

Consultation on the Charging Mechanism of Wholesale IP Bandwidth

The purpose of this consultation paper is to assess and review the charging of wholesale IP bandwidth in Pakistan. Comments on issues / questions raised in this paper are requested to be provided, preferably through email, at the following address within 15 days (i.e. by **27th November 2023**) of the publication of this paper.

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1. Introduction

- 1.1 The Pakistan Telecommunication Authority (the Authority) is responsible for the regulation of the telecom sector through the Telecommunication (Reorganization) Act, 1996 (Amended in 2006). Under Sections 4(c) and 6(e), the Authority is required to promote and protect the interest of users to telecommunication services as well as to encourage fair competition in the telecommunication sector. Under section 4(d), the Authority shall promote the availability of wide range of high quality, efficient, cost effective and competitive telecommunication services throughout Pakistan.
- 1.2 Clause (a), (c), (d), (e), (i), (j), (k), (l) and (m) of section 4 of the Act are: (a) regulate the establishment, operation and maintenance of telecommunication systems and the provision of telecommunication services in Pakistan; (c) promote and protect the interests of users of telecommunication services in Pakistan; (d) promote the availability of a wide range of high quality, efficient, cost effective and competitive telecommunication services throughout Pakistan; (e) promote rapid modernization of telecommunication systems and telecommunication services; (i) regulate arrangements amongst telecommunication service providers of sharing their revenue derived from provision of telecommunication service; (j) ensure effective compliance by licensees with Universal Services Obligations; (k) regulate Access Promotion Contribution; (l) settle disputes between licensees; and (m) regulate competition in the telecommunication sector and protect consumer rights.
- 1.3 Under Section 26, the level of tariffs for telecommunication services including basic telephone service shall be regulated by the Authority in accordance with the following general principles: (a) the regulations shall be made with a view to achieving the greatest possible degree of pricing flexibility and stability compatible with safeguarding and protecting the interest of consumers. (b) The regulations shall apply to comparable providers or users of any regulated telecommunication service. (c) Tariffs shall be at a level, which provides a reasonable rate of return on investments taking into account the cost of operation.
- 1.4 Regulation 6 of Pakistan Telecommunication Authority (Functions & Powers), 2006 states that (1) For exercising its functions under clause (a), (c), (d), (e), (i), (j), (k), (l) and (m) of section 4 of the Act, the Authority may, where it deems necessary, initiate studies, seek advices of consultants, conduct surveys, analysis or initiate consultation process and pass Determination accordingly;; and (2) In the case of consultation process, stakeholders shall be contacted for their comments and, if deemed necessary, hearing may also be arranged prior to

issuing of any Determination. The Determination passed after the consultation process or the hearing, as the case may be, shall be order of the Authority and shall be final and having binding effect on the licensees.

- 1.5 The purpose of this Consultation Paper is to assess and review the charging mechanism of wholesale IP bandwidth in Pakistan and not to intervene in private disputes among the licensees, rather to examine as whether any commercial arrangement which is made or intended to be made pursuant to licensing regime would require any regulatory intervention, if fall within the parameter of cross-subsidization, anti-competitive practice or burdensome, which obviously, affect the consumer's right in terms of obtaining telecom services through telecom licensed operators.
- 1.6 Vide its Determination dated 23rd July 2021, the Authority has declared PTCL and TWA as SMP operator in the wholesale IP bandwidth market.
- 1.7 The Fixed-line Tariff Regulations, 2004 states: Section 11(1) The tariffs for leased line services of an operator, who is determined to have SMP status in the leased line market by the Authority, shall be on cost. Until the determination of cost, the Authority may take into account the international benchmarks of comparable countries while setting/approving tariffs of leased lines. (2) The operator may set the tariffs of leased lines below the approved tariffs provided that they shall inform the Authority about their proposed tariffs thirty (30) days before the applicability of new tariff.
- 1.8 Consultation has been initiated considering that issues related to wholesale charging practice in the market come under sections 4(c), 4(d) and 4(m) of the Act and Regulation 6 of PTA's (Functions & Powers), 2006. In light of the aforementioned, PTA under the applicable regulatory regime is empowered and has jurisdiction to carry out consultation on wholesale charging mechanism in the market. It is clarified that consultation process will not prejudice any commercial arrangement already executed and implemented between the parties.

2. IP Bandwidth

- 2.1 IP bandwidth or commonly known as internet bandwidth is a facility where bandwidth providers offer capacities to multiple users. Bandwidth is the amount of data that can be transferred over the network in a fixed amount of time. Internet bandwidth provided by operators in Pakistan is coming from a giant pool of bandwidth from different worldwide bandwidth providers. IP bandwidth is not a point to point circuit between two parties like IPLC. An important feature of IP bandwidth is that it is offered on a distance less basis as the traffic flows in multiple directions to reach multiple destinations.

