



PAKISTAN TELECOMMUNICATION AUTHORITY
Headquarters, F-5/1 Islamabad
www.pta.gov.pk

No. 15-60/04(Tariff)/PTA

January 30, 2004

Determination

Re

PTCL Co-location Charges

Background

Co-location refers to arrangements where telecom competitors co-exist in an operating facility, sharing support systems and network connections. De-regulation of telecommunication services requires the operators to provide co-location facilities to other licensed telecommunication operators. The purpose of Co-location facilities is to eliminate the requirement of costly transmission media, separate space requirements and duplication of infrastructure thereby optimizing the telecom investment.

The Issue

2. The issue of PTCL's Co-location charges has been under dispute since year 2002 and the telecom operators have been contesting the arbitrarily increased charges for different co-location facilities by PTCL. In September 2002 PTCL had increased its co-location charges that were considered burdensome and unjustifiable by the various telecom operators including ISP and Payphone operators. Some of these charges were as following:

a) Cages:

Caged/enclosed space Offering	Rental Per square foot
Charges per month excluding DC & AC power for the equipment and air conditioning (to be increased @ 10 % per year).	a. Big Cities: Pak. Rs. 192/- b. Small Cities: Pak Rs. 144/-

Source: PTCL Website

b) Cabinets:

Space	Full Cabinet (total 14 sq.ft including working space around cabinet)
Charges per month excluding DC & AC power for the equipment and air conditioning (to be increased @ 10 % per year).	a. Big Cities. Rs. 2,690/- b. Small Cities. Rs. 2,000/-

Source: PTCL Website

- c) Co-location In Open Space for Containers/Endosures Housing Equipment including space for cable runway from tower to indoor equipment.

Containerized Equipment	Rs. 100/- (hundred) per sq. ft for Big Cities
	Rs. 75/- (seventy five) per sq. ft for Small Cities

Source: PTCL Website

- d) Co-location of Rooftop Towers and Dish Antenna including space for Wave-guide, cable runway from tower to indoor equipment and support structure.

Towers	Height in Meters	Per Month in Pak. Rupees
Self Supported and Guyed Towers	Maximum 30 (thirty) including building height.	150,000/- (one hundred fifty thousand)
Satellite Dish Antenna (without tower)	Up to six feet diameter	50,000/- (fifty thousand)
Satellite Dish Antenna (without tower)	Up to twelve feet diameter	80,000/- (Eighty thousand)

Source: PTCL Website

- e) Co-location In Open Space (other than roof-top) for Towers including space for Wave-guide, cable runway from tower to indoors equipment and support structure.

Towers	Height in Meters	Per Month Rates in Pak. Rupees
Self Supported		
	30 (thirty)	100,000/- (one hundred thousand)
	50 (ifty)	125,000/- (one hundred twenty five thousand)
	60 (sixty)	135,000/- (one hundred thirty five thousand)
	70 (seventy)	150,000/- (one hundred fifty thousand)
	80 (eighty)	165,000/- (one hundred sixty five thousand)
Guyed Towers	30 (thirty)	100,000/- (one hundred thousand)

3. In order to resolve the issue PTCL was directed to prepare a detailed Co-location Framework so that with the upcoming deregulation of telecommunication sector the telecom licensees are able to reap the benefits of co-location in an objective manner and without delays owing to administrative and commercial reasons.

4. In a meeting held at PTA Headquarters on January 13, 2003 it was mutually decided that PTCL should review its Co-location Policy and allied documentation, and come up with a new proposal for consideration and approval of the Authority.

5. PTCL submitted its revised co-location charges with justification on March 19, 2003. Following charges were proposed:

- a) Co-location of Rooftop Towers and Dish Antenna including space for Wave-guide, cable runway from tower to indoor equipment and support structure.

Towers	Height in Meters	Per Month in Pak. Rupees
Self Supported and Guyed Towers	Maximum 30 (thirty) including building height.	30,000/- (thirty thousand)
Satellite Dish Antenna (without tower)	Up to six feet diameter	40,000/- (forty thousand)
Satellite Dish Antenna (without tower)	Up to twelve feet diameter	70,000/- (seventy thousand)

- b) Co-location In Open Space (other than roof-top) for Towers including space for Wave-guide, cable runway from tower to indoors equipment and support structure.

