



TVR/VEL/037

17 May 2010

The Telecom Regulatory Authority of India
Mahanagar Door Sanchar Bhawan
Jawahar Lal Nehru Marg (Old Minto Road)
New Delhi-110002

Dear Sirs,

Consultation Paper on Collocation Charges

This is with reference to the Consultation Paper issued by the Authority on 17th March 2010 on the above subject.

Please find attached a copy of our response to the same. We hope that our submissions will merit your kind consideration and support.

Kind regards,
Sincerely yours,

T. V. Ramachandran
Resident Director
Regulatory Affairs & Government Relations

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TRAI CONSULTATION PAPER ON COLLOCATION CHARGES
ISSUES FOR CONSULTATION

INTRODUCTION

Interconnection is currently mandated by regulation and license conditions. To achieve this, it is necessary for operators to locate their equipment and facilities within each other's premises.

Interconnection among different service providers' networks has become an essential requirement to allow subscribers of one network to communicate or interact with the subscribers, networks and services of other service providers.

Establishment of interconnection requires installation of equipment by the interconnection seeker in the premises of the interconnection provider. In our system currently, the concept of collocating equipment has primarily followed the above approach for the purposes of establishing interconnection since – unlike international jurisdictions – the concept of a separate collocation entity does not yet exist in the country. There are several valid and historical reasons for this.

If the hierarchy of interconnect between operators was limited and strictly defined and interconnection between operators was mandated at common / neutral points established by independent entities, the concept of regulating collocation charges would have a lot of significance. However this is not the case today.

TRAI did initiate discussions for an independent interconnection exchange in the past but on account of the already established network architectures and contentious issues like cost and ownership of such facilities it was not implemented.

So today, operators follow the standard practice of interconnect by collocating equipment within each other's premises. In such a scenario – where the interconnection points / MSCs are widely scattered all over the country and spread over large geographical locations – determining and regulating the cost of location, space and other variables and fixing an accurate cost of collocation, is neither practical nor possible.

However collocation of facilities and interconnecting points do have an attached cost, because of the resources they consume – which are of a scarce nature like space and location in prime business districts of a city or town. Such space and capacity for accommodating equipment may not be abundantly available to providers and thus a fair and transparently calculated cost must be attached to them.

The process for establishing active interconnection today requires the seeker of interconnection to place all active, passive and other electronic elements, including transmission equipment at the provider's premises.

The seeker should thus have to pay for use of space, infrastructure, collocation set up and associated facilities like electricity, air conditioning etc.

A judicious pricing of these collocation resources is required.

However, due to the wide cost variations across geographies and cities, it would not be possible to fix a standard, cost for collocation of facilities across the country. The TRAI can establish a reference framework setting the broad principles and methodologies to be used for calculating the charges for collocation.

It is also relevant to mention that over a period of time, a set of principles and norms have evolved in the sector for setting up and providing interconnection. Operators approach each other, negotiate the requirements and pay for the relevant provisions. There are some deviations sometimes but this is more on account of the lack of a benchmark or reference point.

TRAI should establish a set of terms/criteria through this consultation for use as a reference and define a practical set of parameters to be used for calculating collocation charges. The rates and charges could thus be calculated using these criteria as the base and applied for any location or geography.

This framework should be **uniformly and equally applicable to all operators.**

Our comments to the issues raised in the Consultation paper are as follows:

- 1. Give your comments on the procedure for making an application and subsequent provisioning of collocation indicating clearly the time lines for each activity and the centre of responsibility.**

Over the last fifteen years, as multiple networks have been rolled out and new operators have entered the market, a set of procedures and processes have been established within the industry for seeking and providing interconnection.

Collocation of equipment and systems is part of this process.

Some basic conventions for interconnection application are already in place and though not standard across all operators it includes requirement to provide details of the equipment and tentative requirements of space, power and air conditioning etc.

The existing process could serve as the base to evolve a standard for the industry – building in further flexibility to accommodate unscheduled requirements or innovations.

An overall time limit of 30 days should be specified for the collocation / interconnection provider to respond to the request of the seeker.

- 2. Give reasons because of which request for collocation can be rejected by the collocation provider.**

Interconnection is a mandatory requirement for all operators (with only a flexibility for time lines in case of unexpected delays or technical non-feasibility etc) and since the current discussion for collocation is in this context, rejection of requests for collocation would generally be rare. However, the following situations could be grounds for rejection till the matter is rectified.

- i. Incorrect or incomplete details provided by seeker on the equipment, capacity, duration etc for the collocation
- ii. A disagreement on the commercial terms for collocation – which would have to be sorted out before proceeding
- iii. Non-availability of adequate space, infrastructure, resources like power and airconditioning – for which a time frame for rectifying the situation could be communicated by the provider
- iv. Incompatibilities on account of equipment / technical specifications of equipment which would give rise to issues of quality of interference etc
- v. Or there being a significant risk of health and safety issues due to the request of the seeker

However (except for the first and last scenarios), the provider should ideally be able to provide a tentative time frame in which the matter could be resolved.

3. Give reasons because which an ongoing collocation agreement can be terminated by the collocation provider.

It may not be possible to anticipate all possible and unexpected scenarios for termination of an ongoing collocation agreement however the standard and valid possible reasons could be:

- i. Non-fulfilment of commercial agreement terms by the seeker
- ii. Contravention of an applicable law, license, regulation or direction by the seeker
- iii. Direction by the licensor to terminate the license of the seeker
- iv. Possibility of a breach of safety or physical harm due to the equipment used or located, including interference
- v. The Co-Location equipment is used for a purpose other than for interconnection

4. Give your comments on the procedure of termination of collocation including the notice period that any party may give to the other party for termination of collocation agreement.

