

## TELECOM REGULATORY AUTHORITY OF INDIA

### NOTIFICATION

New Delhi, the 02 February, 2007

#### THE TELECOMMUNICATION INTERCONNECTION (PORT CHARGES)

#### AMENDMENT REGULATIONS, 2007

No. 1 of 2007

**File No. 409-10/2006-FN.**----- In exercise of the powers conferred upon it under section 36, read with sub-clauses (ii), (iii) and (iv) of clause (b) of sub-section (1) of section 11 of the Telecom Regulatory Authority of India Act, 1997 (24 of 1997), the Telecom Regulatory Authority of India hereby makes the following regulations to amend the Telecommunication Interconnection (Port Charges) Regulation, 2001 (6 of 2001), namely :-

<p><b>1.</b> (1) These regulations shall be called as the Telecommunication Interconnection (Port Charges) Amendment Regulations, 2007.</p>
<p>(2) These regulations shall come into force on the 1<sup>st</sup> day of April, 2007.</p>
<p><b>2.</b> In the Telecommunication Interconnection (Port Charges) Regulation 2001 (6 of 2001) after regulation 2, the following regulation shall be inserted, namely:-</p>
<p><b>“2A. Port charges on or after the 1<sup>st</sup> April, 2007.</b> - (1) Every interconnection seeker shall, on or after the 1<sup>st</sup> day of April, 2007, make his demand, for every Point of Interconnection for the total number of Ports required by him on or after the said date to the interconnection provider.</p>
<p>(2) Every interconnection seeker shall make demand under sub-regulation (1) on the basis of traffic projection (in Erlangs) on half yearly basis.</p>
<p>(3) Every interconnection provider shall charge, on or after the 1<sup>st</sup> day of April, 2007, the Port charges in accordance with the Port charges specified in Schedule II to these regulations and raise the demand note or the invoice, as the case may be, for the Ports demanded on or after the said date by the interconnection seeker under sub-regulations (1) and (2).</p>

(4) In case where interconnection provider does not allot and provide all the Ports on the date, or, within such period, as requested by the interconnection seeker and in accordance with the demand made by him under sub-regulations (1) and (2), the Port charges for the Ports allotted and provided shall be calculated on the basis of the total number of Ports so demanded (taking into account the Ports allotted and provided and also the remaining ports not allotted and provided by the interconnection provider as per his demand) and charges for the Ports so allotted and provided shall be calculated on the basis of the total Ports so demanded based on traffic projections (in Erlangs) and the charges for the Ports shall be calculated in accordance with the charges specified against the slabs in Schedule II to these regulations.

(5) In case where interconnection seeker does not take all the Ports in accordance with the demand made by him under sub-regulations (1) and (2), the Port charges for the Ports allotted and provided shall be calculated on the basis of the total number of Ports so actually taken by him, and, the Ports not taken by him as per his demand shall be ignored for determining the slab for calculating the Port Charges and the charges for the Ports shall be calculated on the basis of actual Ports taken by him and not on the basis of Ports demanded by him under sub- regulations (1) and (2), in accordance with the charges specified against the Port slabs in Schedule II to these regulations.

(6) The Port charges for every Port demanded, allotted and provided before the 1<sup>st</sup> day of April 2007 shall be charged before the said date in accordance with the Port charges specified in Schedule I to these regulations and the interconnection provider shall accordingly raise the demand note or the invoice, as the case may be, for such Ports demanded, allotted and provided.

(7) The Port charges for every Port demanded, allotted and provided before the 1<sup>st</sup> day of April, 2007 shall be charged on or after the said date in accordance with the Port charges specified in Schedule II to these regulations and the interconnection provider shall raise the demand note or the invoice, as the case may be, for such Ports provided by him before the aforesaid date accordingly.

(8) The slab for calculation of Port charges under sub-regulation (7) shall continue to be with reference to the slabs specified in the Schedule I to these regulations, which were taken into account for determining the Port charges before the 1<sup>st</sup> day of April, 2007.

(9) Nothing contained in the Schedule II to these regulations shall apply in case the interconnection provider and the interconnection seeker mutually agree to charge and pay charges lower than those specified in the Schedule II to these regulations.”

