3 rd Generation Partnership Project 2 – responsible for development of the CDMA family of standards
ANSI	American National Standards Institute
Applicant	A company submits Application for the NGMSA
Auction	Auction is a process that includes all the steps from submission of application till the announcement of winner/ successful bidder. Even if a single bidder participates in the auction process, it will also be treated as an auction.
Auction Winning Price	The last bid placed by a standing high bidder at the close of the auction if applicable.
Base Price	The price for spectrum upon which bid offer must be based and the prices of lot in the first round of the open out-cry auction
Bidder	A pre-qualified Applicant
Starting Price	Same as Base Price
District	An administrative division in Pakistan
EDGE	Enhanced Data rates for GSM Evolution
ETSI	European Telecommunications Standards Institute
FAB	Frequency Allocation Board of Pakistan.
FDD	Frequency Division Duplex. A method of duplexing that uses one frequency range for base station to mobile communications and another for mobile to base station
Fixed Services	The provision of telecommunications services by means of a fixed connection or a system providing public fixed network connections to consumers
GoP	Government of Pakistan
GPRS	General Packet Radio Services, as defined by ETSI
GSM	Global Systems for Mobile communications
IEC	International Electro-technical Committee
IMT	International Mobile Telecommunications. A term used by the ITU to describe the collection of approved standards used for delivery of mobile services
Initial Spectrum Fee	The payment due for the License as detailed in Section 2.9 and Paragraph 4.1.1 of the NGMS License
ITU	International Telecommunications Union
LI	Lawful Interception of communication
LIBOR	London Inter-Bank Offered Rate
License	The License awarded to an Existing NGMS Operator or Market Entrant in the NGMSA 2017
License Effective Date	The date of issuance of the License
Lot	A quantity of spectrum which is auctioned as a non-divisible unit
LTE	Long-Term Evolution means an international 3GPP standard for high-speed NGMS
Market entrant / New Entrant / Potential Market Entrant	A new investor from within or outside Pakistan, which may or may not be from the Telecom Sector, not currently holding Spectrum in the 900 MHz, 2100MHz or 1800 MHz bands, that obtains a license in the NGMSA. However, it cannot be an existing mobile cellular operator in Pakistan
MHz	Megahertz
MOIT	Ministry of Information Technology
NGMS	Mobile Communication Services offered through technologies standardized for 3G and advanced generations
NGMSA	Next Generation Mobile Services Award. The Award of 1800 MHz spectrum in Pakistan-2017

Term	Definition		
Pre-qualified Applicant	An applicant who has been deemed qualified by PTA after assessment of its application for further processing		
Pakistan Table of Frequency Allocations	A document published on the FAB website that defines the allocation policy of Pakistan for each frequency band		
PTA	Pakistan Telecommunication Authority		
RAB	Radio Access Bearer		
SIM	Subscriber Identity Module		
UMTS	Universal Mobile Telecommunications System		
US\$ (USD)	US Dollars		
WLL	Wireless Local Loop. A wireless system providing public fixed network connections to consumers		

8 Annexes

Annex A – Pakistan's Telecommunication Sector

Annex B - Application Form to participate in the NGMSA

Annex C – Company Resolution

Annex D - Power of Attorney

Annex E - Pre-Bid Deposit Form

 $Annex \ F-License \ Template$

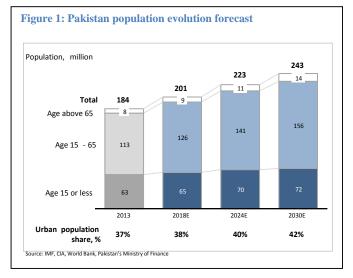
Annex G - Bid Outcry Form

Annex H - Performance Bank Guarantee

Annex A – Pakistan's Telecommunication Sector

1. Economy of Pakistan

- 1.1 Pakistan has the 6th largest population in the world with an estimated population of 195.4 million, making it an attractive market for investors around the globe. Its population is rising at a steady level, and has more than doubled since 1980. According to different global sources, the country is expected to grow at 2% per annum to reach more than
- 240 million inhabitants by 2030. Pakistan is currently carrying out population and household census that is expected to provide more precise figure of the current population.
- 1.2 The population in the country is young and becoming more educated day by day. The urbanization trend is expected to continue and weight of urban population is expected to reach ~42% by 2030;
- 1.3 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.

- 1.4 Pakistan has extraordinarily important strategic endowments and great development potential. Pakistan occupies a strategic location at the crossroads of South Asia, Central Asia, China and the Middle East. It is at the fulcrum of a huge market with a vast population, enormous and diverse resources and huge untapped potential for trade and a huge potential source of demand and growth;
- 1.5 Approximately 39.9% of Pakistani population resides in urban areas. The largest urban centers are Karachi (estimated population of 24 million), Lahore (estimated population of 13.5 million) Faisalabad (estimated population of 6.0 million) and Rawalpindi/ Islamabad (estimated population of 6.5 million). The Country has four provinces Punjab, Sindh, Khyber Pakhtunkhwa (KPK) and Baluchistan having provincial capitals Lahore, Karachi, Peshawar and Quetta respectively. The Federal Capital is Islamabad.
- 1.6. FY2015-16 registered some remarkable achievements as the Inflation hit the lowest level of 2.9 percent in the last thirteen years. The policy rate decelerated to 5.75 percent which is the lowest in last 44 years, capital markets flourished, grading by international rating agencies improved, rapid progress on China Pak Economic Corridor (CPEC) ensued, decline in unemployment rate from 6.0 to 5.9 percent etc.
- 1.7 Pakistan's economy recorded a growth of 4.71% during 2015-16 which is the highest growth achieved since growth since 2008-09. Services sector has 59.16% share in GDP and its contribution in GDP grew by 5.71% in the year 2015-16. Remittances of overseas Pakistanis provide a substantial support to the balance of payment requirements and during the year 2015-16 foreign remittances were registered at US\$ 19.9 billion.

- 1.8 Foreign Direct Investment (inflows) in Pakistan during last three years was recorded to be US\$ 8.3billion (26.8% of the total FDI Inflows was in telecom sector). 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;
- 1.9 Financial reforms introduced in 1990s have liberalized Pakistan's banking sector. Private Banks are playing a more significant role and Pakistan's financial system has shown reasonable growth in recent years. As of June 2016, there are 54 commercial banks with 13,134 branches across Pakistan. The mobile banking sector has also shown a remarkable growth during the last three years and all cellular mobile operators currently operating in Pakistan have launched their mobile banking networks in partnership with financial institutions. The network of over 352,000 mobile banking agents provides a perspective to take financial services to the un-served and poor;
- 1.10 The current (2015-16) per capita income (market price) of Pakistan is US\$ 1,560.7
- 1.11 Additional information on the state of the economy in Pakistan is available in Pakistan Economic Survey 2015-16 published by the Ministry of Finance. The Survey is available at the website of the Ministry of Finance: http://www.finance.gov.pk;
- 1.12 Pakistan has negotiated Bilateral Investment Treaties with several countries, including the People's Republic of China, France, Germany, the United Kingdom, the Republic of Korea, the Netherlands, Romania, Sweden, Spain, Portugal, Kazakhstan, 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, Laos, Cambodia and Singapore. These treaties generally include dispute settlement provisions.
- 1.13 Pakistan has bilateral and/or double taxation treaties or agreements with several 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, USA, Bangladesh, Denmark, Finland, India, Ireland, South Korea, Malta, Singapore, Sri Lanka, Thailand and Turkey.
- 1.14 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.
- 1.15 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. Applicants should consult their own professional advisors for further information on company law requirements.
- 1.16 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 Federal Board of Revenue:

http://www.fbr.gov.pk. Applicants should also consult their own professional taxation advisors for complete information on Pakistan's tax requirements.

1.17 Pakistan has one of the most liberal foreign investment regimes in South Asia. One hundred percent foreign equity is permitted in the manufacturing and infrastructure sectors. There is no bar on repatriation of capital gains, dividends, and profits. On-going reform of Pakistan's trade regime is reducing tariff barriers.

2. Overview of Telecom Sector in Pakistan

- 2.1 The telecom sector in Pakistan has grown rapidly in the past decade and offers significant opportunities in every segment of the telecom market. The Federal Government has granted high priority to developing telecommunications in the country to achieve sustainable growth in all sectors of the economy. The regulatory framework of Pakistan's telecom sector provides conducive environment for international investment and provision of advanced telecom services. There is intense competition in the cellular mobile segment of Pakistan with some of the world's most successful investors in emerging markets including Orascom (VimpelCom), Telenor, Etisalat and China Mobile. Other segments of the telecom sector also feature international investors including Fixed Local Loop (FLL), Wireless Local Loop (WLL) and Long Distance International (LDI).
- 2.2 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 ³ submarine Fibre optic cable system. An older submarine cable also links Pakistan with UAE.
- 2.3 Pakistan has established submarine cable connectivity (SEA-ME-WE-IV) for the international link and improving through IMEWE⁴ and SEA-ME-WE-V. In addition, Transworld Associates Ltd. had established Pakistan's first ever private sector undersea fibre optic cable system (Transworld "TW"-1) which connects Pakistan with Oman and UAE. Transworld is a joint venture between Orascom Telecom of Egypt, the Saif Group of Pakistan and the Omzaest Group of Oman and is planning to lay another submarine cable in near future. PTCL, in collaboration with a consortium of leading international telecom operators, is also planning to build a new sub-marine system named Asia Africa Europe (AAE-1). With the start of above international links, Pakistan has now established sufficient backbone for international connectivity. The country is also in process of connecting with Iran, India, Afghanistan and China through terrestrial optical fibre for improving the redundant connectivity and providing the hub for international connectivity to central Asian states.

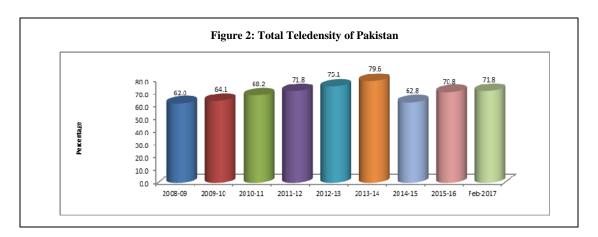
³SEA-ME-WE: The Southeast Asia, the Middle East and Western Europe (SEA-ME-WE) is a submarine cable system linking South East Asia to Europe via the Indian sub-continent and Middle East.

⁴ IMEWE: India-Middle East – Western Europe (IMEWE) is a submarine cable system which links Indian sub-continent and Europe via Middle East.

