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## THE DRAFT TELECOMMUNICATION INTERCONNECTION (AMENDMENT) REGULATIONS, 2018 ( of 2018)

## TELECOM REGULATORY AUTHORITY OF INDIA NOTIFICATION

New Delhi, the ..... May, 2018

**File No. 10-10/2016-BB&PA ---** 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 Regulations, 2018 (1 of 2018) namely:-

1	(1) These regulations may be called the Telecommunication Interconnection (Amendment) Regulations, 2018 ( of 2018).						
	(2) They shall come into effect from the						
2	In regulation 6 of the Telecommunication Interconnection Regulations, 2018 (1 of 2018						
	(hereinafter referred to as the principal regulations), after sub-regulation (3) the following						
	proviso shall be inserted, namely:-						
	"Provided that the port charges and infrastructure charges for all ports provided						
	before the 1 <sup>st</sup> February, 2018 shall continue to be payable as per the terms and						
	conditions which were applicable to them before the 1 <sup>st</sup> February, 2018."						
3	For regulation 8 of the principal regulations, the following regulation shall be substituted:						
	Request for augmentation of POIs(1) Each service provider shall provide its forecast						
	of busy hour outgoing traffic for each POI, at intervals of every six months, to the						
	interconnecting service provider and the first such forecast shall be provided within sixty						
	days of the commencement of "The Telecom Interconnection (Amendment) Regulations						

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2018" and thereafter on the 1st April and 1st October every year.

(2) A service provider may request the other service provider for additional ports at a POI, if the projected utilisation of the capacity of such POI, calculated in the manner as contained in schedule II to these regulations, at the end of sixty days from the date of placing the request, is likely to be more than eighty-five percent and such projected utilization of the capacity of POI shall be determined on the basis of the daily traffic for the preceding sixty days at the POI during busy hour:

Provided that the service provider shall request for such number of additional ports which is likely to bring the utilization of the capacity of such POI, at the end of sixty days from the date of making request, to less than seventy-five percent.

- **4** In regulation 9 of the principal regulations,
  - (a) in sub-regulation (1), for the words "five working days", the words "seven working days" shall be substituted;
  - (b) in sub-regulation (2), for the words "three working days", the words "five working days" shall be substituted;
  - (c) in sub-regulation (3), for the words "five working days", wherever occurring, the words "ten working days" shall be substituted;
  - (d) in sub-regulation (4), for the words "three working days", the words "ten working days" shall be substituted;
  - (e) in sub-regulation (5), for the words "five working days", the words "ten working days" shall be substituted;
- **5** After schedule I to the principal regulations, the following schedule shall be inserted, namely:-

## "Schedule II

For given number of channels of POI, its capacity for 0.5% Grade of Service shall be deduced from the Erlang B table. The sample calculation for augmentation of ports of POI is indicated below:

Considering that Service Provider A has, for its outgoing traffic, existing POI of 600 channels with the Service Provider B, then as per the Erlang B table, the capacity of such POI at 0.5% Grade of Service shall be 562.3 Erlang. Now when the projected outgoing traffic of Service Provider A, at the end of sixty days from today, would be more than 477.95 Erlang (i.e. 85% of the POI capacity), it may request the Service Provider B for augmentation of the POI capacity by such number of ports which takes it to more than 637.27 Erlang (i.e. 477.95/0.75). As per Erlang B table, this would imply augmentation of ports at such POI by approximately 77 channels."

(S.K. Gupta) Secretary

**Note 1:** The principal regulations were published vide F.No.10-10/2016-BB&PA dated 01.01.2018 (1 of 2018).

**Note 2:** The Explanatory Memorandum explains the objects and reasons of the Telecommunication Interconnection (Amendment) Regulations, 2018 ( of 2018).

Stakeholders are requested to furnish their comments in electronic form at e-mail id <a href="mailto:kapilhanda@trai.gov.in">kapilhanda@trai.gov.in</a> by 18th May, 2018. For any clarification/ information, Shri S.K. Singhal, Advisor (BB&PA) may be contacted at Tel. No. +91-11-23221509 Fax: +91-11-23230056.