**3.** After the Schedule I to the Telecommunication Interconnection (Port Charges) Regulation 2001, the following Schedule II shall be inserted, namely:-

**“SCHEDULE II**  
{See regulation 2A. }

**PORT CHARGES**

ITEM	PORT CHARGES	
(1) Date of implementation	1 <sup>st</sup> April, 2007	
(2) Coverage	Charges for ‘Ports’ (other than the Port Charges for Internet, which are specified in Schedule VI of the Telecommunication Tariff Order 1999)	
(3) ‘Port’ Charges covering all switches	No. of ‘Ports’	‘Port’ Charges ( in Rs.) per annum
	1 to 16 PCMs	N*39,000
	17 to 32 PCMs	6,24,000 + (N-16)*22,500
	33 to 64 PCMs	9,84,000 + (N-32)*14,500
	65 to 128 PCMs	14,48,000 + (N-64)*11,500
	129 to 256 PCMs	21,84,000 + (N-128)*10,500

Note.----N refers to the number of ‘Ports’ within the capacity ranges under the column ‘No. of Ports’.”

**(Rakesh Kacker)**  
**Acting Secretary**

Note1. The principal regulations were published vide F.No. 311-6/2001-TRAI (Econ.) dated 28<sup>th</sup> December 2001 (6 of 2001).

Note 2. The Explanatory Memorandum explains the objects and reasons of these regulations.

## **EXPLANATORY MEMORANDUM**

### **Background:**

1. With the induction of the competition in telecom sector in the country, the interconnection among the operators has become an essential requirement for the development of the sector. In the multi-operator multi service scenario, establishment of interconnection helps the consumers of one network to communicate to the consumers of other network. Port is an essential part for the establishment of the interconnection between two networks.
  
2. On the 28<sup>th</sup> May 1999, the Authority had notified the Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999, which specified arrangement among service providers for interconnection charges and revenue sharing for all telecommunication services including Port charges. Schedule III of the Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999 specifies average annual charges per Port. These Port charges were derived on the basis of cost based charges for a unit of 8 PCMs (E1s), starting from 8 E1s and going up to 256 E1s.
  
3. The entrants in the telecom sector, before commencement of the Telecommunication Interconnection (Port Charges) Regulation 2001, had been representing to the Authority that there was reluctance on the part of the some operators to supply Ports at the prices specified by the Authority in the past. It was also represented by the BSNL that charges specified in the Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999 had an anomaly in that these charges encouraged the interconnection seeker to place more than the actual demand for Ports. It thus transpired that the Port charges needed to be re-

evaluated and the existing anomaly to be corrected so that there should not be any economic disincentive for provision of more Ports. Therefore, Authority decided to undertake a review exercise relating to Port Charges.

4. The Authority, after discussion with the industry notified a revised Regulation on Port charges the Telecommunication Interconnection (Port Charges) Regulation 2001 on 28<sup>th</sup> December 2001 (hereafter referred to as the said regulation). The said regulation inter-alia specifies the Port charges payable by interconnection seeker to the interconnection provider. In the said regulation, the number of slabs for Port charges were increased to five from three.
5. For specifying the Port Charges in the said regulation, the Authority had considered only incremental or additional cost directly attributable to the provision of Ports by the interconnection provider. The Directly Attributable Incremental Cost (DAIC) are not only taken for Port terminals but also for all other relevant elements such as CCS7 signalling equipment, processors, and switching matrix etc. All such associated costs have been computed as overhead in the various Port slabs. These common costs have been found to be a function, which varies over a range of Port sizes. Based on the cost data supplied by the operators for the Switching Systems in the Network, costs have been worked out for the various configurations. To these costs, overheads @ 10% representing freight, storage and installation costs had been added. For arriving at the Annual Recurring Expenditure (ARE), a rate of 22% had been applied to the capital cost so worked out. The `Port` charges, which were in the nature of annual rentals, had been equated to the ARE so computed.
6. In considering the point made by network operators that due to provision of an Interconnection `Port` and consequent traffic flow,

capacity enhancement would be required at other nodes as also in the interconnecting links for smooth flow of traffic across the network. A decision therefore, was taken that the cost of downstream augmentation of the network resources should be recovered from the usage charges of network elements involved in call carriage. The underlying principle is that all costs are to be recovered but that no cost elements should be counted twice.

7. The “Telecommunication Interconnection (Port Charges) Regulation 2001 (6 of 2001)”, provides that the Authority may also at any time, on reference from any affected party, and for good and sufficient reasons, review and modify the Port charges. Besides, there has been long pending basic demand of interconnection seekers that Port charges need to be reviewed so as to align it with the current switch/exchange cost.
  
