

# **CPP-INTERCONNECT ISSUE: THE CASE OF PAKISTAN**

**Paper for ITU-BDT Symposium for Regulators**

**November 20-22, 2000**

**Geneva**

**SWITZERLAND**

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## **INTRODUCTION**

1. The Pakistan Telecommunication Authority (PTA), the regulator for telecom systems and services in Pakistan, issued a comprehensive determination on 3 November 2000 on Calling Party Pays (CPP) and Interconnect issues. Till then, Pakistan had the Mobile Party Pays (MPP) regime. The objective of the present paper is to share inform about the process of arriving at the determination and the model used to determine the tariff and interconnect rates under the new regime. But first a few remarks about the telecom sector in Pakistan would be appropriate.
2. Pakistan has a monopoly operator for the fixed-line telephone, known as Pakistan Telecommunication Company Limited (PTCL). It has three mobile operators. The fourth one, a subsidiary of the incumbent operator, is about to launch service in January 2001. The monopoly of PTCL will come to an end by December 2002. Besides PTCL, there were two small fixed line operators also: one for the government connections and the other for defense forces. But they were quite small in size and could not play any significant role in the issue under study. There are about 3.5 million fixed-line phones and about 0.35 million mobile phone. The mobile service started in 1990. The tele-density is about 2.1 for a population of about 140 million.
3. There had been a demand from the mobile operators for introducing the CPP, as the MPP regime was a potent deterrent in the spread of mobile telephones. The mobile phone customers would keep their phones shut, or would avoid giving their mobile numbers to others and often refused to take the call, if they thought it was not important for them. It was because the incoming calls would also cost a

charge to the customer. The mobile operators pleaded for adopting CPP so that diffusion of mobile service could take place.

4. In the first week of July 2000, the Minister for Science and Technology, assessing the advantages of CPP, issued a policy directive to the PTA that CPP regime should be adopted by 1<sup>st</sup> October 2000. PTA had only three months to act. It therefore, started quickly and entered into a process of consultation with various stakeholders as well as public. It held public forums in three large cities and issued two consultation papers for soliciting public opinion as well as the comments of the mobile and fixed line operators.
5. PTA encouraged the mobile operators and the PTCL to negotiate among themselves the interconnect rates and revenue sharing formulas. But despite encouragement of the PTA, the operators were unable to arrive at any agreed formula for interconnect and tariff rates. At that juncture, PTA decided to play a more active role. It held several meetings jointly as well severally with all the operators. The operators expressed their reservations on the PTA's model suggested in the consultation paper. During this process, the operators shared with PTA their confidential business data, which helped PTA in arriving at a fair determination.

### **PTA's MODEL**

6. PTA adopted the following hypothesis for arriving at fair rates of tariff.
  - ❖ PTA kept consumer interest as its top-most priority.
  - ❖ It decided to protect the cost of the mobile operators for terminating incoming calls.
  - ❖ It decided to protect the revenue of the mobile as well fixed-line operators on originating calls.
  - ❖ It assumed, on the basis of available data, that there would be a diffusion of mobile phones about 20% in every six months after the introduction of CPP. For arriving at this rate it took into account the price elasticity of demand for mobile as well as fixed phones, and the possible contraction in the fixed-mobile phone calls.
7. The PTA adopted the following line of argument. After the introduction of CPP, the mobile phones would be cheaper and there would a diffusion of about 20% in every six months. This would enable the mobile phone operators, initially, to absorb some of the expansion on the existing network. As a result, their fixed cost per minute would go down. Subsequently, if they have to bring in new investment to expand their network, it would also, in the long run, lead to lower per minute cost.
8. The PTA tried to arrive at a tariff rate from fixed to mobile calls that should, at least, absorb the cost of the mobile operators on the incoming calls, which they

would be terminating without any revenue from their customers. This cost should now be paid by the fixed phone customer and passed onto the mobile operator.

9. As we shall illustrate below, the above line of argument still gave a rate of tariff for fixed-mobile calls that PTA considered would not be affordable for the fixed-phone customer. It, therefore, started looking for avenues for reducing the cost of the mobile operators. It identified two potential areas:
  - a) Rent of leased lines that the mobile operators had leased from PTCL for handling traffic on their own respective networks
  - b) PSTN discounts that PTCL was extending at the moment.
10. The then existing rates for leased lines provided for an average discount of 10% on the total bill of the mobile phone operators. Similarly, PTCL provided about 17% discount on the mobile operators PSTN calls bills. PTA decided to adopt an interconnect regime that would increase these discounts and then pass on this benefit to the customer of the fixed line phones.
11. Thus the PTA model provided for the following:
  - a) Determine cost of incoming calls to the mobile operators
  - b) Reduce it by a higher discount on PSTN
  - c) Reduce it further by a higher discount or by reduction in the leased line rates
12. The figure thus arrived at should be the share of the mobile operators from a fixed-mobile phone call.
13. The other challenge was the protection of revenue from originating calls. PTA decided not to interfere with the outgoing call rates of the mobile operators. So far as, PTCL revenue for originating fixed-mobile calls was concerned, PTA decided that the per-minute rate should be sufficient to protect their average revenue per call.

## **ILLUSTRATION OF THE MODEL**

14. The following illustration would clarify the application of this model.
15. Given:
  - a) Mobil-fixed local call rate in the pre-CPP regime: Rs 2.00/ per 5-minute call
  - b) Average discount on PSTN calls to mobile operators: 17%
  - c) Average discount on leased lines: 10%

- d) Mobile outgoing standard package maximum local call rate: Rs 6.25 per minute
  - e) Average fixed-mobile local call duration: About 1 minute and 30 seconds
16. PTA determined that the cost of making a fixed-mobile local to mobile operators was Rs 2.00 per minute in the first period. This was based on the data provided by the mobile operators themselves. PTA averaged out the figures.
  17. Average fixed-mobile call duration being less than two minutes would be rounded off to 2 minutes. The pre-CPP rate for a call of five minutes was Rs 2.00. If this rate had to be protected, then PTCL should get a rate of Rs one per minute in the post-CPP regime.
  18. Combining these two rates, PTA determined that a rate of Rs 3 per minute would be fair. PTCL and mobile operators in 1:2 ratios should share it.
  19. However, the rate of Rs 3.00 per minute was to accompany two further provisions in the interconnect rates:
    - a) The PSTN discounts would increase from 17% to 25%.
    - b) The lease line rates would be reduced by 50%.
  20. For long- distance call, all the operators agreed for a far-end hand over. Therefore, each operator would charge long-distance charge (NWD charge) from its customer besides the above CPP charge of Rs 3 per minute. Other rules regarding peak off-peak hours rate, roaming charges, installation charges and line rent would remain as they were in the pre-CPP regime.
  21. For terminating incoming international calls, the mobile operators would terminate the international call from fixed network and get an interconnect share of Rs 2 per minute. In the MPP regime they did not get anything from PTCL, while they charged their customers for incoming calls.