- 2.4 In addition to the international connectivity, Optical Fiber connectivity inside the country has also improved connecting most of the cities and town all across the country. Many
- companies have established optical fiber networks accumulating to a total of 85,549 km of Optic fiber network. The following table summarizes the domestic optical Fibre network:
- 2.5 To promote development of affordable telecommunication facilities in unserved and underserved areas of Pakistan, Universal Service Fund (USF) has been working successfully since its establishment in 2006. USF has been instrumental in improving the optical fibre connectivity of Pakistan, especially to the un-served areas.

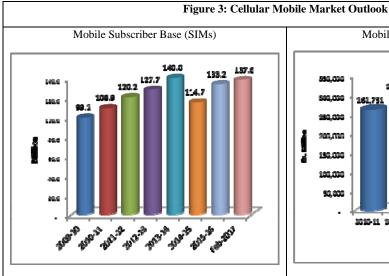
Table 1 Fiber Optical Length As of Dec 2016					
1	PTCL	39,523Km			
2	Wateen	21,000 Km			
3	Multinet	14,081 Km			
4	Link Direct	10,945 Km			
Total		85,549 Km			
Note: Long/Back Haul and Metro fibre					

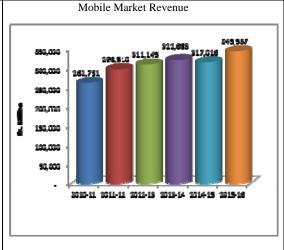
- 2.6 The telecommunication sector in Pakistan has shown significant growth in the recent years. However, it still lags behind many of its comparable economies in terms of fixed line density (number of fixed phones per 100 inhabitants), mobile penetration (number of mobile subscribers per 100 inhabitants) 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. Tele-centers are also being rolled out in all the provinces of the country.
- 2.7 Pakistan carried out the Next Generation Mobile Services (NGMS) spectrum auction in 2014 where 3G and 4G LTE licenses were awarded to the cellular operators after a competitive and transparent auction. Resultantly, mobile broadband services were commercially launched in May 2014 by the cellular mobile operators. The immediate success and exponential uptake of mobile broadband services pushed the Government to carry out another round of NGMS spectrum auction in 2016 where the spectrum was acquired by Telenor in the 850 MHz band.
- 2.8 The graph below shows Pakistan's total Tele density over the last few years:



3. Cellular Mobile Services Sector in Pakistan:

3.1 The mobile subscriber base in Pakistan has evolved at a fast pace reaching a sizeable market of around US\$ 3.4 billion by 2015-16.

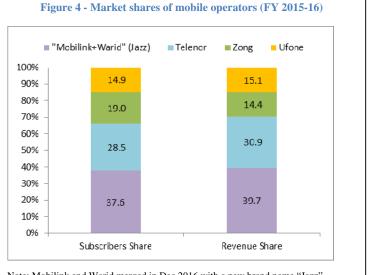




- 3.2 There are 4cellular mobile operators in Pakistan as Mobilink and Warid have merged under the new name 'Jazz' on 19th December, 2016. Jazz is the market leader followed by Telenor, Zong and Ufone.
- 3.3 National population coverage by the cellular mobile network is 86% (as of Dec-2016) in Pakistan and has been expanding with investments of mobile operators.
- 3.4 At the end of FY 2015-16, cellular mobile segment represents 75.8% of total Pakistani Telco market revenues, and it is expected to further increase its share in the medium term with the introduction of NGN services.
- Fixed Telco market is limited in

terms of geography and this represents an

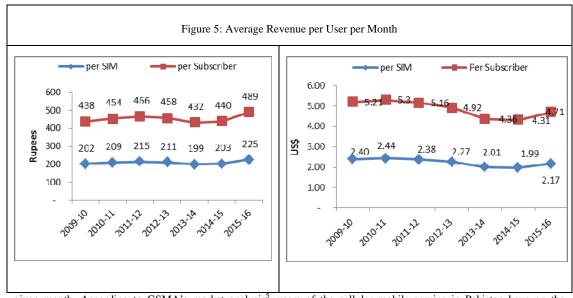
important potential for mobile broadband in the market.



Note: Mobilink and Warid merged in Dec 2016 with a new brand name "Jazz"

There are 137.8 million active SIMs in Pakistan by February, 2017, which corresponds to a mobile market penetration 70.2%. The penetration is expected to rise at an increasing pace in the near future.

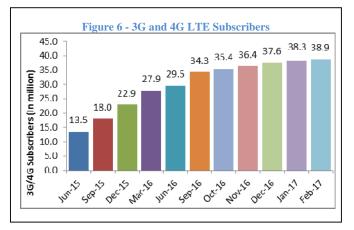
- 3.8 Market is mainly prepaid oriented (98%), and pay per minute tariff structure is dominant. The post-paid share in the market can be expected to increase as the market reaches maturity in the medium term future.
- 3.9 ARPU is the average revenue being generated by cellular companies from a user on their network service in a



given month. According to GSMA's market analysis⁵, users of the cellular mobile service in Pakistan have on the average 2.17 SIMs. Based on this factor, ARPU of cellular mobile segment has increased to Rs. 489 during FY 2015-16 compared to Rs 440 last year. BVS campaign by PTA helped to clean subscribers' data in Pakistan which resulted in true representation of ARPU in Pakistan. The Average Revenue per SIM in Pakistan stands at Rs 225 for FY 2015-16. The SIM re-verification drive boosted the ARPU of cellular mobile industry which is a good sign for the telecom outlook of the country. The potential investors and the existing companies consider high ARPU a major attraction for investment in a telecom market. ARPU is expected to rise in the coming months as more subscribers are added into the 3G and 4G (LTE) services, generating more data revenue for operators. The rising share of data revenue in the overall operator revenue figures also points towards the fact that data will be the new cash cow for the cellular industry.

3.10 3G and 4G LTE subscribers have reached at 38.9 million at the end of Feb 2017 as compared to 13.5 million as of June 2015 which shows that on average, there have been more than one million subscriptions to 3G & 4G LTE networks per month. More coverage and reduced tariffs will further increase the pace of 3G and 4G LTE subscriptions.

3.11 LDI and CVAS potential remains unexploited with 6.3% share in total revenues



⁵ GSMA's Report on 'Greening Telecoms: Pakistan and Afghanistan Market Analysis", October 2013

(among mobile operators). It can be expected to increase its share with hype especially among smartphone and mobile broadband users with the introduction of NGN services. Data revenues and value added services (e.g. mobile TV) on handset terminals will also trigger the non-voice revenue growth in mobile market in near future.

4. Cellular Mobile Services Provider Profiles

The following paragraphs give brief description of the four existing Mobile Cellular Operators:

4.1 Pakistan Mobile Communication Limited -PMCL (JAZZ)

4.1.1 PMCL (Jazz) launched its GSM network in 1994. In June 2003, the company became the largest mobile operator in Pakistan. The company has cell sites covering over 10,898 (Dec-2016) cities, towns and villages. PMCL operates under the consumer brand 'Jazz' after merger of Mobilink and Warid in December 2016. Jazz has the highest number of subscribers in the market as of February, 2017 i.e. 51.8 million.

4.2 Telenor

4.2.1 Telenor acquired the License for providing GSM services in Pakistan in April 2004, and launched its services commercially in Islamabad, Rawalpindi and Karachi on March 15, 2005. The company has cell sites covering over 10,212 (Dec-2016) cities, towns and villages. Telenor has the second largest subscriber share in the market with 39.75 million subscribers as of February, 2017.

4.3 CMPak Limited (ZONG)

4.3.1 CMPak Limited acquired Paktel and started offering cellular services in 2006-07. Paktel was awarded cellular license in 1990. CMPak operates under the brand name of Zong, and is owned and controlled by China Mobile the biggest cellular mobile operator in China. It has the third highest subscriber share in the market with 27.71 million subscribers.

4.4 Pakistan Telecommunication Mobile Limited - PTML (UFONE)

4.4.1 PTML (Ufone) is the second GSM operator in Pakistan. It launched services in January 2001 under the 'Ufone' brand. PTML is a wholly owned subsidiary of PTCL controlled by Etisalat. Ufone has the third highest subscriber share with 18.45 million subscribers.

5. Local Loop Services

- 5.1 Pakistan has been divided into 14 Telecom regions as per the licensing regime. A Local Loop operator has to operate within the telecom regions for which the license is awarded. Local Loop operators include both fixed line and wireless operators and are operating all over the country. So far there are 23 Fixed Local Loop operators who are operating in different areas of the country along with 12 Wireless Local Loop operators in all 14 telecom regions.
- 5.2 At the end of Dec, 2016, local loop subscriber's base was 3.06 Million Including fixed and wireless local loop operators. FLL subscriber base has 2.8 million subscribers (Dec, 2016) while the wireless local loop subscribers stand at 0.38 million. The closure of huge number of WLL connections in the last two years indicates that cellular mobile services are preferred choice of consumers for voice and data connectivity.

6. Long Distance and International Services

6.1 Long distance and international services segment is an integral part of the telecom sector which are responsible for carrying international traffic from Pakistan to abroad and terminating international traffic in Pakistan. At the time of de-regulation in 2004, a total of 14 LDI Licenses were awarded to various companies, besides PTCL, the incumbent operator. Major players include Link Direct, Wateen, WorldCall and Telecard. Almost all of the LDI operators are providing LDI service using NGN networks.

7. Class Value Added Services

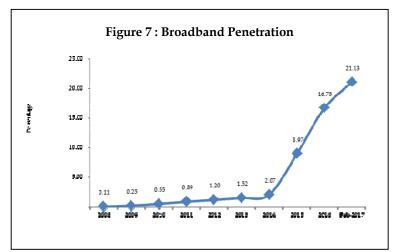
7.1 Class value added service licensing started in 2005-06 which comprises three broad categories for licensing. i.e. CVAS Data, CVAS Voice and CVAS Registration for provision of different services such as Vehicle Tracking System, Payphone Services, Premium Rate Services, Video Conferencing etc. So far a total of 799 Licenses have been issued to various companies which are operating in different areas across Pakistan.