8. The Authority has, therefore for the purpose of revisiting the Port Charges and review thereof, initially asked the service providers to furnish the cost details of the various elements used for expansion of Digital Trunk Automatic Exchange (DTAX) / Tandem to provide Ports for interconnectivity. Most of the service providers including the Bharat Sanchar Nigam Limited (BSNL), being the incumbent operator with legacy network spread out in 2647 Short Distance Charging Areas (SDCAs), Level-II Trunk Automatic Exchanges (TAXs) at 322 locations and Level-I Trunk Automatic Exchanges (TAXs) at 21 locations and is also the main provider of the Ports, furnished the cost details of the various network elements. A consultation was done by TRAI with BSNL, MTNL, COAI and AUSPI for review of the Port charges specified in these regulations and matter was also discussed in series of meetings with them for the said purpose.

9. For the purpose of Port Charges review as made by this notification, the service providers were asked to submit cost of the network elements and detailed traffic trend analysis to the Authority. On the basis of the substantial data provided by the interconnection seekers and interconnection providers, the Authority undertook the calculations for determining Port Charges and found some gaps and even inconsistencies in data in certain cases provided by interconnection seeker and interconnection provider. The Authority has made a reasonable check with due diligence while taking the network elements and costs thereof for expansion of exchange / switch. For calculating Port Charges, the Authority has adopted the similar approach as used in the said regulation in year 2001, with alignment of the costing methodology adopted by the Authority in recent regulations and tariff orders.
  
10. List of network elements used for the calculation of the Port charges is given in Table-1 in this Explanatory Memorandum. The network elements listed in Table-1 are normally required to expand the OCB exchanges, which are mostly used for providing the interconnection to other service provider by the incumbent operators. Separate cost is calculated for expansion of the exchanges by 16 E1s, 32 E1s, 64 E1s, 128 E1s and 256 E1s and accordingly different slabs are specified in these regulations.
  
11. In the present review for calculation of the Port charges, the reasonable returns (Pre-tax Weighted Average Cost of Capital ) @ 14% per annum on the capital employed (net block only) has been considered after providing depreciation @10% per annum based on Straight Line Method of depreciation. Additionally, overhead @ 10% on CAPEX recovery has been added. The Authority has not adopted Annual Recurring Expenditure (ARE) method for present review of Port Charges.

12. The Authority released the draft of the proposed amending regulations on Port charges along with detailed Explanatory Memorandum after due diligence on inputs from stakeholders and particularly major interconnect provider such as BSNL. The draft of the proposed amending regulations was released on the 12<sup>th</sup> January 2007, for seeking the comments of stakeholders. The last date for receiving the comments of the stakeholders was the 22<sup>nd</sup> January 2007.

**Examination of the main comments / issues raised by the stakeholders:**

13. Some of the stakeholders requested for extension of time for submission of comments. The Authority considered the requests of extension and found that issue involved is relating to review of Port charges only, for which meetings were also held earlier by TRAI with the stakeholders namely BSNL, MTNL and other service providers represented through COAI and AUSPI. In addition, the calculations for Port Charges in the present review are based on the costs details furnished by both interconnect providers and interconnect seekers. The draft amendment regulations on Port charges were released with detailed Explanatory Memorandum for seeking the comments of the stakeholders with clear indication of the 22<sup>nd</sup> January 2007 as the last date of submission of comments. Therefore, the Authority decided not to extend the time limit for submission of comments and also intimated accordingly. However the comments received from the BPL Mobile Communications Limited, the Bharti Airtel Ltd, the TATA Teleservices Ltd, the MTNL, the BSNL and a joint response from the COAI and the AUSPI have been fully considered and addressed.
14. The Authority has taken the various comments and inputs into consideration and analysed the matter in detail. For sake of clarity the comments/issues raised by stakeholders are shown below in



*italic fonts* and the analysis/consideration of the Authority is made thereafter.

**Issue 1: Date of Applicability of Regulations:**

*Revised Port charges Regulations should be made effective from the date of its notification.*

15. The demand of the interconnection seekers / stakeholders regarding the date of application of the new Port Charges has been examined and the Port charges as specified in the Schedule II to the Telecommunication (Port Charges) Amendment Regulation, 2007 have been made applicable with reference to the financial year beginning on and after the 1st April 2007 for following reasons namely:

- (a) It is easier for reconciliation and implementation that payments, which are on an annual basis, should coincide with the financial year.
- (b) Moreover interconnection seeker is required to properly assess their traffic before placing the demand on the basis of traffic projection on six monthly basis. Thus there is a need to give sufficient time to interconnection seeker for assessing their demand.
- (c) Since Port charges are specified on per annum basis and the revised port charges are applicable to existing working ports.