Towers	Height in Meters	Per Month Rates in Pak. Rupees
Self Supported		
	30 (thirty)	55,000/- (fifty thousand)
	50 (fifty)	70,000/- (seventy thousand)
	60 (sixty)	70,000/- (seventy thousand)
	70 (seventy)	100,000/- (one hundred thousand)
	80 (eighty)	100,000/- (one hundred thousand)

6. The Authority carried out its analysis on the basis of the information provided and sought clarifications/additional information from PTCL vide its letter dated May 31, 2003. In the said letter PTCL was also asked to reduce its co-location charges to a reasonable level and submit its Co-location Framework after addressing the observations raised therein.

7. In response to the PTA observations and comments PTCL resubmitted its Detailed Operational Framework for Co-location on July 2, 2003. Additional information and basis for calculation was again sought from PTCL to complete the analysis. In the said Framework PTCL proposed the following summarized charges for co-location facilities:

Co-location Facility	Proposed Monthly rate (Rs./sq-ft)	Proposed monthly rent (Rs.)		
		Big Cities	Existing Exchanges in Big Cities	Existing Exchanges in Small Cities
Cages (7'W x 8'D x 10'11)	170	9,400	7,050	5,288
Roof-top Access	36			
Satellite Dish up to 6ft m diameter without tower*		22,000	22,000	16,500
Satellite Dish up to 12ft m diameter without tower*		30,000	30,000	22,500
Self-supported lower up to 30m high (including building height)*		55,000	55,000	41,250
Open Space	29			
Content m open space**	29			
Self-supported lowers*	29			34,500
30m High		46,000	46,000	42,000
50m High		56,000	56,000	42,000
60m High		56,000	56,000	62,250
70m High		83,000	83,000	62,250
80m High		83,000	83,000	7,500
Dish on PTCL Tower		10,000	10,000	3,750
Dish on Customer Owned Tower Power & Air-conditioning		5,000	5,000	
A/C Power (Per Ampere)		2,600		
D/C Power (Per Ampere)		600		

8. After completing the analysis of PTCL's Framework for Co-location, it was decided that PTCL should make a presentation to the Authority and the stakeholders. A meeting in this regard was held at PTA headquarters on September 26, 2003 where PTCL representatives gave a presentation on the proposed Co-location Framework.

9. The stakeholders once again resented the PTCL proposed co-location charges and demanded that PTCL should review its charges with a view of encouraging operators to utilize the co-location facilities. The Authority also observed that the PTCL proposed co-location charges were still unreasonably high and required rationalization. The Authority gave directions to PTCL to review their Co-location Framework and to make it cost effective for the existing and new operators. PTCL was also asked to seek the approval of their Co-location Framework from the Chairman PTCL.

10. PTCL submitted its revised charges of co-location facilities on December 29, 2003 for Authority's consideration. Subsequently, a meeting was held at PTA Headquarters on January 16, 2004 to discuss the revised co-location charges. Stakeholders were also invited and PTCL was asked to give a presentation on its proposed co-location charges.

11. It was observed during the presentation that the revised co-location charges proposed by PTCL were reasonable and reflected the expectations of stakeholders. During the meeting on January 16, 2003 various decisions on PTCL's Co-location charges were taken and consensus of the stakeholders was also achieved on these charges with a few adjustments. An agreement was also signed between the PTCL representatives and the stakeholders that is placed as (Annex A). The significant feature of the agreed co-location charges is the reduction of rates that is acceptable to the stakeholders. The reduction of charges in the purpose built co-location charges as a result of this agreement is summarized as following

	PTCL Proposed	Agreed	
	Per Sq. Ft. (Rs.)	Per Sq. Ft. (Rs.)	Change %
Indoor Space	192	78	59.4 %
Roof Top	36	16.5	54.2 %
Outdoor	29	11	62.1 %

Decision

12. The Authority is pleased to approve the co-location charges agreed between the PTCL and stakeholders. The Authority is of the view that amicable resolution of this long outstanding issue will result in healthy growth of the telecommunication sector of Pakistan. It is also important to note that the ability to achieve consensus on the contentious issue of Co-location reaffirms the confidence that all other issues relating to deregulation of telecommunication sector of Pakistan can also be negotiated and settled amicably.