8. Internet and Broadband Services

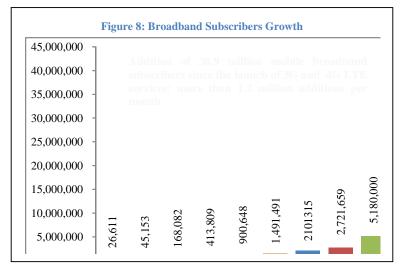
- 8.1 Internet and broadband services are one of the priority areas for the Government of Pakistan. Pakistan Vision 2025 has a specific goal to improve the internet penetration in the country to 50%. Therefore, in line with the Federal Government policy of expanding Internet access, Internet connectivity is available in most of cities and towns.
- 8.2 The internet services were introduced in Pakistan in the early 1990s. Pakistan implemented Broadband Policy in 2004 with the optimistic targets for next five years. In 2006, NayaTel started offering FTTH services bringing fibre into the broadband sector. The next year, Wateen rolled out the world's first commercial WiMAX broadband services in Pakistan. Internet users in Pakistan experienced 3G speeds of upto 3.1 Mbps with the launch of PTCL's EvDO service in 2009. Despite the introduction of new technologies such as WiMAX, EvDO, and FTTH etc, the broadband penetration remained on the lower side. Broadband services were mainly confined to the metropolitan cities. PTA kept on facilitating the broadband sector with technology-neutral licensing, easy barriers to entry, and formation of Broadband Stakeholders Group etc. The introduction of WiMAX and success of EvDO showed the glimpse of the potential of mobile broadband in Pakistan. In a historic step towards broadband revolution in Pakistan, PTA provided necessary spectrum for mobile broadband through NGMS spectrum auction in 2014. The introduction of broadband on cellular mobiles/handheld devices has changed the entire landscape of the broadband sector, in terms of statistics and adoption of internet in Pakistan. The rapid uptake of mobile broadband is a testimony of the fact that there exists a huge demand for internet connectivity on smart devices. In recognition of the extraordinary demand for more NGMS

spectrum, PTA carried out another round of NGMS spectrum auction where 10 MHz in the 850 MHz band was won by Telenor for US \$395 million in May 2016.

8.3 The enormous impact of mobile broadband can be seen in the broadband penetration trend given in the figure - 7. At the end of February 2017 broadband penetration of the country stands at 21.13% as compared to just 2% at the end of June 2014. The huge spike in total broadband penetration is due to the fact that the mobile broadband leads the way in the total broadband subscriber base.



8.4 Broadband subscriber soared exceptionally high during the FY 2015-16. At the end of February, 2017, broadband subscribers stood at 41.5 million as compared to 5.2 million at the end of 2013-14 depicting a staggering 700% growth in just under 3 years. In order to further provide impetus to the broadband sector, synergy of various elements is required. Therefore, external factors are also needed to be addressed which include affordability, computer literacy, religious and cultural views regarding objectionable content on internet and lack of local content.



Annex B - Application Form

APPLICATION FORM TO PARTICIPATE IN THE NGMSA

APPLICATION SUBMISSION INSTRUCTIONS:

The Application Form must be in <u>English</u> language and one (1) original signed by the Applicant's authorized representative plus (2) two copies must be submitted to the following address of PTA by 4pm Pakistan Standard Time as per the timeline in Section 1.5:

Director (Wireless)

Pakistan Telecommunication Authority

H/Qs F-5/1, Islamabad 44,000

Pakistan

Phone: (+92 51) 2878111

Fax: (+92 51) 2878129

Email: ngmsauction2017@pta.gov.pk

Applications shall be submitted in sealed envelopes and the envelopes shall be clearly marked "ORIGINAL" or "COPY". If there are any discrepancies between the original and the copies of the proposal, the original proposal will be taken as the correct one. The envelope shall be titled as Application for NGMSA 2017 and include (i) the submission address and date, (ii) the name of the applicant.

INFORMATION AND SUPPORTING DOCUMENTATION TO BE PROVIDED:

The following documents are part of the Application Form and must be provided in support of the application:

*Please check mark with yes if provided or explain why a document is not provided. Please provide a cover letter along with each requested document including title and number of pages.

		Provided (yes/no)	If no, please explain
1. APPLIC	CANT INFORMATION		
a.	The name of the Applicant		
b.	The name, title, capacity and signature of at least one person legally authorized to fully represent the applicant by virtue of the law.		
c.	Certificate of Incorporation/registration duly attested / certified by SECP		
d.	Memorandum and Articles of Association duly attested/ certified by SECP		
e.	List of Directors with details of their shareholdings, and relation to other Operators and applicants for a License		

6 9 11 11 11 11		1	
f. Shareholders with detail	s of their shareholdings		
g. Ownership. A clear, con the applicant's ownershi	mprehensive and detailed view of ip structure.		
applicants for a Licens Applicant	Affiliates that are Operators or i.e, and description of relation to		
(for foreign nationals) a	(for Pakistan National)/ Passport and other antecedents like contact and authorized representatives of		
2. Proof or a statement on word of he	onour by the Applicant:		
declared insolvent by organization.	its Directors have never been a court of law or government		
convicted by a court unethical/ immoral turpi	the company have never been of law for major offences or tude (other than minor offences)		
	applicant Company nor its bers are defaulter(s) of PTA and ransactions.		
3. National Income Tax Number			
venture/Consortium members participants for NGMSA in P (Annex B)	nead from the Group /Joint that they are the authorized akistan through the Applicant.		
ii. legally authorized to six virtue of the law	and signs the Application fully represent the applicant by		
6. Special Power of Attorney grante signs the Letter of Application	ed to the person who submits and		
7. Company Resolution Format (Ann	nex C)		
8. Authorized Contact Representative by the Applicant	es nominated and duly authorized		
Brief Description of Telecommunications Qualifications and Experience of the Applicant, its key management personnel and its shareholders			
finance in the form of equity and l	10. Capital Cost of service/ project for the first year and the sources of finance in the form of equity and long term debt.		
price.	11. Source of funds in the form of equity and debt for auction winning price.		
for the first 5 years of operation.	ements and cash flow statements		
13. Brief description of committed financial resources to meet Capex of the project for the 1st year in the form of bank statement of the company's account duly signed and stamped by bank manager, confirmed commitments, letter of intent, MOU signed by the bank and CFO/ Authorized officer of the company for any long term debt.			
14. Technical Plan			
15. Bank account details for any reimbursement after the auction			
16. Annex D – Power of Attorney			
17. Annex E – Pre-bid Deposit Form			

The Award of 1800 MHz Spectrum for Next Generation Mobile Services

18. Pre-Bid Deposit paid to PTA with:	
Pay order-demand draft number: Dated: OR	
SWIFT code number: Dated:	
OR	
Direct deposit Receipt Number: Dated:	
as per Annex-E	
19.Processing Fee 500 USD or equivalent PKR	
-	

AUTHORIZED CONTACT REPRESENTATIVES

Name one (1) Principal Authorized Contact Representative and a Backup Authorized Contact Representative, together the Authorized Contact Representatives, for purposes of receiving all award-related documentation and for communications with PTA on matters relating to the Spectrum allocation process.

Please note that an Authorized Contact Representative must be available for all matters related to the licensing process and this is the person who will receive all official communications and confidential information. These Representatives will be the only people allowed to submit official communications to the PTA during the process.

The Authorized Contact Representatives must be duly authorized by the Applicant's Board of Directors.

As part of the Application, provide contact details as follows:

PRINCIPAL AUTHORIZED CONTACT REPRESENTATIVE

[FIRST, LAST NAME]

PHYSICAL ADDRESS

LANDLINE TELEPHONE

CELL PHONE NUMBER

FAX NUMBER

EMAIL ADDRESS

BACKUP AUTHORIZED CONTACT REPRESENTATIVE

[FIRST, LAST NAME]

PHYSICAL ADDRESS

LANDLINE TELEPHONE

CELL PHONE NUMBER

FAX NUMBER

EMAIL ADDRESS

Annex C – Company Resolution

[Letterhead of the Company]

I,, Company Secretary of [HERE GIVE FULL NAME AND ADDRESS OF THI
APPLICANT ENTITY] (the "Company"), do hereby certify that the following is a true and correct copy of a Resolution
duly adopted at a meeting of the Board of Directors of the Company duly convened and held on,and at thi
resolution has not been modified, rescinded or revoked, and is at present in full force and effect:
RESOLVED THAT the Company be and is hereby authorized to apply for the award of [here describe the nature of the
Spectrum being applied for], ("the Spectrum") and to comply with all requirements of its application process and the
terms of the License, if any, granted as a consequence;
FURTHER RESOLVED THAT Mr/Ms,son/daughter of Mr,bearing CNIC/Passpor
Noresident of [here give designation of the appointee] be and is hereby appointed as an
authorized representative of the Company (the "Authorized Representative"), for and on its behalf, to execute all
documents and take all actions as may be required, necessary or incidental in connection with submission and grant of the
application of the License, including submission of the Power of Attorney in the form and manner prescribed at Annex I
of the Information Memorandum issued by the Pakistan Telecommunication Authority for which all necessary
instructions and information has been provided to him;
FURTHER RESOLVED THAT Mr/Ms,son/daughter of Mr, bearing CNIC/Passport No.
, director/secretary of the Company be and is hereby authorized on behalf of the Company to execute
Power of Attorney in favour of the Authorized Representative on such terms as may be deemed expedient and in the form
prescribed by the Pakistan Telecommunication Authority.
Certified to be a true copy:
Company Secretary
Company Seal and Stamp

Annex D – Power of Attorney

POWER OF ATTORNEY

[To be submitted on a stamp paper of Rs.100]

KNOW ALL MEN BY THESE PRESENTS THAT WE, ("Company Name")
Incorporated in (country) having our registered office at (hereinafter called the "Applicant') on approval by the [Board of Directors] and after meeting all necessary requirements for appointing a Special Attorney do hereby nominate, constitute, appoint and execute [here give name, parentage identity document number and address of the
Special Attorney] (hereinafter to be called as "Attorney") to be and to act as our lawful attorney, for us, in our name and on our behalf to exercise any and all of the powers herein contained and ancillary thereto, that is to say:
 to sign, execute and/or authenticate all applications or other correspondence, statements and documents required to be submitted to Pakistan Telecommunication Authority (hereinafter the "Authority') and to act for and on our behalf in a matters including negotiating the terms and conditions of the award and signing any and all documents relating to award of the spectrum for provision of Next Generation Mobile Services (herein after "NGMS") in Pakistan.
to fulfil all the requirements and formalities as may be required to be fulfilled for the award of Spectrum for provision of NGMS and grant of the License applied for and on behalf of the Applicant in this regard.
 to attend all meetings with and hearings before the Authority or any other governmental officer or entity and t provide any and all necessary documents and material information or assistance as may be required by the Authorit for its satisfaction to issue the License for NGMS applied for by the Applicant;
 to execute any and all such documents and undertake all such acts as may be necessary in order to comply with the directions, decisions and orders of the Authority relating to award of spectrum for NGMS and issuance of Licens applied for by the Applicant.
5. and generally to do any and all such acts as may be necessary or incidental for the award of spectrum for NGMs and grant of the License applied for by the Applicant.
We hereby agree and undertake to bind ourselves irrevocably to all commitments made, acts done, agreements made an arrangements entered into by the Attorney and hereby anticipatorily and irrevocably confirm and ratify all acts, deeds an things which the said Attorney shall lawfully do or cause to be done in express and implied exercise of any of the power contained herein.
This Power of Attorney shall not be revoked without prior written notice reasonably in advance to the Authority and successful revocation shall not invalidate any and all action taken by the Attorney before the revocation in exercise of the powers vester hereby. In witness whereof we have signed this power of attorney at this day

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	EXECUTANT
	Seal of the Company
WITNESSES:	
1	
National ID/CNIC NO	
Passport Number (in case of foreign national)	
Passport Number (in case of foreign national)	
2	
National ID/CNIC NO	
Passport Number (in case of foreign national)	

Annex E – Pre-Bid Deposit Form

STATEMENT OF SPECTRUM THE APPLICANT IS INTERESTED IN BUYING AT THE BASE PRICE FOR THE NGMSA

Please state below the proof of payment of Pre-Bid Deposit against the offered lot with base price given below:

	A	В	С
Radio Frequency Lot	Base price	Pre-Bid Deposit amount	Proof of Payment
	(in USD or Equivalent	(15% of Base Price in USD or	
	PKR)	Equivalent PKR)*	
1800MHz Band:			
Spectrum rights for	USD 295,000,000	USD 44,250,000	
segment of 2x10 MHz			

^{*} Pre-Bid Deposit Amount shall be paid in US Dollars or its equivalent in Pak Rupees to be converted at the National Bank of Pakistan (NBP) Telegraphic Transfer (TT) selling rate prevailing on the day preceding the date of payment.