Therefore, the Authority is of the view that the date of applicability should be the 1<sup>st</sup> April 2007 instead from the date of its notification.

**Issue 2: The new Regulations should replace or amend the existing 2001 Regulation:**

*It will be more appropriate that the proposed Regulation should replace the existing 2001 Regulation instead of amending the existing 2001 Regulation. This will have implication for extending connectivity and for the operators who have already got POI.*

16. There was a long pending basic demand of the interconnection seekers that costs of the network elements have been reduced over the

period and also costing methodology for calculation of the Port charges needs to be aligned with the costing methodology used by the Authority in various other regulations / orders. The Authority has taken note of these demands and found that the basic demand can be met by amending the Telecommunication Interconnection (Port Charges) Regulation, 2001 (6 of 2001).

**Issue 3: Port Charges Calculations:**

- (a) The Authority has permitted reduction in domestic leased line and long distance tariff to a great extent in 2005. The cost of equipment has gone down further thereafter. Therefore, there is an ample justification for 80% reduction in the Port charges.*
- (b) BSNL will be able to get the benefit of economy of scale for the purchase of the equipment and these benefits should be reflected in the reduced Port charges.*
- (c) Only the portion of the cost element be considered, which is associated with additional Port provisioning by BSNL / MTNL. How much proportion of central equipment costs has been apportioned for various slabs of E1s should be tabulated along with the capacity.*
- (d) There have been reductions in the domestic leased line tariffs by the Authority and in IUC for carriage charges.*
- (e) First price slab should not exceed Rs.31200/- and corresponding adjustment is required for other slabs.*
- (f) In the interest of the transparency, it is proposed that detailed calculations made by TRAI in arriving at Port charges in Schedule II may be put on its website to enable operators to examine and respond back.*

17. The Authority has made all the calculations on the basis of the substantial data provided by the interconnection seekers and interconnection providers. The Authority has also found some gaps and even inconsistencies in data in certain cases provided by interconnection seeker / provider. The Authority has made reasonable checks with due

diligence while taking the network elements and costs furnished by some of the stakeholders thereof for expansion of exchange / switch. The Table-1 in this Explanatory Memorandum provides details of network elements considered for determining the Port charges. It was also noted that while furnishing the costs details of network elements, some of the stakeholders marked it 'Confidential'. Therefore the cost has not been indicated against the network elements listed in Table-1.

18. In the present review, the Authority has taken cost of the network elements provided by the service providers (interconnection seekers and interconnection providers) and also aligned the costing methodology with current practices adopted by the Authority in various regulations / tariff orders and specifies the Port charges by amending the Telecommunication Interconnection (Port Charges) Regulation, 2001 (6 of 2001).

19. In the present review, the Authority considered only incremental or additional cost directly attributable to the provision of Ports by the interconnection provider. The Directly Attributable Incremental Cost (DAIC) are not only taken for Port terminals but also for all other relevant elements such as CCS7 signalling equipment, processors, switching matrix etc. All such associated costs have been computed as overhead in the various Port slabs. These common costs have been found to be a function, which varies over a range of Port sizes.

20. The five slabs for Port charges have been specified, based on the cost of common control and switching matrix which are observed to vary in five steps.

**Issue 4: Pricing Methodology, Depreciation, Rate of Return on Incremental CAPEX:**

*(a) The returns allowed are much higher than 14% in the proposed draft Regulations. In 10 years the service provider would get returns @ 16%.*

*(b) Equating annual Port rental to 22% ARE may not be justified specially in new nodes / tandems where switches may be required before completing 10 years life (as 10% depreciation with Straight Line Method has been assumed by the Regulator for calculation of ARE). In fact, for new nodes, the depreciation should be 20% in view of plans to migrate to IP switches and chances of non-support of conventional switches by vendors in near future.*

*(c) The Authority has taken the incremental CAPEX as taken in previous Regulations. This may not always be the case as some times, new tandems will be required for providing E1s from nodes / tandems that are fully grown (45K).*

21. For calculation of the Port charges, the reasonable returns (Pre Tax Weighted Average Cost of Capital) @ 14% per annum on the capital employed (net block only) has been considered after providing depreciation @10% per annum based on Straight Line Method of depreciation. The Authority has not used Annual Recurring Expenditure (ARE) method in the present review of Port Charges. Therefore, in view of the methodology used by the Authority for calculations of the Port charges, the view of the stakeholders that interconnection provider would get returns @ 16% is not correct.

