



**CONSULTATION PAPER ON SCOPE OF
MANDATORY SERVICES IN LOCAL
LOOP LICENSE**

PAKISTAN TELECOMMUNICATION AUTHORITY
HEADQUARTERS, F-5/1, ISLAMABAD

1 Background

Pakistan Telecommunication Authority (PTA) is undertaking a Consultation process to gather feedback on the regulatory framework governing Local Loop (LL) Licensing regime in Pakistan, in light of evolving communication technologies. With the rapid adoption of next-generation voice services and broadband solutions, it is essential to ensure that regulatory regime supports innovation, competition, and efficient service delivery. This consultation seeks stakeholders' input to reassess the obligations of LL license in facilitating modern voice services and enhancing connectivity while aligning with global best practices to improve service quality, reduce operational costs, and introduce innovative services.

Through this consultation, the PTA seeks to:

- (i) **Assess Current Regulatory Regime:** Determine if existing LL licensing regime align with the technological advancements and current market dynamics.
- (ii) **Gather Stakeholder Input:** Collect feedback from industry and other stakeholders on potential regulatory adoption, if required.
- (iii) **Promote Fair Competition:** Ensure that the regulatory environment fosters healthy competition, benefiting consumers with better and more affordable/ competitive services.

2 Key Objectives of Consultation.

This consultation process is expected to align with technological advancements, market dynamics/ demand, and consumer needs. The key outcomes are expected to include:

a. **Clarity on Mandatory Service Obligations for LL License**

One of the main objectives of this consultation is to determine whether Local Loop (LL) licensees should be required to provide voice services. Furthermore, should they have the flexibility to adopt modern technologies such as Network Function Virtualization (NFV), Software-Defined Networking (SDN), VoIP, and Packet-Switched Networks (PSN) etc. to provide voice services.

- i. Regulatory clarity on whether voice services remain mandatory?
- ii. If voice service remains Mandatory then, whether LL licensees can transition to technology-neutral approach?

b. **LL Licenses to provide only Internet Services**

Currently, LL licensees are expected to provide both voice and data services. Through this consultation, it is intended to examine whether LL Licensees should be allowed to function solely as an Internet Service Providers (ISPs), focusing purely on broadband services without a mandatory voice telephony obligation.

- i. Introduction of ISP-only LL license to promote broadband proliferation.
- ii. Market flexibility, allowing service providers to invest in high-speed data networks without requiring voice services, thereby promoting broadband infrastructure investment.

c. **Numbering Resource Allocation Requirement**

The consultation may help define numbering resource allocation requirement for LL Licensees offering services through modern technologies. Allocations of numbering resources for provisioning of voice services.

3 Regulatory Provisions – PTRA, 1996

- **Section 2(b) of PTRA 1996** states “*Basic telephone service means the provision of any telecommunication service which consists of*
 - *two-way live voice telephone service, in digital form or otherwise, over any public fixed switched network or between base stations or switches or modes of any public mobile switched network;*
 - *real-time transmission or reception of facsimile images over a public fixed switched network;*
 - *international telephony service; and*
 - *the lease of circuits for the provision of the services specified in sub-clauses (i), (ii) and (iii);”*
- **Section 2(n) of PTRA 1996** states “*Public Switched Network means a telecommunication system which allows intelligence to be switched between members of the public.”*
- **Section 2(v) of PTRA 1996** states “*Telecommunication service” means a service consisting in the emission, conveyance, switching or reception of any intelligence within, or into, or from, Pakistan by any electrical, electromagnetic, electronic, optical or optio-electronic system, whether or not the intelligence is subjected to re-arrangement, computation or any other process in the course of the service.”*
- **Section 2(g) of PTRA 1996** states “*Intelligence” means any speech, sound, data, signal, writing, image or video;”*