I declare and irrevocably commit that the [name of Company] shall pay for the above lot at the Base Price if awarded such spectrum in the NGMSA being a sole bidder.

In addition to the above declaration and commitment, I declare and irrevocably commit that the Company shall pay for the lot at the end of the auction for which it is declared Provisional Winner at the highest amount bid.

Date:	
	N 10' (CA d ' ID (c'
	Name and Signature of Authorized Representative

Warning

Applicants will note that the application must be complete when it is submitted, with the correct amount of copies, with neither mistakes nor omissions. The application shall also be submitted during the hours indicated, and at the latest by the date specified by PTA. PTA will provide a receipt of application with checkmarks on the submitted documentation. If these requirements are not met, the application can be turned down and PTA may only provide 24 hours to complete.

Annex F-License Template

A template of the NGMS License is available at the end of this IM as a separate document (Annex-F).

Annex G - Bid Out-cry Form

Pakistan Telecommunication Authority Headquarters F-5/1, Islamabad

Auction of NGMS Spectrum - Bid Form (Out-cry)

Frequency Band: 1800 MHz Band (10 MHz bandwidth)

			Bid No	0
			(Bid No. to be l	eft blank)
Company Name				
Bid Amount USD	In words			
		Name & Signa	ature of Authorized Repr	esentative
I solemnly declare that this sixty (60) days from the capplicable.				
		Name & Sign	ature of Authorized Repr	esentative

Annex H – Performance Bank Guarantee (PBG)

Guarantor:	
	Name of local bank in Pakistan with credit rating of AA+ and above, or a foreign bank having credit rating of A1 and above, acceptable to the Authority (the "Guarantor") Bank's address
Beneficiary:	Pakistan Telecommunication Authority (PTA)
	PTA Headquarters Building F-5/1 Islamabad, Pakistan,
	(the "Beneficiary").
Principal:	NGMS Licensee Name
	A company incorporated under the laws of Pakistan with its registered offices at (the "Principal").
Guarantee	
Amount:	USD 3,750,000 (US Dollars three million seven hundred fifty thousand) or equivalent Pakistan Rupees at the T.T Selling rate of National Bank of Pakistan on the preceding working day of the conversion date (the "Guarantee Amount")
PBG Date:	License Effective Date
PBG Expiry: months, at the c	Expiry date shall be set in accordance with roll out obligations with an additional grace period of 6 counters of the Guarantor
WHEREAS:	
form of Bank USD 3,750,000	Principal has committed to furnish an unconditional, irrevocable and continuing Performance Bond in the Guarantee (the "Guarantee") of (Name of Bank) for the sum as security for compliance with the network roll out obligations in accordance with the License ("Theth, 2017; and
B. The Guar	rantor has executed this unconditional without recourse, irrevocable and continuing Performance Bond in
the shape of Ba	ank Guarantee at the request of the Principal for the performance of Principal's obligations as described in

- **First Phase:** within twelve (12) months from the Effective Date of the License, provide NGMS presence in all four Provincial Capital cities and Federal Capital.
- "Other phases, timelines and clauses will be amended accordingly"

Appendix-I of the license for NGMS that the Principal shall at:-

The Award of 1800 MHz Spectrum for Next Generation Mobile Services

NOW THEREFORE the parties agree as follows:

- 1. Subject to the terms of this Guarantee, the Guarantor hereby un-conditionally, irrevocably and continuingly guarantee without recourse to the Beneficiary, i.e. PTA, as primary obligor and as a guarantor of payment, the due, complete and punctual payment within 3 working days upon receipt of written notice of claim from the Beneficiary (in the form attached hereto as Appendix A), of all amounts which are or may become due and payable by the Principal under clause A1.2 of Appendix-I of the License (the "Guarantor Obligations").
- 2. The maximum aggregate liability of the Guarantor under or in connection with this Guarantee shall be limited to the Guarantee Amount, together with interest thereon at the prevailing one (1) month Karachi Interbank Offer Rate (KIBOR) from the date from which payment is due to the Beneficiary until receipt of payment by the Beneficiary or collection thereof against the Principal and the Guarantor.
- This Guarantee is un-conditional, irrevocable and continuing, and the Principal shall be entitled to have this
 Guarantee returned on its request upon successful completion of defined network rollout obligation under the
 License met by the Principal/Licensee and duly approved by Beneficiary/PTA.
- 4. In case any phased network roll-out obligation is not fulfilled, the Performance Bond against the defined network roll-out obligation not met shall be encashed by the Authority. This Performance Bond shall remain in force and valid until 6 months after the associated phase of the network roll-out obligation.
- 5. If any payment by the Principal or any discharge given by the Beneficiary is avoided or reduced as a result of insolvency or any similar event:
 - a. the liability of the Guarantor shall continue as if the payment, discharge, avoidance or reduction had not occurred; and
 - the Beneficiary shall be entitled to recover the value or payment from the Guarantor, as if the payment discharge, avoidance or reduction had not occurred.
- 6. Subject to clause 3 above, this Guarantee is valid until(add Expiry Date), by which date notice of claims, if any, must have been given to the Guarantor, and failing such notice of claim by close of business on (add Expiry Date)(18 months from the PBG Date) this guarantee shall be null and void.
- 7. Any claim or notice made or given by the Beneficiary to the Guarantor under this Guarantee shall be deemed to be sufficiently made and given if in writing in the form attached in Appendix A and delivered at the counters of the Guarantor at the following address:

	the Guarantor at the following address:
	Bank Name:
	Address:
8.	This Guarantee shall be governed by and construed in accordance with the Uniform Customs and Practice for Documentary Credits, 2007 Revision, ICC Publication No .600 (UCP) and/or Uniform Rules for Demand Guarantees, 2010 Revision, ICC Publication No.758 (URDG) and their updated versions, whichever is
	applicable, to the extent that such provisions are not inconsistent with this Guarantee and the laws of Pakistan, and engages us in accordance with the terms thereof. No recourse is permissible upon the occurrence of events listed in Article 17 (UCP) or Article 26 (URDG), to any other branch, subsidiary or affiliate of
	(Bank Name).
	For matters not covered by the Publication, the laws of Pakistan shall be applicable and the Guarantee related
	matters will be governed, accordingly. We hereby unconditionally and irrevocably understand and accept the
	exclusive jurisdiction of the Courts of Pakistan at Islamabad.
	Notwithstanding anything contained herein above, the Guarantor's liability under this Guarantee is limited to
	USD 3,750,000 (US Dollars three million seven hundred fifty thousand) or its equivalent Pakistan Rupees at
	the T.T Selling rate of National Bank of Pakistan on the preceding working day of the payment/encashment
	date, together with interest thereon at the prevailing one (1) month Karachi Interbank Offer Rate (KIBOR) from
	the date the payment is due to the Beneficiary until receipt of payment by the Beneficiary and reasonable
	expenses not exceeding in the aggregate 2% of the Guarantee Amount incurred by the Beneficiary in collection
	thereof against the Principal and the Guarantor. Claims under this Guarantee will be payable and must be
	lodged and received (accompanied by the original instrument of Bank Guarantee) solely at the counters of
	Bank's name (Bank Address) on or before ("Expiry Date") and will be payable solely
	by (Bank's name) at Islamabad, Pakistan. Except for any claims duly received at the
	Guarantor's counters in Islamabad before close of business on the Expiry Date, the Guarantor shall stand
	discharged and released of all its obligations under this Guarantee at close of business on the Expiry Date and
	shall not be liable for any claims lodged thereafter, notwithstanding that Beneficiary may have failed to return
	the original instrument of Bank Guarantee to the Guarantor duly cancelled at expiry hereof.

The Award of 1800 MHz Spectrum for Next Generation Mobile Services

Bank Guarantee No	duly	issued	on	the	(PBG	Date)	for	and	on	bel
(Licensee Name) as Guaranto	r.									
Ву										
Name (Bank's Representative):										
Title:										
In the presence of:										
Witnesses:										
1- Name:				2-	Name:_					_
Address:					Address	3:				
Occupation:				(Occupat	ion:				
CNIC No.:					CNIC 1	Vo.:				

APPENDIX-A

Beneficiary's Demand under Unconditional, Irr No	evocable & Continuing Bank Guarantee / Letter of Credit
Issued by	(Bank Name)at Islamabad Branch
Orawn under Letter of Credit No	
	(Insert Bank Guarantee/Letter of Credit Number and Date)
Γο Name and Address of Issuing Bank)	
The undersigned hereby demands that	pay to the order of (Name of issuing Bank)
ha undargignad (Panafigiany/DTA) hafara ala	se of the 3 rd business day after receipt of the notice a sum of
USD 3,750,000 (US Dollar three million seven IT.T Selling rate of National Bank of Pakista ogether with interest thereon at the prevailing date the payment is due to the Beneficiary until not exceeding in the aggregate 2% of the Guaragainst the Principal and the Guarantor. The Ba	hundred fifty thousand) or equivalent Pakistan Rupees at the non the preceding working day of the payment/encashment, one (1) month Karachi Interbank Offer Rate (KIBOR) from the receipt of payment by the Beneficiary and reasonable expenses antee Amount incurred by the Beneficiary in collection thereof ank Guarantee / Letter of credit is enclosed for endorsement by ranch of the amount drawn for cancellation.
Dated:	
	Pakistan Telecommunication Authority
	Chairman



