June 8, 2012

DUA Consulting

Dr. Rahul Khullar
Chairman
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhavan
Jawahar Lal Nehru Marg
New Delhi 110 002

**Sub: Comments for consideration of TRAI on Telecommunication Interconnection (Port Charges).**

Dear Sir,

Please see enclosed a copy of our comments on the various issues mentioned in the consultation paper on "Telecommunication Interconnection (Port Charges)".

Yours Sincerely,

Anuja.

**Anuja Kadian**
Manager

Encl: as above

Cc: Shri Arvind Kumar, Advisor (I&FN), TRAI

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## Issues for Consultation

**The stakeholders are requested to send their comments on the cost data and costing methodology used for estimating the port charges in this consultation paper. The stakeholders may also send their comments on the period for which these charges should remain operative.**

## Importance of Interconnection in Telecom Industry

Interconnection is crucial for communicating across networks, and makes it possible for the subscribers of two different operators to communicate with each other. Interconnection is the life of telecommunications. Interconnection involves inter network, intra network and connectivity to international networks. It is essential for extending the scope and efficiency of the telecom network, and is especially important for new operators entering the market who normally use the existing facilities of another operator for providing their services. It, therefore, is fundamental to a competitive market structure. Interconnection involves a linking up of one telecom operator to the infrastructure facilities of another operator for exchange of information of his customers with customers of other networks on a bilateral basis. It is a hand shake of networks of sorts. Interconnections can also be used for transiting traffic to optimize network utilisation.

The Telecom Regulatory Authority of India notified The Telecommunication Interconnection (Port Charges) Regulation, 2001 on 28th December 2001. Since then the regulations have been amended from time to time. The regulation, inter alia, specifies the port charges. These were revised through 'The Telecommunication Interconnection (Port Charges) Amendment Regulations, 2007 on 2nd February 2007 to be effective from 1st April 2007.

The current port charges as mentioned in TRAI Consultation paper on Review of the Telecommunication Interconnection (Port Charges) are as in table below:

**Table 1.2**

**Port Charges notified in 'The Telecommunication Interconnection (Port Charges) Amendment Regulations, 2007'**

| S. No. | No. of Ports | 'Port' charges (in Rs.) per annum |
|---|---|---|
| 1 | 1 to 16 PCMs | N * 39,000 |
| 2 | 17 to 32 PCMs | 6,24,000 + (N-16) * 22,500 |
| 3 | 33 to 64 PCMs | 9,84,000 + (N-32) * 14,500 |
| 4 | 65 to 128 PCMs | 14,48,000 + (N-64) * 11,500 |
| 5 | 129 to 256 PCMs | 21,84,000 + (N-128) * 10,500 |

Where 'N' refers to the number of 'ports' within the capacity ranges under the column 'No. of Ports.

## Reasons to Review the Interconnection Charges:

TRAI should review the interconnection charges after a fixed period of time (preferably 5 years) so as to align the interconnection charges with the prevalent costs of the relevant equipment. This needs to be done in order to ensure fairness and opportunity to maintain transparency in the review of interconnection charges. Also as the circumstances and technology keeps on changing, it is important to ensure efficient interconnection network with reasonable charges.

Interconnection charges can be established using different procedures as mentioned below:

i. Charges can be determined by the Regulator, together with other essential elements of interconnection, in advance
ii. Regulator can set the standard or guidelines which should be used for establishing the charges among the operators themselves;
iii. Operators can set the charges through commercial agreement, without the involvement of the regulators;

iv. The regulators stand-by as mediators/arbiters, settling the interconnection charges between the operators;

v. They could be governed by putting upper and lower ceilings by the regulator, thus giving elbow room to maneuver/negotiate.

We are off the view that the key objectives while determining the Interconnection Charges should be:

i. To keep the tariff low - The aim of interconnection pricing policy are similar to that of telecom tariffs because of the link between interconnection and the provision of telecom services to end-users. Therefore, to meet the objective of efficient provision of services to end-users interconnection would necessarily require efficiency of different telecom operators. For ensuring efficiency, costs which form the basis of interconnection charges should be the minimum (or efficient) costs incurred in the long run to provide the service.

ii. There must be a flexibility of interconnection - To ensure efficiency of operation, it is necessary to have flexibility of interconnection. This means facilitating interconnection among different operators at any specific point and interconnection being provided to the specific elements of the network for which interconnection is required rather than interconnection being given only for a whole bundle of services. Flexibility of interconnection is important also for dealing with unfair competition.

iii. We believe that a call or a data should be able to travel by the shortest distance across territories without any artificially defined handovers of circle like boundaries etc. such steps will help realise the no roaming or single tariff long distance charging.

iv. An interconnection seeker and provider must be able to hand shake by the shortest of gaps.

v. Charges should be less discriminating in terms of level playing field – It should be kept in mind that interconnection charges should not discriminate between different operators, including the operator which belongs to the same business group as the interconnection provider.

We are of the view that there should not be any undue favuors/discriminations in determining interconnection charges. Also we believe that investments in network infrastructure should be encouraged. Those who have not invested enough in the infrastructure must make necessary investments for an efficient network and interconnection.

Different methodologies that may be used for fixing interconnection charges are:

i. Charges based on the actual tariffs
ii. Charges imposed on a per-minute basis for the calls made. This is a variant of the tariff-based methodology
iii. Charging for interconnection on the basis of the capacity to which access is provided
iv. Linking charges to the actual elements of the network used by a call
v. On the basis of Efficient Components Pricing Rule (ECPR)

**Costing**

Interconnection costing constitutes of two parts – Fixed Cost and Variable Cost. Therefore cost will be equal to total CAPEX divided by number of interconnections or capacity. We are of the view that there should be a reasonable Return on Investment and appropriate useful life of calculating the charges preferably 8 years should be taken in account.

We are of the view that given the pace at which technology is changing the amount of investment made in the infrastructure must be increased. Operators who have already invested in the network infrastructure must be rewarded. Accordingly, we are of the view that the Government should calculate the charges keeping ROI at 15% and number of useful life as 8 years. This will in turn reward the operators who have already invested in network infrastructure. Moreover, this will also push operators to invest in network infrastructure rather than running over networks of other players. If equal investments are made in infrastructure than the incremental cost due to reduced useful life as 8 years will automatically nullify.

It is recommended that interconnection charges must be reviewed every 5 years. Review of 3 years will be too short period and will lead to burden on operators due to regime change. Similarly, 7 years time period will be too lengthy as the market will undergo various changes.

**Conclusions**

We are of the view that to promote competition and to guard against unfair competition interconnection charges should be non-discriminatory. We recommend new operators to invest in network infrastructure rather than running over networks of other players. If equal investments are made in infrastructure than the incremental cost due to reduced useful life as 8 years will automatically nullify.

As a market appended precaution the regulator may look at price ceiling on Interconnection Charges.

We are of the view that interconnection is not only about port charges, but much more beyond that. For most efficient utilisation of network and resources, interconnection and transitions must be made as simple as possible by forgetting the legacies of **"At what point to interconnect"**. If that require a bigger consultation so be it. We can not for ever reamin static in this ever evolving world of systems, technology and softwares.