22. The Port charges payable by the interconnection seeker have been classified on the basis of number of Ports falling in a particular slab. The first such slab begins from 1 to 16 PCMs and the last such slab ends at 128 to 256 PCMs. Further, if higher capacity new switches are to be installed by interconnection provider then it is expected that about 50% of the ports of the total capacity will be used by interconnect provider for its own network connectivity for intra-network links and remaining will be used for provisioning of ports to interconnect seekers for inter-network links. The economies of scale will also bring down the CAPEX of higher capacity switches. Therefore, the Authority is of the view that incremental

CAPEX for port charges calculations for various slabs is reasonable as specified in the Schedule II to these regulations.

**Issue 5: Applicability of Port Charges for Cellular Services of BSNL:**

*Port utilization for CellOne POI is 100% and, therefore, the Port charges for CellOne POIs, irrespective of the demand, should be charged at average rate of 256 E1s.*

23. The Authority is of the view that applicability of port charges on uniform basis would make implementation smooth and reconciliation of port charges easier. As far as charging at average rate of 256 E1s is concerned, interconnection seeker can always take the advantage by placing demand on the basis of their traffic projection as the slab of 129 to 256 PCMs is available for Port charges in schedule II of these regulations.

**Issue 6: Recovery of CAPEX for existing Ports and sunset clause:**

*(a) Cost of POI working for more than three years has been recovered by the interconnection providers and, therefore, there is no rationale for continuation of payments for the same.*

*(b) Cost of 7 years old Ports have already been recovered as per TRAI's own calculations and as such no further payments should be applicable for at least such Ports and, therefore, sunset clause should apply to these Ports immediately.*

*(c) There should be sunset clause for payment of Port charges.*

24. The Authority has also considered the view of the stakeholders regarding recovery of the cost for the existing ports and is of the view that interconnection provider generally is required to replace the existing equipment necessary for continuance of interconnection from time to time and, therefore, proposition made by the service providers, that cost of the existing ports is completely recovered within 7 years and no further

payment should be applicable with sunset clause for Port charges, is not sustainable in present scenario.

**Issue 7: Clubbing of existing Ports:**

*All E1s working as on 1<sup>st</sup> April 2007 should be clubbed together to calculate the slab rates for charges payable after 1<sup>st</sup> day of April 2007 as per the Schedule II.*

25. The earlier slabs mentioned in the Schedule I to the Telecommunication Interconnection (Port Charges) Regulation, 2001 were fixed keeping in view of the fact that the interconnection provider may have to expand / upgrade their exchanges sequentially and from time to time. To meet such expansion and up-gradation requirements, the interconnection provider might have made the investment for upgrading their exchange as per the demand raised by interconnection seeker from time to time. Therefore, Authority is of the view that clubbing of the charges for all such existing ports at this stage would be unreasonable on financial grounds to interconnect provider.

**Issue 8: Review of Port charges:**

*Regular review of Port charges, at least once a year, to account for any reduction in the cost of equipment.*

26. As far as regular review of Port charges, at least once in a year is concerned, it may here mentioned that various issues including Port charges relating to telecom sector are revisited by the Authority and there is already a provision in the Telecommunication Interconnection (Port Charges) Regulation 2001 that from time to time Authority may review and modify Port charges.

**Issue 9: Inclusion of cost of ports in determining termination charge:**

*Cost of the Ports (including all associated equipments) should be included in the termination charges rather than prescribing separate Port charges.*

27. Inclusion of the Port charges in the termination charge will lead to differential termination charge for the calls which are terminating in the interconnection provider's network and hence it may lead to complex tariff structure both for service providers and consumers. For calculating the port charges, only incremental cost has been taken into account. The Authority's observation in this regard in Interconnection Usage Charge (IUC) Regulation dated 29<sup>th</sup> October 2003 is reproduced below:

“63. .... The Authority also recalled that during the calculation of Port Charges, only the incremental CAPEX for provision of the port was considered although for providing ports, there is a need for not only augmenting the switch capacities but also other downstream parts of the network to handle the additional traffic entering the network through these ports. The costs required for augmentation of other downstream network elements to handle the additional traffic, were left to be recovered through the IUC.”