PAKISTAN TELECOMMUNICATION AUTHORITY

HEADQUARTERS F-5/1 ISLAMABAD, PAKISTAN

License No	Date
NEXT GENERATION MOBILE SERVICES (NGMS) LICENSECTION 21 OF THE PAKISTAN TELECOMMUNICATION ACT, 1996 FOR PAKISTAN	
Pakistan Telecommunication Authority ("PTA") hereby grants a non- ("The Licensee") to establish, maintain and operate the Licensed Sy Licensed Services in Pakistan excluding Azad Jammu & Kashmir (Ac (GB), subject to the terms and conditions annexed herewith which for License.	/stem and to provide the J&K) and Gilgit - Baltistan
On behalf of	
Pakistan Telecommunication Authority	

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1. PART 1 GRANT OF LICENSE

1.1 SCOPE OF THE LICENSE

- 1.1.1. This License authorises the Licensee to establish, maintain and operate the Licensed System and to provide Next Generation Mobile Services (NGMS) in Pakistan, **excluding** Azad Jammu & Kashmir (AJ&K) and Gilgit Baltistan (GB).
- 1.1.2 The Licensee shall provide NGMS including the following Mandatory Services throughout Pakistan **except** AJ&K & GB:
 - 1.1.2.1 emergency services;
 - 1.1.2.2 operator assistance services;
 - 1.1.2.3 national and international long distance services through LDI operators; and
 - 1.1.2.4 such other Telecommunications Services as the PTA may, by Regulation require.
- 1.1.3 The Licensee may provide optional services incidental to Next Generation Mobile Services.
- 1.1.4 The License does not authorise the following:
 - 1.1.4.1 The provision of Telecommunication Services in AJ&K& GB;
 - 1.1.4.2 The interconnection of the Licensed System to the telecommunication system of a service provider that provides telecommunications services outside Pakistan or in AJ&K& GB;
 - 1.1.4.3 Such other activities or Telecommunication Services as the PTA may prohibit through regulations and in accordance with law;
 - 1.1.4.4 Direct access for customers through a Network Connection Point beside interconnection; and
 - 1.1.4.5 Provision of Fixed Services.
- 1.1.5 The Licensee shall not install, maintain or operate any Telecommunications System or provide any Telecommunication Service that is not authorised in this License, except pursuant to a separate License or other proper authorisation from the PTA.
- 1.1.6 The Licensee shall not authorise 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 Telecommunication Services only through the interconnection of the Licensed System

- with the Telecommunication System of another Operator duly Licensed by the PTA to provide national and international long distance services.
- 1.1.8 The Licensee shall notify the PTA 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. The PTA may intervene for supervision or permission of such service, where required in the public interest.
- 1.1.9 Upon being notified by the PTA that an Operator's License 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 PTA restores or renews such License.

1.2 EFFECTIVE DATE AND TERM OF THE LICENSE

- 1.2.1 This License shall come into force on the Effective Date and shall be valid for a term of 15 (Fifteen) years.
- 1.2.2 In the event that the Licensee wishes to renew the License at the expiry of the initial term, it shall submit to the PTA a written request for renewal at least 36 months prior to the expiry of the term under the License. Similarly for further renewing a renewed term the written application shall be submitted at least 36 months before expiry of that renewed term.
- 1.2.3 Within three months after the receipt of the Licensee's request pursuant to Condition 1.2.2, the PTA 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 renewed term as the case may be; or
 - (b) give written notice to the Licensee stating that the PTA may not renew the License and provide reasons thereof. The reason(s) may include the Licensee's repeated, grave or continuing violations of the terms and conditions of this License, or the renewed License, the Act, Rules or Regulations during the initial term or extended term. The Licensee shall be given at least 60 days to make written representations in response to the PTA's written notice. Within 30 days after the conclusion of such 60 days period, the PTA shall hold a hearing at which the Licensee may make representations in response to the PTA's written notice. The Licensee may, as part of its representation, indicate the further License conditions it is prepared to accept to reduce the likelihood of continued or further violations of the terms and conditions of this License, the Act, Rules or Regulations. Following such hearing, the PTA shall, within 15 days of such hearing, give its determination either:

- that the PTA has determined not to renew the License at the expiration of the initial term or extended 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 that time, to come into effect at the conclusion of the initial term, including such additional terms as the PTA considers appropriate.

2. 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 PTA, 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 PTA and shall maintain suitable records of its utilisation of numbering capacity, subject to the following:
 - 2.1.2.1 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
 - 2.1.2.2 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 months' notice period should it be necessary to withdraw or to change allocated numbers due to any change in numbering plan by PTA or due to any directive by PTA.

2.2 SIGNIFICANT MARKET POWER (SMP)

2.2.1 If the PTA determines that a Licensee possesses SMP in a relevant market, the Licensee shall comply with orders / decisions of the PTA that are intended to prohibit abuse of its SMP 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 Operators.

2.3 MOBILE NUMBER PORTABILITY (MNP)

2.3.1 The Licensee shall implement MNP with all Mobile Cellular Operators as it is implemented in Pakistan. The Licensee is required to contribute to Pakistan Mobile Database (PMD) Company in accordance with MNP Regulations.

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 by the Licensee; or
- 2.4.1.3 in the event the quality of service falls below international standards for interregional circuits as determined by PTA.

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 the concerned agencies.

2.6 INFRASTRUCTURE SHARING

- 2.6.1 The Licensee is required to share its existing and future infrastructure with other NGMS Licensees as a matter of first priority. As a minimum, the infrastructure to be shared shall be: site sharing and mast sharing. Licensees may enter into commercial arrangement with each other for active sharing, however, such arrangement shall not take effect till such time the GoP policy is in place and subject to the formal approval and comprehensive framework of PTA. The precise commercial structure of any bilateral or multilateral infrastructure sharing is to be agreed between the Operators involved and then presented to PTA for approval. If no such agreement can be reached after negotiation in good faith by the Licensee and the Operator, then the parties will resolve the matter through mediation and/or arbitration process for an early resolution of the dispute.
- 2.6.2 Licensees may enter into commercial arrangement with each other for Spectrum Sharing and Trading, however, such arrangement shall not take effect till it is approved by PTA as per the framework developed under the GoP Policy.

2.7 LOCAL MANUFACTURING, ASSEMBLY, TRANSFER OF TECHNOLOGY AND RESERACH AND INNOVATION

2.7.1 The Licensee shall encourage and facilitate local manufacturing, assembling and development of telecom equipment, terminal devices, applications, transfer of technology and Research and Innovation in Pakistan.

2.8 NATIONAL ROAMING

2.8.1 The Licensee is free to negotiate a commercial arrangement with one or more Operators for national roaming. The Licensee may seek negotiations to enter into an agreement to purchase national roaming from another Operator so that the Licensee can provide national GSM, GPRS / EDGE and other services if any. If no such agreement can be reached after negotiation in good faith by the Licensee and the Operator, then the parties will resolve the matter through mediation and/or arbitration process for an early resolution of the dispute.

2.9 INTERNATIONAL ROAMING

2.9.1 Licensee shall use its best efforts to enter into the necessary agreements with foreign operators in order to enable and provide international roaming to its subscribers. The

Licensee must follow PTA guidelines on international roaming which may be issued from time to time.

2.10 MOBILE VIRTUAL NETWORK OPERATOR (MVNO)

2.10.1 The Licensee is encouraged to support MVNO Services under the framework prepared and published by the Pakistan Telecommunication PTA (PTA) from time to time or as determined by PTA.

3 PART 3 OBLIGATIONS OF THE LICENSEE

3.1 COMPLIANCE WITH LAW

- 3.1.1. This License and all allied matters are subject to the terms and conditions contained herein and to the Act, Rules and Regulations and other laws for the time being in force in Pakistan. In the event of any conflict or inconsistency between the provisions of this License, 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 PTA and its authorised representatives in the exercise of the functions assigned to the PTA under the Act. The Licensee shall comply with all orders, determinations, directives and decisions of the PTA.
- 3.1.4 Details of all foreign directors of the Licensee's company along with the foreign nationals deployed for installation/operation/maintenance must be communicated to the PTA and all other concerned quarters.

3.2 NETWORK ROLLOUT

3.2.1 The Licensee shall provide coverage as per Appendix-I.

3.3 PERFORMANCE BOND

3.3.1 The Licensee shall submit Performance Bond as per Appendix-I

3.4 ACCESS TO EMERGENCY SERVICES

3.4.1 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 failure of Licensee's automated system. The Licensee shall comply with other requirements imposed by the PTA in relation to emergency services.

3.5 ALTERATION OF NETWORK

3.5.1 The Licensee shall, within such reasonable time and in such manner as may be directed by the PTA, and at its own expense, alter the course, depth, position or mode of Page 5 of 33

attachment of any apparatus forming part of its Licensed System which may cause hazard to human life, community, or is deemed against the public interest in any way. All the telecommunication system of the operator must be in the knowledge of the PTA including but not limited to Core and Access network.

4 PART 4 FEES AND OTHER CHARGES

4.1 PAYMENT OF FEES, CHARGES AND CONTRIBUTIONS

- 4.1.1 The Licensee shall pay the Initial Spectrum Fee (the Auction Winning Price) for 1800 MHz spectrum as per Appendix-II of **USD**______ (**US Dollars in words**) or its equivalent in Pak Rupees to the PTA.
 - 4.1.1.1 Initial Spectrum Fee shall be paid in US Dollars or its equivalent in Pak Rupees to be converted at the National Bank of Pakistan (NBP) Telegraphic Transfer (TT) selling rate prevailing on the day preceding the date of payment.

The Licensee may opt for 100% payment of the Initial Spectrum Fee given in clause 4.1.1 above of the License as a onetime upfront amount within 30 days of the Auction.

OR

Pay 50% payment of the Initial Spectrum Fee given in clause 4.1.1 of the License within 30 days of the Auction and the remaining 50% of the Initial Spectrum Fee is payable in 5 years in 5 equal annual installments with cumulative mark up rate at the rate of one year LIBOR rate + 3% for the period from the Effective Date of the License to the payment date Additionally, if auction winner intends to pay the remaining balance liability on account of Initial Spectrum Fee at any time before the end of 5 years, it would be acceptable and without any pre payment penalties. However, mark up at LIBOR + 3% shall be payable on the balance amount till the date the payment is made. In case of delay in payment to the PTA, the Licensee shall pay Late Payment Additional Fee @ 2% per month or part thereof from the due date till the date of payment. The License shall be suspended /terminated on account of non-payment of any installment of initial fee, the outstanding amount shall be recovered as arrears of land revenue in addition to any other penalties to which the Licensee may be liable under the Act/Rules/Regulations and terms and conditions of the License.

4.1.1.2In case the initial spectrum fee, if it is opted to be paid 100% upfront, or first 50% payment if it is opted to be paid in installments or any of its installment becomes overdue, the PTA may serve upon the Licensee a show cause notice stating the default and seeking explanation, allowing it not less than 7 days, as to why its License shall not be suspended or revoked. On considering the Licensee's explanation the PTA may suspend or revoke the License as deemed appropriate. The PTA and the Licensee have agreed to this term in the light of the spirit of Section 28 of the Contract Act, 1872 and despite Section 23 of the Act read with Rule 9 of the Pakistan Telecom Rules, 2000.