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## Explanatory Memorandum to "the Draft Telecommunication Interconnection (Amendment) Regulation, 2018 dated ....05.2018"

- The Authority notified the Telecommunication Interconnection Regulations, 2018 on January 1<sup>st</sup>, 2018. These regulations came into effect from February 1<sup>st</sup>, 2018.
- 2. Some of the stakeholders had written to the Authority stating difficulties in implementing the aforementioned Regulations. Accordingly, meetings with the service providers were held on 09<sup>th</sup> March, 2018 and 19<sup>th</sup> March, 2018 at TRAI to understand their perspective. During the discussions in the meetings, the service providers raised mainly the following issues:
  - (a) After conversion of the ports from bothway to oneway as per the regulation, what will be the status of existing annual port charges being paid between the TSPs.
  - (b) Since TRAI has already prescribed 0.5% PoI congestion norm through QoS regulations, there may be no need to have an additional norm of bringing down the POIs capacity utilisation to less than 60%. According to them, currently the POIs are being utilized till as high as 85%-90% of their capacity while still complying with the QoS norm. However, the regulation has specified utilization of POIs to be as low as 60%-70% which is uncalled for as it will lead to inefficient use of network resources leading to unnecessary cost implications.
  - (c) For provisioning of ports in time bound manner, they suggested that in line with the existing practice, the seeker should continue to make a forecast of required port capacity for the next 6 months to enable the other party to dimension its network accordingly.
  - (d) According to service providers, the augmentation of POI capacity is a complex process requiring involvement of multiple domains such as core, transmission, and switching etc. and various technical, commercial, procurement and logistic issues pertaining to these domains and therefore, the time frame of 21 days specified in Regulation becomes a challenge.
- 3. The Authority examined the issues raised by the service providers and observed the following:-
  - (a) As far as the issues relating to charges for the existing ports are concerned, conversion of these ports from bothway to one way should not affect the commercial arrangement already

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in place between the two connecting service providers. However, keeping in view the new regulatory framework in place, for new ports, to be added on the basis of outgoing traffic, the service providers may mutually decide the terms and conditions for provisioning of such ports including port charges. Accordingly, to avoid any uncertainty, it may be appropriate to provide in the regulation that, the interconnection charges such as port charges and infrastructure charges for all existing ports of the existing POIs shall continue to be as per existing arrangement between the interconnecting service providers.

- (b) Whereas, it is a fact that on an average ≤0.5% POI congestion during busy hour is permitted as per Network Service Quality requirement, it is also a fact that the traffic may increase sporadically due to unforeseen circumstances. During such circumstances, higher level of capacity utilisation may result into congestion at POIs. Congestion at POIs may have spiralling effect on functioning of the other elements of the network also. Accordingly, it is always advisable to dimension the POIs capacities in such a manner that in most of the situations, congestion on POIs can be avoided. Generally the core networks are also dimensioned for 70% utilisation during normal times. However keeping in view the concerns of the service providers and to ensure efficient utilisation of the available resources, the amendment from seventy percent to eighty five percent and sixty percent to seventy five percent is proposed. The change in time period from thirty days to sixty days will provide a reasonable window for analysis and provisioning of additional ports.
- (c) The traffic forecasts are used for planning of sufficient switching and transmission capacity and hence the requirement of providing traffic forecasts initially within 60 days and thereafter on a biannual basis may be supplemented.
- (d) Considering the technical and practical challenges raised by the stakeholders, the time-frame proposed for provisioning of ports for initial interconnection and augmentation thereafter may be increased to maximum 42 working days. This period may get further reduced to less than 30 working days if the seeker takes actions on its own end promptly. The amended illustration demonstrating the various timelines to be adhered to with respect to provisioning of initial interconnection and augmentation of ports at POIs, in case demand note is issued by the service provider, to whom request for provisions of initial interconnection of augmentation of port is placed is as under:

Maximum period (in working days) for					
service provider-2 to issue letter of		 			
acceptance and demand note, if any, upon					
receipt of request of ports and collocation					
space from service provider-1					
Maximum period (in working days) for					
service provider-1 to pay the amount from					
the date of receipt of the demand note, if		5			
any					
Maximum period (in working days) for					
service provider-2 to intimate service					
provider-1 about the provisioning of the			10		
requested ports at the POI and allocation of					
collocation space					
Maximum period (in working days) for					
service provider-1 to intimate service					
provider-2 about establishment of				10	
transmission link between the POIs					
Maximum period (in working days) for					
service provider-2 to carry out acceptance					
testing and issue final letter of					10
commissioning of the ports					