**Issue 10: Average Port Charges:**

*Average charges per E1 should be indicated for different slabs.*

28. If average charges per E1 as suggested are to be specified then port charges for 17 E1s will be less than the port charges for 16 E1s which will create similar anomaly as was in “The Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999”. The Authority recalled that during the above regime the new entrants represented to the Authority that there was reluctance on the part of the incumbent to supply Ports at the prices specified by the Authority in the past. It was also represented by the BSNL that prevailing charges had an anomaly in that these charges encouraged the interconnection seeker to

place more than the actual demand or actual requirements for Ports, because annual Port charges for 8 Ports were of the same order as that for 33 Ports. It thus necessitated that the Port charges needed to be re-evaluated and the existing anomaly to be corrected so that there should not be any economic disincentive for provision of more ports. Therefore, the Authority reviewed the port charges in 2001 and made the Telecommunication Interconnection (Port Charges) Regulation, 2001 (6 of 2001). Therefore, the Authority is of the view that incremental slab system of Port Charges is reasonable.

**Issue 11: Sharing of Port Charges in view of traffic patterns and other issues:**

- (a) POIs are used for both incoming and outgoing traffic and for that reason why charges for Port not recovered on the basis of usage by respective parties.*
- (b) Ports are used by both interconnection parties and interconnection is a mandatory licensing requirement; then why Port should not be provided on non-charging principle?*
- (c) All EIs in each exchange of BSNL / MTNL be combined for all services within a seekers license for determining chargeable slab.*
- (d) Even after more than 10 years of interconnection the private operators are still being treated as interconnection seeker by the incumbent BSNL / MTNL.*
- (e) While private operators can assess and forecast the likely increase in subscribers and traffic over a period of next one year, it will not be possible for them to forecast the requirement of interconnecting circuits / Ports for handling increased traffic from BSNL network to their network. Therefore, each interconnecting party should place demand on the second party for the Ports required to handle its increased outgoing traffic over the next one year period.*
- (f) The demand on the basis of traffic projection on annual basis is contradictory to the current scenario where demand is considered firm only after the seeker makes the payment. Seeker may take*



*advantage of this clause by giving higher traffic projections and thereby projecting demand for higher number of Ports and in turn, taking advantage of lower Port charges though in the course of the year he may give firm demand for less number of Ports. This may be against the interest of interconnection provider and may also lead to huge inventory.*

*(g) If the Port surrendered under one category (license / service) is offered to be utilized by the same company under another service / license then no surrender charges should apply.*

*(h) There should not be any surrender charges after three years.*

29. The aforesaid amendment i.e. the Telecommunication (Port Charges) Amendment Regulations, 2007 only makes amendments to the principal regulations i.e. Telecommunication Interconnection (Port Charges) Regulation, 2001 (6 of 2001), to the extent that Port charges should be on the current cost of the network element and to align with the present costing methodology adopted by the Authority in various regulations/ tariff orders. There are many countries like United Kingdom, Australia, Germany, Sweden, Ireland, Pakistan, Bahrain, Oman and Malaysia etc. where the concept of separate Port charges in addition to Interconnect Usage Charges is prevalent. The Authority, therefore is of the view that system of the Port charges should continue at present.

**Issue 12 Clarification with respect to applicable Port charges for different scenario:**

*Stakeholders have also requested to explain charges to be paid by the interconnection seeker to an interconnection provider for different scenario emerging out of demand of seeker and provisioning by provider at different point of times. They further requested for clarifications with respect to regulation 2A as inserted in the principal regulations by the Telecommunication (Port Charges) Amendment Regulations, 2007. An illustration with two cases clarifying the Port Charges is as follows:-*

*Illustration: If a seeker applies for 100 E1s and:*

Case 1: Provider provides 50 E1s only

Case 2: Seeker takes 50 E1s only although provider is ready to provide all the 100 E1s

In both the cases the queries raised for explanation are:

- (i) What is the charge to be paid?
- (ii) How it is different from the scenario that Seeker applies for 50 E1s and provider provides 50 E1s?
- (iii) What happens, if seeker gives a staggered demand spread over two quarters, will he still get slab benefit of total E1s demanded on six monthly basis?