- 4.1.2 The Licensee shall pay the following annual regulatory fees, contributions and charges within 120 days of the close of Financial Year of the Licensee:
 - 4.1.2.1 The Licensee shall pay Annual License Fee (ALF) to the PTA, an amount equivalent to 0.5% of the Licensee's annual gross revenue from Licensed Services minus inter operator payments and related PTA / FAB mandated payments. In the case of PTA / FAB mandated payments, this deduction will be allowed if these amounts have actually been paid and not on accrual basis. However, Initial Spectrum Fee, Initial License Fee, leased line charges, late payment additional fee, penalties, collection charges, and other expenses imposed by PTA, if any, shall not be deducted from the gross revenue.
 - 4.1.2.2 The Licensee shall pay annual Universal Service Fund contribution to the Federal Government, an amount equivalent to 1.5% of the Licensee's annual gross revenue from Licensed Services minus inter operator and related PTA / FAB mandated payments. In the case of PTA / FAB mandated payments, this deduction will be allowed if these amounts have actually been paid and not on accrual basis. However, Initial Spectrum Fee, Initial License Fee, leased line charges, late payment additional fee, penalties, collection charges, and other expenses imposed by PTA, if any, shall not be deducted from the gross revenue.
 - 4.1.2.3 The Licensee shall pay Annual R&D Fund contribution to the Federal Government, an amount equivalent to 0.5% of the Licensee's annual gross revenue from Licensed Services minus inter operator and related PTA/FAB mandated payments for Research and Development Fund managed by the Federal Government. In the case of PTA / FAB mandated payments, this deduction will be allowed if these amounts have actually been paid and not on accrual basis. However, Initial Spectrum Fee, Initial License Fee, leased line charges, late payment additional fee, penalties, collection charges, and other expenses imposed by PTA, if any, shall not be deducted from the gross revenue.
- 4.1.3 The Licensee shall pay to the PTA Annual Spectrum Administrative Fee (ASAF), an amount calculated on the basis of the proportion of spectrum allocated to the Licensee out of the total spectrum allocated to all Cellular Mobile Operators and NGMS Licensees to recover 75 % of FAB's total budgeted expenditure for the next Financial Year. The ASAF will fall due on 1st of June every year for the next financial year and is payable in advance latest by 30thJune of every year. Any change, in payment mechanism of Annual Spectrum Administrative Fee (ASAF) will be carried out in light of Telecommunications Policy 2015.
- 4.1.4 For each number allocated to the Licensee, the Licensee shall pay to the PTA at commencement of each financial year the Annual Number Charges as mentioned in the Numbering Allocation and Administration Regulations, 2011, as amended from time to time. The annual Numbering Charges will fall due on the first of June every year and are payable latest by 30th of June every year.

4.2 UNIVERSAL SERVICE FUND

4.2.1 The Licensee shall be eligible to apply for money from the Universal Service Fund in order to cover rural and underserved areas as per USF Rules and any further Rules/Regulations, notified from time to time, for utilization of Universal Service Fund.

4.3 GENERAL CONDITIONS CONCERNING FEES

- 4.3.1 The Licensee shall annually submit to the PTA, audited financial statements in support of its calculations of annual fees, charges and contributions. The notes to the financial statements of the Licensee should be drawn up in sufficient detail so as to disclose separately the Annual Gross Revenue between Licensed and Non-Licensed Services, and interconnection and inter-operator payments that are allowable to determine the Adjusted Gross Revenue of the Licensee as per clause 4.1.2 above for the purpose of calculation of Annual Fees, charges and contributions.
- 4.3.2 In case of delay in payment of any fees, charges, contributions and other amounts to the PTA or as the case may be, the Licensee shall pay Late Payment Additional Fee @ 2% per month or part thereof from the due date till the date of payment.
- 4.3.3 The Licensee shall pay to the PTA or as the case may be all fees, charges, contributions and other amounts required to be paid under the Act, Rules and Regulations.
- 4.3.4 This License shall be suspended / terminated in accordance with the law or Rules or Regulations, in case the Licensee fails to make the payment of any outstanding dues i.e. annual fees, contributions, charges, late payment additional fee, penalties etc. on due dates.
- 4.3.5 After expiry of the 15 year term, License shall be renewed or otherwise as per the Federal Government policy applicable at that time.
- 4.3.6 Where the Licensee is required under the Licence, to make a payment of fees to the PTA 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 prevailing at the business day preceding the date of payment.

5 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-II is assigned to the Licensee pursuant to the terms and conditions of this License, including any terms and conditions appearing in Appendix-II.
- 5.1.2 The assignment of radio frequency spectrum to the Licensee pursuant to this License 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 a further term as may be fixed by the PTA in accordance with the Federal Government policy at the time of renewal.

5.1.3 Upon termination of the assignment to the Licensee of those radio frequencies listed in Appendix II, 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.

5.2 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 PTA 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-License, allocate, assign or otherwise make available the use of the assigned radio frequency spectrum to another Operator;
 - 5.2.1.3 The PTA shall have the right, exercisable at any time, to terminate any assignment to the Licensee of radio frequency spectrum if the PTA determines that the Licensee is not complying with the requirements in the Appendix-II applicable to such radio frequency spectrum;
 - 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 by the rollout obligation given in Appendix I; and
 - 5.2.1.7 The assigned spectrum shall be used for technologies standardized for NGMS for meeting the Roll out and QoS obligations given in Appendices-I and III respectively.

5.3 REASSIGNMENT OF FREQUENCIES

5.3.1 The PTA may, in order to comply with international radio frequency spectrum coordination requirements, ITU assignments or reassignments, or generally in the course of regulating the radio frequency spectrum in the best interest of Pakistan, reassign radio frequency spectrum assigned 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 PTA 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.
- 5.3.2 If, pursuant to sub clause 5.3.1, the PTA 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 PTA re-assigns the radio frequency spectrum to another Operator within three years after the date established by the PTA 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 PTA shall require the other Operator to compensate the Licensee for its reasonable costs incurred as a result of such change or surrender, as determined by the PTA. The detailed procedure for refarming will be provided at the appropriate time by the Board/PTA.

5.4 RADIO APPARATUS

- 5.4.1 The Licensee shall operate radio communication apparatus and devices in compliance with all requirements of the PTA and the Board pertaining to emissions, frequencies of operation, base station site clearance, technical characteristics, power and aerial characteristics.
- 5.4.2 The licensee shall ensure compliance with 3GPP standards and will have to take all possible measures while installing its network to ensure that the out-of-band emissions are under the permissible limits defined by ETSI, ANSI, ITU, IEC standards.

6 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 Telecommunications System or Telecommunications Services of any other Operator or any other radio frequency spectrum not assigned to the Licensee.
- 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 relevant law, rule or regulation.

6.2 DISCONTINUATION OF SERVICES

6.2.1 The Licensee shall not discontinue providing a category of Licensed Services in any area unless (a) the Licensee gives the PTA and affected customers at least 90 days' prior written notice of such discontinuation, and (b) PTA's prior written approval to such discontinuation is obtained. However, services to the subscribers who have defaulted may be disconnected as per the PTA approved "Code of Conduct" and "Service Level Agreement". The PTA will not give its written approval to such discontinuation if the Licensee is in arrears of any fees, contributions or any other amounts payable to the PTA.

6.3 MONITORING

- 6.3.1 The Licensee shall provide, at its own cost, suitable equipment at premises designated by the PTA and will ensure its upgrading, security and safety, in order to monitor the communications for the purpose of; measuring and recording traffic; call detail records; curbing of Grey International Telephony Services including SIM Box Detector and Quality of Service in a manner specified by the PTA. The Licensee shall provide the PTA with access to such equipment, and the information generated by such equipment.
- 6.3.2 The PTA shall have the full right to inspect any premises or facility including hardware and software of the Licensee.

6.4 INFORMATION

- 6.4.1 The Licensee shall furnish to the PTA, such information as the PTA may demand regarding the Licensee's network plan, network and terminal standards, links utilized, financial information, costs and accounts, Network audit and penetration test from an accredited technical auditor or any such other information as the PTA 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 PTA may require. The PTA 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 PTA. Upon request by the PTA, the Licensee shall make its books and records available for inspection by the PTA.
- 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 Income Statements (statements of Profit and Loss), Balance Sheets (statements of assets and liabilities), Statements of Changes in Comprehensive Income and Cash Flow Statements to the PTA within 120 days of the closing date of Financial Year of the Licensee.
- 6.4.4 The PTA 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 PTA may disclose information where the PTA 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-III and such other Quality of Service standards as the PTA 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 PTA on a quarterly basis in such format as the PTA may require. The Licensee shall maintain supporting records for inspection and technical audit as and when required by the PTA. The Licensee shall maintain all such records for a period of three years.

6.5.2 The PTA 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 PTA at any time and furnish to the representative such information as may be required by the PTA.

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.
- 6.7.2 It shall be open to the PTA to restrict the Licensee from operating in any unauthorized area defined by the Federal Government from the national security point of view.
- 6.7.3 The Licensee shall not transfer user information and CDRs (except pertaining to foreign subscribers on operator's network while roaming) to any person/place outside Pakistan including AJ&K and GB.
- 6.7.4 No local/long distance traffic (mobile and fixed line) shall be hauled directly outside Pakistan.
- 6.7.5 No remote access shall be provided to any unauthorized person/place outside Pakistan for any maintenance/repairs/databases/facility.
- 6.7.6 The network base stations shall be installed in such a way that signal strength fades away within the international border, or as specified, and no communication takes place across the international border. No base station shall be installed without prior approval of the PTA/FAB.
- 6.7.7 Licensee shall not use any ciphering/encryption other than built in standard technologies (GSM, WCDMA, LTE) without approval of the PTA.
- 6.7.8 The Licensee shall ensure to implement Equipment Identity Register (EIR) or related module in the network or as directed by the PTA.
- 6.7.9 Every User Equipment (UE) shall have a unique subscriber identity number.
- 6.7.10 The Licensee shall provide and extend at its own cost suitable equipment at premises designated by the PTA in consultation with the Designated Agency for the purpose of LI. The Licensed System must be compliant with ETSI LI and other related security standards of communications security and must be ready to be extended as desired by the PTA. The System shall be available prior to launch of commercial operation and support all services provided by the Licensee.

- 6.7.11 The Licensee shall activate a SIM after proper verification as per applicable Regulations/Directives/Standard Operating Procedures of PTA.
- 6.7.12 The Licensee shall block website(s), or /web content(s) (on best effort basis)or other services as and when directed by the PTA.
- 6.7.13 The Licensee shall provide details of subscriber antecedents as and when directed by the PTA.