4 Regulatory Provisions – PTRA, 1996

- Condition 4 of Schedule 1, read with Paragraph 1.2 of Appendix ‘B’, further read with rule 7(4) of Pakistan Telecommunication Rules, 2000 defines Number as “*means any identifier which would need to be used in conjunction with any telecommunication service for the purposes of establishing a connection with any Terminal Connection Point, customer or telecommunication apparatus connected to any telecommunication system providing a telecommunication service, but not including any identifier which is not accessible to the generality of customers of a telecommunication service.”*
- Condition 21 of Schedule 2, read with Paragraph 11 of Appendix ‘B’, further read with rule 7(4) of Pakistan Telecommunication Rules, 2000 provides “*The Licensee shall make reasonable efforts to employ modern technology as it becomes available for the provision of the Licensed Services so as to provide modern and efficient services to its customers to the maximum practicable extent.”*

5 Regulatory Provisions - De-Regulation Policy, 2003

- **Clause 3(b) of Telecommunication De-Regulation Policy, 2003** (“De-Regulation”) states that “The policy is designed to achieve the following objectives:

(b) Promote infrastructure development, especially infrastructure that will increase teledensity and the spread of telecommunication services in all market segments (including voice, data and cellular etc)

- **Clause 4.1.6** of De-Regulation Policy, 2003 states that “**LL licensees will have the right to geographic and non-geographic numbers, as well as short codes (for example, for operator services). PTA will be the number issuing authority. PTA will organize and manage numbering in order to ensure contiguous numbering for new entrants, wherever practicable. PTA will set a nominal charge for numbering to discourage misuse, and a procedure for taking back numbering ranges not used within a reasonable period of time.**
- **Clause 4.2.2(a) of De-Regulation Policy** states that **LL Licensees will have the following key obligations:**
- “**Start operations with building and operating one Point of Interconnect within the prescribed period and in each licensed PTCL Region where they operate (“Points of Interconnect” are premises at which other licensed operators can send to or receive from the LL licensee voice or data traffic originated by or destined for the LL licensee’s customers) at acceptable technical and quality standards.**”
- “**Provide free of cost directory assistance services to its own customers, access to emergency services, operator assistance and any other similar support services as required by PTA.**”
- **Clause 5.5** states “**The USF will be used to finance the expansion of basic services (including access to the Internet), both on individual and community basis. Under USF rules, there will be a determination about the level and types of services to be financed by the USF, the designated populations or geographic areas eligible to receive subsidized services from the USF, and the level of available financing and actual subsidies.**”
- **Clause 12.1 of De-Regulation Policy** states that “**The Policy and licensing regime are proposed to be technology neutral.**”
- **Clause 12.2** of De-Regulation Policy states that “**LL / LDI licensees may employ any technology such as IP, VoIP, DWDM, CDMA and so forth within flexibility of license.**”

6 Regulatory Provisions of IM Long Distance & International (LDI) And Local Loop (LL), 2004

- **Clause 16.1 of IM of LDI & LL 2004** states that “**A LL Licence will authorize the licensee to construct local network facilities in licensed Region and to provide basic public telephone access and other telecommunication services in that Region.**”
- **Clause 16.3 of IM of LDI & LL 2004** states that “**LL licensees are required to provide certain services in the Licensed Regions. The primary requirement is to offer public telecommunication services, which also include the following:**

 - *Access to emergency services*
 - *Access to directory assistance,*
 - *Access to operator services, and*
 - *Access to Long Distance And International Public Voice Telephone Services*

- Definitions of IM of **LDI & LL 2004** states that “*Local Loop means a communication channel, provided with or without a pair of wire(s), from a switching center to a customer’s telephone or Terminal Equipment.*”