30. The analysis regarding the above illustrations is explained in the following Table-A:-

**Table-A**

<b>Interconnection Seeker demanded for 100 E1s on the basis of traffic projection (in Erlangs) on half yearly basis</b>			
<b>Sr. No.</b>	<b>Description</b>	<b>Case-I</b> Provider provides 50 E1s only	<b>Case-II</b> Seeker takes 50 E1s only although provider is ready to provide all the 100 E1s
(a)	Interconnection Provider is ready to Provide	50 E1s	100 E1s
(b)	Seeker takes	50 E1s	50 E1s
(c)	Applicable Slab	No. of 'Ports': 65 to 128 PCMs {As per sub-regulation (4) of Regulation (2A)} Rs. {14,48,000+(N-64)*11,500} taking N=100	No. of 'Ports': 32 to 64 PCMs {As per sub-regulation (5) of Regulation (2A)} Rs. {9,84,000+(N-32)*14,500} taking N=50
(d)	Liability of Seeker to pay total Port Charges	Rs.18,62,000 for 100 E1s (Using the formula given at (c) above)	Rs.12,45,000 for 50 E1s (Using the formula given at (c) above)
(e)	Invoice or Demand note to be raised by Interconnection Provider	Rs.12,45,000 for 50 E1s {= 9,84,000+(N-32)*14,500}; taking N=50	Rs.12,45,000 for 50 E1s {= 9,84,000+(N-32)*14,500}; taking N=50
(f)	Invoice or demand note to be raised for remaining Ports	Amount payable for remaining 50 Ports = (d) minus (e) Rs.6,17,000 {=Rs.18,62,000 minus Rs.12,45,000}	At Later stage, if Seeker asks for 50 E1s then seeker has to pay Rs.12,45,000 again.

(g)	How it is different from the scenario that seeker applies for 50 E1s and provider provides 50 E1s	Seeker has to pay the charges for 50 E1s with taking into account the slab of No. of Ports 33 to 64 PCMs i.e. Rs.12,45,000. Subsequently if seeker requests for further 50 E1s then he has to pay Rs. 12,45,000 and benefit of higher slab will not be available.	No Difference  (In this case it is presumed that seeker needs 50 E1s only)
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**Note regarding staggered demand:**

If seeker gives staggered demand for the total number of ports spread over two quarters (six months) at a time, on the basis of traffic projection on six monthly basis in one go, he will get the benefit of applicable higher slab for total E1s so demanded. In case the interconnection provider is not able to meet the demand for the total number of ports in one occasion or as per the staggered demand made on six monthly basis, based on traffic projection, then also interconnection seeker will get the slab benefit for the ports so demanded. However benefit of higher slab shall not be applicable if interconnection seeker demands at different points of time within six months.

**Table-1**  
**NETWORK ELEMENTS REQUIRED FOR EXPANSION OF SWITCH / EXCHANGE**

S.No.	Name of the Equipment
<b>Port Terminals</b>	
1	SMT Basic Equipment
2	SMT Processor
3	16 LR Interface
4	8 PCM Module-120 Ohms
<b>CCS 7 Signalling</b>	
1	SMA Basic Equipment
2	CCS 7 Coupler
<b>Processor</b>	
1	MAS Access Unit
2	Memory Board
3	SMC Basic Equipment
4	Processor Unit
<b>Switching Matrix</b>	
1	Switching Matrix Interface
2	MAS Access Unit
3	MCX Matrix 1 branch
4	MCX Helping 1 branch
5	MCX Coupling 1 branch
6	MCX Matrix O/P 1 branch
7	DC/DC Convertor
<b>Mechanical</b>	
1	UE Rack
2	UC Rack
3	XA Rack
4	Rack cladding
<b>Cable, Connector</b>	
1	16 pair HF Cable (meters)
2	SMT 32 PCM Convertor
3	SLIM Rack for 8 Modules
4	DDF Module for 8 PCMs
5	Inter suite runway
6	Basis Cords
7	Cords Set- Rack
8	CordSet
9	Cordset MCX
10	128 pair cable
11	Power cables
<b>Software</b>	
1	basic platform software
2	ISUP-N Interface Software

<b>Batteries &amp; Power Plant</b>	
1	Power Plant
2	Batteries
3	Power-40 outputs distrib. Module
4	Power Distribution Panel - 48 V
5	Power Distribution Panel-220 V
<b>Miscellaneous</b>	
1	Installation Material
2	Tools & Testers
3	Spares
4	DDF Tools MSU
5	Documentation