6.8 CALL RECORDS

- 6.8.1 The Licensee shall maintain call records including called and calling numbers, date, duration, time, IMEI and location details with regard to the communications made on its Telecommunication System for a period of one year for scrutiny by or as directed by the PTA.
- 6.8.2 In addition to maintaining call records mentioned in clause 6.8.1 above, the Licensee shall also record/store data session logs/info along with IP address for one year for scrutiny by or as directed by the PTA.

6.9 NETWORK STANDARDS

- 6.9.1 The Licensee shall use any type of network equipment that meets appropriate ITU or other international telecommunication standards recognized by the PTA.
- 6.9.2 The Licensee shall ensure that its network is at all times interoperable and interconnectable with the networks of other Operators. If the Licensee implements any new equipment or protocols in its network, the Licensee shall bear the cost of any modifications to its network to maintain such interoperability and inter-connectability with the networks of other Operators.

6.10 TYPE APPROVAL OF TERMINAL EQUIPMENT

6.10.1 The Licensee shall not install or connect, or permit the installation or connection of, any Terminal Equipment unless the Terminal Equipment is (a) type approved, or otherwise permitted by the PTA, (b) type approved by a recognized telecommunications equipment type approval agency or a recognized telecommunications equipment testing laboratory in a member country of the Organisation of Economic Cooperation and Development (OECD). The Licensee shall not install or connect, or permit the installation or connection of, any Terminal Equipment or type of Terminal Equipment prohibited by the PTA.

6.11 SERVICE COMMENCEMENT CERTIFICATE

6.11.1 The Licensee shall not provide any Licensed Services to customers, or accept any payment from customers in respect of Licensed Services to be provided by the Licensee, until the Licensee has obtained from the PTA a service commencement certificate evidencing that the PTA is satisfied that the Licensee has established the Licensed System, and is able to provide the Licensed Services including Mandatory Services as per the QoS KPIs set by the PTA, in accordance with the License.

6.11.2 The Licensee shall give 30 days' prior written notice to the PTA of the date on which the Licensee intends to commence providing Mandatory Services to customers. The Licensee shall cooperate with the PTA in its investigation of the Licensed System and the Licensed Services in connection with the issuance by the PTA of a commencement certificate.

7 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 PTA, before commencement of its services. The Licensee shall file the standard contract, and amendments thereto from time to time, with the PTA for its approval. The PTA shall approve the standard contract if it contains the terms and conditions described in sub clause 7.2.1 and if it contains terms and conditions that are not unduly burdensome on non-commercial customers.
- 7.1.2 The standard contract, as approved by the PTA, shall apply to all consumers that obtain NGMS from the Licensee.
- 7.1.3 Prior to providing NGMS to its customers, the Licensee shall enter into a contract with customers in accordance with the standard form contract approved by the PTA.
- 7.1.4 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 such deposits or security exceeds 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;
 - 7.2.1.7 Customer's and Licensee's rights of termination;

- 7.2.1.8 The customer shall not use the SIM for unsolicited, abusive, obnoxious, offensive, indecent, obscene, or menacing messages, calls or communications or for any improper, immoral or unlawful purpose; and
- 7.2.1.9 In case of a loss or theft of the SIM Card, the customer shall immediately inform and request the Licensee, in writing, to block the SIM Card, failing which, the customer shall not be absolved from criminal liability, if any, arising due to use of such SIM Card/connection in any unlawful/criminal act.

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 PTA.
- 7.3.3 If a complaint is filed with the PTA in connection with any dispute between the Licensee and a customer regarding any activity that is the subject of this License, the PTA 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 PTA.

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 PTA 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 7.4.1.
- 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 PTA. The code of commercial 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;
 - 7.5.1.5 Availability to customers of information concerning their accounts with the Licensee; and
 - 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 or required under any other applicable law of Pakistan.
- 7.6.2 The Licensee shall take reasonable measures to safeguard its Licensed System from unauthorised 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 an 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 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.
- 7.8.2 The Licensee shall, on the directions of the PTA, terminate or suspend service to any customer that is the source of harassing, offensive or illegal communication.

8 PART 8 TARIFFS

8.1 TARIFF OF NON-SMP OPERATORS

8.1.1 The Licensee shall comply with the PTA's orders, determinations and regulations relating to the Licensee's tariffs, issued from time to time by the PTA in accordance with the law, to protect the consumers' interest.

8.2 PRICE REGULATION OF OPERATORS WITH SMP

8.2.1 If the PTA determines that the Licensee possesses SMP in a relevant market, the PTA may regulate Licensee's prices, terms and conditions for those Licensed Services in the SMP market and any Licensed Services incidental thereto as determined by the PTA. The method of regulation shall be determined by the PTA and may include a requirement for prior approval of the PTA 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 PTA from time to time. No hidden tariffs will be charged to the Customer.

9 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 requested in order for the requesting operator 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 PTA:
 - 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 of its Mobile Services over its Mobile System; or
 - 9.1.2.3 Not be technically or commercially feasible.
- 9.1.3 If the PTA 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:
 - 9.1.3.1 on a 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 PTA, the Licensee shall ensure that within a reasonable specified period of time to be set by the PTA its charges for the provision of Mobile Services in accordance with 9.1.3 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 the evidence of cost for Interconnection Termination rates within 12 months of Commencement of the services. The cost information so provided should be certified by a practicing Cost and Management Accountant firm of Pakistan.
- 9.1.6 The Licensee shall provide to the PTA all such technical, operational and accounting information as the PTA may reasonably require in order to ensure that the requirements of this Condition are met. The PTA shall ensure that any information provided to it in accordance with this Condition which is expressed to be confidential is maintained as such.
- 9.1.7 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 PTA and the PTA 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.

10 PART 10 INFRACTIONS AND SANCTIONS

10.1 SANCTIONS FOR VIOLATIONS OF THE LICENSE

10.1.1 If the PTA determines that the Licensee has violated a provision of this License or the Act, Rules or Regulations conditions of this License or any other order or instructions of

the PTA, the PTA may by order impose one or more sanctions provided in the Act, the Rules and Regulations issued there under.

11 PART 11 TERMINATION AND AMENDMENT

11.1 TERMINATION OF THE LICENSE

- 11.1.1 The License shall remain in force until it is terminated by one of the following events:
 - 11.1.1.1 The term of the License expires without renewal;
 - 11.1.1.2 The Licensee agrees to the termination of this License; or
 - 11.1.1.3 The License is suspended or terminated in accordance with the Act, Rules or Regulations, or the provisions of this License.

11.2 AMENDMENT

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

12 PART 12 GENERAL

12.1 ASSIGNMENT OF RIGHTS

12.1.1 The License granted under the Act and Rules shall be personal to the Licensee and shall not be assigned, sub-Licensed to, transferred directly or indirectly or held on trust for any person, without the prior written approval of the PTA.

12.2 OWNERSHIP AND CONTROL REPORTING

- 12.2.1 The Licensee shall notify the PTA of the occurrence of any act, agreement or transaction that to its knowledge, directly or indirectly, results in (a) acquisition by a person or a group acting in common of more than 10 per cent of the Voting Interests of the Licensee, or (b) disinvestment by a person or a group acting in common having direct or indirect control of 10 per cent or more of the Voting Interest of the Licensee, of those Voting Interest to any other person or group of persons.
- 12.2.2 The Licensee shall give the notification referred to in sub clause 12.2.1 above to the PTA 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) 60 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 written consent of the PTA is obtained.

12.3 NO LIABILITY BY THE PTA

12.3.1 No suit, prosecution or other legal proceedings shall lie against the PTA or any Member or employee of the PTA in respect of anything done or intended to be done by the PTA in the good faith exercise of its powers under the Act.

12.4 FORCE MAJEURE

12.4.1 Notwithstanding anything to the contrary 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 PTA the same and cause of such inability and its efforts to remove such cause and remedy it's consequences.

12.5 COMMUNICATION WITH THE LICENSEE

12.5.1 The Licensee shall maintain on file with the PTA 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 PTA. Any notice or other communication to the Licensee permitted under this License 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 PTA.

13 PART 13 INTERPRETATION AND DEFINITIONS

13.1 INTERPRETATION

- 13.1.1 In this License, words importing the singular shall include the plural and vice versa.
- 13.1.2 The headings in this License 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**

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 License shall have the meanings indicated below:

- "AAA, AA+, A1" means the most recent, as at the date it is required, credit rating published by State Bank of Pakistan.
- "Act" means The Pakistan Telecommunication (Re-organization) Act, 1996.
- **"PTA"** means the Pakistan Telecommunication PTA 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.
- "City Coverage Area" means 60% of the geographical area of a given city mentioned in Appendix I.
- "Day" and "Month" means a calendar day or a calendar month as the case may be.
- "Effective Date" means the date on which this License is issued by the PTA and is appearing on the first page of this License.
- **"Existing Sites"** means the base stations sites used by the Licensee to provide mobile services under any License.
- "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.
- **"Fixed Services"** means the provision of telecommunications services by means of a fixed connection or a system providing public fixed network connections to consumers.
- "GOP" means the Government of Pakistan.
- "GPRS" means General Packet Radio Services, as defined by the European Telecommunications Standards Institute (ETSI).

- "GSM" means Global System for Mobile Communications, as defined by ETSI.
- "Grey International Telephony Services" includes involvement at any level in origination, termination, routing, carriage, modification, alteration of telecom traffic by licensed or un licensed operator with the intent to avoid the associated fees, taxes levied by the Regulator or GOP from time to time and/or to conceal or misreport the traffic and the associated information from the Regulator or other GOP or international authorities for the gain of any motives other than the business as allowed under the License.
- "Interconnection Rules" means the Rules relating to interconnection.
- "ITU" means the International Telecommunications Union.
- "LI" means Lawful Interception of communication.
- "License" means this License, together with the terms and conditions applicable thereto, and any amendments thereto.
- "Licensed Services" means the Mandatory Services and the Optional Services as listed hereinabove.
- "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 during the validity of the License for the purpose of providing Licensed Services by whatever means allowed under the License.
- "Long Distance" means end to end communication between points that are (i) located in different Regions or (ii) such other distance apart as the PTA may by Regulations specify.
- "Long Distance and International Licensee" means a Licensee Licensed to offer endto-end communication between points that are (i) located in different Regions of Pakistan or (ii) located in Pakistan on one end and outside of Pakistan on the other or (iii) such other distance apart as the PTA may by Regulations, specify.
- "Long term evolution (LTE)" means an International 3GPP standard for high-speed NGMS.
- **"Mandatory Services"** means the Telecommunications Services that the Licensee must provide under this License, as described in Clause 1.1.2.
- **"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 Licensed operator which enables any user to whom a mobile

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 PTA which sets out the sequence of numbers or other characters which shall be used to route telephony traffic to specific locations and/or equipment.
- "Network Connection Point (NCP)" is a location at which other Operators can send to or receive from the Licensee's voice or data traffic originated by or destined for the Licensee's customers.
- "Network Termination Point (NTP)" means any point or node forming part of Licensed System through which the 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.
- "Next Generation Mobile Services (NGMS)" means the Mobile Communication Services offered through technologies standardized for 3G/4G/LTE and advanced generation(s).
- "Operator" means any person authorised by a License issued by the PTA to establish, maintain and operate Telecommunications System or to provide Telecommunications Services.
- "Premium Rate Service" means the service of routing a telephone call with a nongeographic 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.