13. PTCL is advised to incorporate the following terms and conditions in its Co-location Framework along with the decisions in para 14 and 15 and submit the revised Framework for Co-location facilities for approval of the Authority latest by February 15, 2004:

- i. Rate per sq. ft for purpose built co-location center will be Rs. 78 (rupees seventy eight) per month. This includes purpose built collocation spaces at designated centers with 24 hours air conditioning and generator for power backup. Area for cages will be also calculated at this rate.
- ii. Rent for rooftop dish antennas (VSAT or simplex satellite services) will be Rs. 16.50 (rupees sixteen and fifty paises) per sq. ft per month. The area of the antenna will be calculated by adding 6 ft. roaming area to the each sides of the square to the diameter of the dish. For instance, if the diameter of the dish is 12 feet, the total area will be $(12+6+6) \times (12+6+6) = (24 \times 24) = 576$ sq. ft. In this calculation, 12 is variable according to the diameter of the dish and all other parameters are fixed. Additional space of 100 sq. ft (fixed) will be added for cable runways. Total chargeable area in above example will be $576+100 = 676$ sq. ft.
- iii. Rent for rooftop self-supported towers will be Rs. 50,000 (rupees fifty thousand) for 30 meters height. Rates for additional heights (higher or lower) will be calculated on the basis of this rate.

- iv. Rent for self supported guyed wired towers to be installed by the tenant will be as follows:
 - a. In Open Space (on ground): Rs. 11 (rupees eleven) per sq. ft per month. Cable runways area will be charged @ Rs. 11 (rupees eleven) in open area and Rs. 17 (rupees seventeen) per month per sq. ft in covered area.
 - b. On rooftop: Rs. 16.50 (rupees sixteen and fifty paisas) per sq. ft per month.

Note: Area will be calculated on the basis of actual space utilization from the anchor points of guyed wires connected in square and two feet roaming space will be added at each side of the square. For instance, if the distance between two anchor points is 40 ft, the total area will be $(40+40+2+2) \times (40+40+2+2) = 84 \times 84 = 7,056$ sq. ft. Additional 100 sq. ft will be added for cable runways.
- v. Rent for installation of dish antenna on PTCL's tower (whether on rooftop or ground) will be Rs. 10,000 (rupees ten thousand) per month.
- vi. No rent for installation of own dish antenna (in any quantity provided the engineering design of the tower permits) by the tenant on his own tower installed at ground will be charged by PTCL. The tenant will submit the engineering design of the tower to PTCL at the time of application.
- vii. Rent @Rs. 5,000 (rupees five thousand) per month per antenna will be paid by the tenant to PTCL on a rooftop tower installed by the tenant, provided, however that first antenna installed by the tenant will be at zero charge.
- viii. Tenant will be allowed to share his own tower installed at open space (ground level) by the other licensed operators, provided that tenant pays PTCL @Rs. 5,000 (rupees five thousand) per month per antenna installed at his tower. In case of rooftop tower installed by the tenant, sharing will be allowed @ Rs. 5,000 (rupees five thousand) per month per antenna paid to PTCL. The installation of other licensed operators antennas will be subject to permission by PTCL.
- ix. Rent for ordinary space in exchanges (simple covered area) will be Rs. 17 (rupees seventeen) per sq. ft per month with no stand by power. Ordinary space means covered area in exchanges without any allied facilities.
- x. An additional amount of Rs. 15 (rupees fifteen) per month per sq. ft will be charged if the tenant wants backup generator power in ordinary spaces (simple covered area). Thus the total rent of ordinary space with stand by power will be Rs. 32 (rupees thirty two) per sq. ft per month.
- xi. Rates of electricity will be as follows:

Purpose built co-location centers with air conditioning:

AC (220 V): Rs. 1,500 (rupees fifteen hundred) per Amp per month including backup power.

DC (48 V): Rs. 900 (rupees nine hundred) per Amp per month including backup power and air conditioning

Ordinary Spaces:

AC (220 V): Rs. 1,000 (rupees one thousand) per Amp per month

DC (48 V): Rs. 600 (rupees six hundred) per Amp per month

Power for individual air conditioners to be installed, if any, by the tenant will be subject to above rates.

Provision of backup electricity will be subject to Clause 10 above.

- xii. GST for collocation facilities will only be applicable if levied by CBR and will be paid by the tenant. Previous amount paid by the tenants on account of GST, if not applicable by CBR, will be reimbursed/adjusted to the tenants by PTCL. Local taxes, if any, levied by Statutory Governmental Bodies on the towers and antenna installed by the tenant will be borne by the tenant.
- xiii. The above rates will be effective from 01 July 2003.

14. PTCL may charge up to Rs. 10,000 as onetime registration charges to telecom operators who seek co-location facilities at purpose built co-location centers.

15. PTCL is also advised to reserve 50% of the space in the purpose built Co-location facilities for the new licensees that will be awarded licenses under the fixed line and cellular policy of the Government of Pakistan.

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