7 Regulatory Provisions - Telecommunication Policy, 2015

- Glossary of **Telecommunication Policy, 2015** states that:-
 - “**Access (as an element in a telecommunications network):** Transmission from the final distribution point before the CPE to the CPE”.
 - “**Access (regulatory use):** Access to a network or service element provided by a network or service provider to another service provider”
 - “**ISP:** Internet Service Provider. A company that owns Internet based infrastructure (Routers, Servers) and **provides Internet access to users**”
 - “**Next Generation Network (NGN):** A **telecommunications network based on packet switching (as opposed to the traditional circuit switching)**. In an NGN, end user services, including telephony services, are delivered over the top of the packet switched network from service nodes”
 - “**Next Generation Access (NGA):** **Deployment of fibre cables in the local loop to replace copper cables**, allowing the delivery of higher speed broadband service associated with an NGN”
 - “**PSTN:** Public Switched Telephone Network. The **conventional fixed line telephone network**”
- **Clause 12.5.1 of Telecommunication Policy, 2015** states “The Services falling under scope of USF will include the following retail services.
 - Telephone services to local, national, mobile, toll free, premium rate and international numbers, including facilities for incoming calls from all sources, accessed from public access points as well as private lines;
 - **Access to emergency services** (as under voice licenses);
 - **Broadband Internet access;**

8 Regulatory Provisions - Number Allocation and Administration Regulations, 2018

- Clause 2 (i) of Number Allocation and Administration Regulations 2018 (“Regulation”) states “**Applicant means a licensee of PTA or any other person(s) requiring allocations of numbering capacity and considered by the Authority as eligible for allocation of a number resource;**”
- Clause 2 (xxix) of Regulation states that “**Public Switched Telephone Network (PSTN) means the telecommunications networks of the major operators, on which calls can be made to all customers of the PSTN**”
- Clause 2 (xix) of Regulation states that “**Numbering series means as a block of numbers from the national numbering plan for telephony, ISDN and mobile communications that has the same initial digits.**”

- Sub-Clause 3 (b) of Clause 12 of Regulation states that “*emergency services shall be extended by all telecom operators to the subscribers/ consumers without payment of any charges purely on humanitarian grounds from their respective telecom networks.*”

9 Broader Impact of the Consultation

- Operators may transition toward latest solutions / technologies, improving efficiency and reducing operational costs for the provision of voice services.
- Introducing ISP-only LL licenses could increase competition in the broadband market, leading to lower prices and better services for consumers. Allowing LL licensees to focus on broadband expansion could accelerate digital transformation in rural and underserved areas.
- It will pave the way for modernized telecom services, enhanced broadband access, and better regulatory clarity, ultimately benefiting both service providers and consumers in Pakistan.

10 Invitation for Stakeholder Input

PTA invites all Licensees (Integrated, CMOs, LDIs, LL, Class Licenses), industry experts, policymakers, regulatory bodies, and the public to provide feedback on the questions outlined in this paper.

11 Submission Guidelines

The stakeholders are requested to submit requisite comments in the tabulated form as shared in section **12** of this paper, preferably through email, latest by **28th March, 2025**. Email ID: snd.consultation@pta.gov.pk

Comments /input / opinions may be addressed to Director S&D, S&D Division, PTA HQ, F-5/1 Islamabad Fax. 051-2878133.

Consultation paper is also available at PTA's website: <https://www.pta.gov.pk/category/consultation-papers-1237411963-2023-05-30>

12 Questionnaire for Consultation

S/No	Question	Response (Yes/No)	Justification for Response
1	Whether Local Loop (LL) licensees should be required to provide voice services?		
2	Should Local Loop (LL) licensees have the flexibility to adopt modern technologies such as Network Function Virtualization (NFV), Software-Defined Networking (SDN), Cloud-Native Network Functions (CNF), VoIP, and Packet-Switched Networks (PSN) etc. to provide voice services?		
3	Whether LL Licensees should be allowed to function solely as an Internet Service Providers (ISPs), focusing purely on broadband services without a mandatory voice telephony obligation?		
4	Should LL licensees be required to obtain numbering resources only when they provide voice services?		
5	Should numbering allocations to LL Licensees be expanded to accommodate emerging use cases provisioned through modern technologies?		
6	Please suggest if there are any other issues/aspects that need to be addressed in the given context.		