"RAB" means Radio Access Bearer.

"Region" means a telecommunications administrative region, as determined by the PTA.

"Regulations" means all or any the regulations issued from time to time by the PTA.

"Revenue" definition will be inserted later

"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 Pakistan Telecommunication Rules, 2000.

"SIM" means Subscriber Identity Module.

"Telecommunications 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 opto-electronic system, whether or not the intelligence is subjected to re-arrangement, computation or any other process in the course of the service.

"Telecommunications System" means any electrical, electro-magnetic, electronic, optical or opto-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.

"UE" means User Equipment.

"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.

For and an habalf of

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

ACCEPTANCE

The Terms and Conditions of the License along with all its appendices are hereby accepted.

(The License	
Signature	:
Name	:
Designation (Official Stam	
(Univial Staff	ID)

Appendix I - NETWORK ROLL-OUT

A1. NETWORK ROLL-OUT AND PERFORMANCE BOND

- A1.1 Where the existing NGMS Licensee has obtained usage rights for **1800 MHz** spectrum in the NGMSA it shall provide 4G / LTE coverage at the Quality of Service defined in Appendix III whichever is applicable in the areas as stipulated below:
 - A1.1.1 **First Phase:** The Licensee shall within twelve (12) months from the Effective Date of the License, provide NGMS presence in all four Provincial Capital cities and Federal Capital.
 - A1.1.2 **Second Phase:** The Licensee shall within three (3) years from the Effective Date of the License, provide NGMS coverage of 25% of the 3G Coverage Area in ten (10) additional cities (one of which must be located in each of the four provinces).
 - A1.1.3 **Third Phase:** The Licensee shall within five (5) years from the Effective Date of the License, provide NGMS coverage of 50% of District Headquarters where coverage of a District Headquarters means the area of the Tehsil within which the District Administrative Headquarters lies.
 - A1.1.4 **Fourth Phase:** The Licensee shall within seven (7) years from the Effective Date of the License, provide NGMS coverage in 25% of Tehsil Headquarters.
- A1.2 As a guarantee for the performance of Licensee's obligations in A1.1, the Licensee shall deliver to the PTA a Performance Bond in the shape of an unconditional, irrevocable and continuing Bank Guarantee from a local bank in Pakistan with credit rating of AA+ and above, or a foreign bank having credit rating of A1 and above, acceptable to the PTA for the amount of US\$15,000,000 (US Dollars Fifteen Million only) or its equivalent in Pakistan Rupees of the value prior to Effective Date. The Licensee shall be entitled to release and exchange of the performance bond according to the time period specified in A1.1.1 to A1.1.4 above, proportionately to the roll out obligations met by the Licensee. In case any phased roll-out obligation is not fulfilled, Performance Bond proportionate to the roll-out obligation not met shall be encashed by the PTA. Each Performance Bond shall remain in force until 6 months after the associated phase of the network roll-out.

FOR NEW ENTRANT ONLY

- A 2.1 Where the NGMS Licensee (New Entrant) has obtained usage rights for **1800 MHz** spectrum in the NGMSA it shall provide 4G LTE coverage at the Quality of Service defined in Appendix III whichever is applicable in the areas as stipulated below:
 - A2.1.1 **First Phase:** The Licensee shall within eighteen (18) months from the Effective Date of the License, provide NGMS presence in all four Provincial Capital cities and Federal Capital.

- A2.1.2 **Second Phase:** The Licensee shall within three and a half (3-1/2) years from the Effective Date of the License, provide coverage in ten (10) additional cities (one of which must be located in each of the four provinces).
- A2.1.3 **Third Phase:** The Licensee shall within six (6) years from the Effective Date of the License, provide coverage in 50% of District Headquarters where coverage of a District Headquarters means the area of the Tehsil within which the District Administrative Headquarters lies.
- A2.1.4 **Fourth Phase:** The Licensee shall within eight (8) years from the Effective Date of the License, provide coverage in 25% of Tehsil Headquarters.
- A 2.2 As a guarantee for the performance of Licensee's obligations in A 2.1, the Licensee shall deliver to the PTA a Performance Bond in the shape of an unconditional, irrevocable and continuing Bank Guarantee from a local bank in Pakistan with credit rating of AA+ and above, or a foreign bank having credit rating of A1 and above, acceptable to the PTA for the amount of US\$15,000,000 (US Dollars Fifteen Million only) or its equivalent in Pakistan Rupees of the value prior to Effective Date. The Licensee shall be entitled to release and exchange of the performance bond according to the time period specified in A 2.1.1 to A 2.1.4 above, proportionately to the roll out obligations met by the Licensee. In case any phased roll-out obligation is not fulfilled, Performance Bond proportionate to the roll-out obligation not met shall be encashed by the PTA. Each Performance Bond shall remain in force until 6 months after the associated phase of the network roll-out.

Appendix II – 1800 MHZ BAND ASSIGNMENT, TERMS & CONDITIONS

A1. RADIO FREQUENCY SPECTRUM ASSIGNED TO LICENSEE

- A1.1 The Licensee is assigned the following radio frequency spectrum from the Effective Date for use in providing the Licensed Services nationwide in Pakistan **excluding** Azad Jammu & Kashmir (AJ&K) and Gilgit Baltistan (GB):
 - **1800 MHz band spectrum:** 2 x 10 MHz: MHz paired with MHz (will be inserted after auction process)
- A1.2 Upon termination of the assignment to the Licensee of the radio frequencies listed in A1.1, 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.

Appendix III – QUALITY OF SERVICE

A1. QUALITY OF SERVICE STANDARDS

- A1.1 The Licensee shall take reasonable and prudent measures to ensure that the Licensed System and Licensed Services are available as per the network roll out obligations and operate as per the following QoS Key Performance Indicators (KPIs) at all times.
- A1.2 Any fault in any component of its Licensed System or Licensed Service shall be repaired as per the time lines given in the following standards.
- A1.3 PTA's Regulation on QoS and 3GPP latest Version/Release for Cellular Mobile (3G/4G/LTE) shall be followed. The PTA may carry out tests on the quality of the Licensed Services and the Licensed System and the Licensee shall extend full cooperation and assistance for the purpose including provision of test instruments and equipment.
- A1.4 The Licensee shall maintain records of its performance in meeting these QoS standards, and shall submit them to the PTA on a quarterly basis in such format as the PTA may require. The Licensee shall maintain supporting records for inspection and technical audit as and when required by the PTA. The Licensee shall maintain all such records for a period of three years.
- A1.5 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
Service Provisioning	_	
Service Activation Time		
Post-Paid	1hr.	

The Licensee shall be solely responsible for meeting all regulatory obligations such as PTA's Regulations on QoS and relevant International standardization forums such as ETSI, ANSI, ITU, 3GPP/2, IEC

Key Performance Indicator	Benchmark	Remarks	
Network Down-time	< 1 % (excluding forced shutdown)		
Grade of Service (end to end blocking)	<= 2 %		
Call Connection Time	<= 6.5 sec		
Call Completion Ratio	> 98 %		
Mean Opinion Score (Average of, Average A2B plus Average B2A)	>= 3	As recommended by ITU-T in recommendation number P.862.2 (PESQ), P.862.3 (POLQA) or latest ITU/Relevant forum recommendation	
SMS Success Rate	> 99%		
End to End SMS Delivery Time	<=12 seconds		
RAB setup success rate	>97% for three years from the date of commencement and 98% thereafter		
Session abnormal release rate	<2%		
Inter System Handover (ISHO)success rate for CS Voice (only)	>= 94% for three years from the date of commencement and 98% thereafter		
Indicators	Bench Mark Remarks		
Customers' Complaints			
Customers' Complaints/100 Subscribers / Month			
Complaints Regarding Billing	<=1 %		

Complaints Regarding Network Operability	<=1 %			
Complaint Turn Around Time				
%age of Billing Complaints Resolved Within 24 hrs.	98 %			
%age of Billing Complaints Resolved Within 48 hrs.	100 %			
%age of Complaints (Regarding Network Operability) Resolved Within 24 hrs.	95 %			
Within 48 hrs.	100 %			
Billing Service		1		
Billing Complaints	0.2 per 100 bills issued	Applies to complaints which are valid		
Reconnection Time After Clearing Arrears	15 min.	The time it takes in minutes to reconnect the service once the due payment has been made by the customer		
Operator Service		1		
Operator Assistance Response Time Within 30sec.	>=98 %	There should be a queuing system for all operator attended calls i.e., no call should receive a busy signal;		
Dedicated Customer Complaint Helpline Response Time within 30sec.	>=98 %	rather each call is queued and maximum calls (as shown in the given benchmark) should be answered within 30		

Directory Assistance Response Time Within 30sec.	>=98 %		seconds.	
Calls to Emergency Numbers Handled Within 30 Seconds	100%			
Directory Assistance				
Updated Directory Assistance	Provisioning of redirect mechanism to PTCL directory	Provisioning of updated directory assistance	The Licensee should provide redirect service mechanism for accessing PTCL's Directory Assistance to its subscribers. The Licensee is required to provide its own Directory Assistance services after one year of the Effective Date.	
Network Management & Sec	Network Management & Security			
Voice Security during Connection		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		The Licensee should demonstrate to PTA that fraud controlled procedures are in place.	

A1.5.1 where the NGMS Licensee has obtained usage rights for **1800 MHz** spectrum in the NGMSA, it shall provide the Quality of Service across the coverage areas defined in A 1.1 of Appendix - I as stipulated below:

Key Performance Indicator	Benchmark for 4G/LTE	Remarks
User data throughput	A minimum user data rate of 2 Mbps typical	
Signal Strength (RSRP)	A minimum outdoor signal strength of -100 dBm must be achievable with 90% confidence within the areas defined in Appendix I.	To be measured at random locations within the areas covered

A1.6 The PTA may revise the QoS standards and targets in A1.5 at any time. In addition, any QoS KPIs devised in future and regulations made thereto by the PTA for the Licensed Services shall be strictly followed by the Licensee.