- 2.2 Prior to August 2023, there were only two submarine cable operators in Pakistan, Pakistan Telecommunication Company Limited (PTCL) and Transworld Associates (TWA). Recently, PTA has allowed operation of PEACE Cable System in Pakistan to Cyber Internet Services. Presently, Cyber Internet Service is utilizing bandwidth capacity for its own requirements. However, services to other operators are planned for Q4 2023. All other downstream providers (e.g. fixed line, mobile cellular operators) buy International bandwidth from PTCL, and TWA (submarine cable operators) in wholesale and sell in retail to home and corporate customers.
- 2.3 It is also pertinent to highlight that SCO owns OFC based Transmission Network and operates a cable station at SCO node Khunjerab. SCO is also providing End to End Circuit to CMPak for its sole and exclusive use under Tripartite agreement with CMPak and China Mobile International (UK) Limited. It is anticipated that operators will be investing in acquiring international bandwidth infrastructure which will bring more international cables into Pakistan in near future.

Consultation Question No. 1

Do you think whether the Authority should intervene and determine charging mechanism of wholesale IP bandwidth after entry of third market player i.e. Cyber Internet Services (submarine cable operator)? If yes, then provide justification / basis for Authority's intervention?

Consultation Question No. 2

Is there a need for further revision in IP bandwidth tariffs? If so, provide justification along with authentic and verifiable international benchmarks, etc. Also, provide information on the price / cost of wholesale IP bandwidth for the month of June 2023, July 2023 and August 2023 along with invoices.

Downstream operators are requested to provide their cost of IP bandwidth and total operating cost for the year 2022, 2021 and 2020.

3. Charging of Wholesale Internet Bandwidth

- 3.1 Internationally, prices of internet bandwidth are declining, and so is the case that wholesale IP bandwidth service providers are passing on the benefit of reduced international bandwidth prices to the downstream operators in Pakistan.
- 3.2 Wholesale Internet Bandwidth in Pakistan is denominated / charged in US Dollars (USD) and payments are made in Pak Rupees (PKR) equivalent on the date of payment. Therefore, whenever Pak Rupee depreciates versus USD, the cost of Internet bandwidth for wholesale customers automatically increases with the same proportion. Similarly, wholesale internet service providers also have to pay higher amount to worldwide / international internet bandwidth providers in terms of PKR due to Rupee depreciation. As per State Bank of Pakistan, from

January 2020 till August 2023, PKR depreciated by **83%**, i.e., approx. **17%** yearly depreciation. On the other hand, the inflation in Pakistan during these three years averaged at around **16%** per annum as per Pakistan Bureau of Statistics (PBS).

Consultation Question No. 3

Do you consider Rupee depreciation as a significant factor for increase in the cost of acquiring IP bandwidth? Please provide brief impact assessment of PKR depreciation. Operators are also requested to provide copy of their IP bandwidth agreements along with invoices to assess the impact of PKR depreciation.

- 3.3 Presently, Pakistan have seven submarine cables landing stations and operators are continuously investing in their respective cable networks to meet the existing and future demand. Resultantly, PTCL, TWA and Cyber Internet are paying costs in USD to international operators like O&M charges, IP ports charges, Circuit charges, inter-linking charges and transport to Pakistan, while other costs in Pak rupees like HR salaries, network operations and transport of bandwidth within Pakistan.

Consultation Question No. 4

Do you think that the denomination of price of wholesale bandwidth as a whole should be in PKR? If yes, then how wholesale bandwidth providers will recover their costs with regards to existing and future investments including CAPEX / cable landing stations which are to be made in US Dollars? Suggest your proposals along with authentic and verifiable information. You may also provide related decisions in other jurisdiction on similar matters of charging in foreign currency or local currency.

- 3.4 Input cost of a product can be a mix of USD and PKR. To ascertain the impact due to any change in the USD value on the output costs / price of a product, the percentage share of USD and PKR in the input cost is required to be calculated.

Consultation Question No. 5

Can it be argued that the impact of any change in USD value on the output cost / price of IP bandwidth should be only to the extent of USD share in the input costs?

Wholesale IP bandwidth service providers are requested to submit bifurcation of cost components that are paid in USD / foreign exchange, and the part of cost that is in local currency for the provision of wholesale IP bandwidth along with all relevant details for the year 2021 and 2022. The information will be used for analysis of this consultation paper without compromising the business confidentiality.

Further Issues for Consultation / Additional Comments

Operators may highlight any further issues / additional comments along with verifiable information related to the subject consultation.