The standard time frame for termination of interconnect agreements within the industry involves a notice period of 30 days. A similar approach can be adopted for collocation of equipment. The process for this can be as follows:

- i. Either party may give notice to the other party for termination – giving reasons for this
- ii. The notice period could be the standard 30 days as prevalent in the interconnect agreements.
- iii. Operators can have the freedom to agree for either a longer period of notice say 60 days or shorter period say 15 days depending on the circumstances and the reasons.

5. What measures can be taken to ensure transparent and non-discriminatory treatment in pricing and provisioning of collocation facility? Should these be mandatorily published on the providers' websites?

The terms and conditions for collocation can be clearly mentioned in the application format itself and also be a part of the interconnection agreement, which is the case today in the form of Schedules attached to the interconnect agreement.

The pricing and process for charging would have to be non-discriminatory and in case of a change of terms for one operator should be applied to all others – unless the conditions for such change are not fulfilled by any specific operator.

However the rates and charges would vary across circles, especially with regards to charges for space, real estate, power etc. Thus the charges for these elements cannot be standard and only the methodology if any can be indicated for arriving at these rates.

Other standard details of terms and conditions and requirements can be provided on the operator's websites.

However, due flexibility needs to be permitted for operators to mutually negotiate and arrive at separate arrangements for different scenarios and agreeable terms to each other.

6. How should a bay and a rack defined and what area they should be presumed to occupy?

AND

Should the charges be quoted on a consolidated basis per unit area or per rack/bay inclusive of all facilities or should they be segregated item wise ie separate charges for space, power maintenance etc?

A bay is an area / space or enclosure that houses an array of racks for the purposes of installing equipment/systems. A collocation facility would generally consist of several bays in parallel housing the racks. Each rack in turn consists of a number of shelves in modular stacks or fixed units.

The size and specifications for racks and shelves are generally based on industry standards and depend on the types of equipment being installed. There are different types of racks and bays and the exact dimensions are clearly specified and available from the vendors of such equipment. The area occupied by these equipment is standard too.

The charges quoted by the collocation provider would depend on the quantity and duration apart from varying from case to case depending on the commitments from the other party.

We would suggest this should be left to mutual negotiations with the broad principles outlined by TRAI for a fair basis/understanding of arriving at the final numbers.

- 7. What elements should be taken into consideration for costing collocation and what should be the costing methodology for calculation of various elements like**
- **Charges for space both in case of owned and rented buildings. Should the calculations be based on carpet area or super area?**
 - **Should the charges be based on market rent or any other criterion.**
 - **Electricity & miscellaneous charges**
 - **Charges for in-premises duct sharing**
 - **Charges for tower sharing (For the purpose of mounting of antenna for interconnect link)**
 - **Annual escalation for the charges**
 - **Charges for sharing of any other facility required for collocating equipment for interconnection**
- i. Charges for space and rented buildings are dependent on real estate costs and vary from location to location. In fact these would be different not just across circles but significantly different in different cities of the same circle.
- ii. Super area is the standard practice for pricing/leasing of space/area
- iii. While the actual final price can be negotiated, the principles for arriving at them should be standard.
- 8. A common method of costing is based on directly attributable cost. If this method is used then what should be the reasonable return allowed?**

Essentially, the key principle for pricing should be based on the assumption that the costs of the collocation provider is recovered – taking into account the payments for space, infrastructure, maintenance and other relevant costs.

Directly attributable costs methodology would be appropriate in cases where the demand for space is incremental and in addition to already established collocation.

However for demands for collocation in the first instance, the charges should cover all primary, secondary and other associated costs that would be incurred for providing the collocation. Maintenance and servicing charges could be separately applicable.

9. Should there be well defined criteria for allowing collocation provider to retain space for own need? Explain your answer.

The telecom sector as a whole is experiencing extremely rapid growth. There is constant need for operators to augment capacity, deploy new equipment, provide for additional unexpected surge in demand etc. Simultaneously new technologies require deployment of new equipment.

In light of the above, and given that the scenario is very dynamic it would be difficult to lay down a very well defined criteria for an operator who is also the collocation provider for their own needs. However, it is essential that the provider should have the freedom to define their own near term and long term requirements before accommodating requests of seekers.

10. Should there be an option to the seeker for carrying out operation and maintenance (O&M) of the collocated equipment itself or through the collocation provider? In case O&M is done by seeker what should be the conditions for access to the premises while in case it is done by the provider what should be the criteria for charging for it?

One of the primary concerns of a collocation agreement is that of security. Since O&M and related requirements would extend to all common areas of the collocation space, it is necessary that the provider of collocation should have the freedom to arrive at mutual agreements and build in sufficient safeguards before permitting seeker to carry out these operations.

11. What should be the criteria for determination collocation charges of passive links?

The primary costs related to passive links would be that of the space occupied by ducts and cables. Associated space and infrastructure costs for this should be the criteria for determining collocation charges for such links.

12. Is there a justification for the collocation cost to be shared by both the seeker and the provider? If yes what should be the criteria used?

As mentioned in our response to question 6 above, since the collocation being discussed in the current context pertains to direct interconnection between operators within their premises, there is a possibility that such collocation could benefit both parties.

In such a scenario the terms and methodology for sharing of costs could be mutually discussed and agreed upon. However, the principles for arriving at such negotiated charging could be established within the framework.

13. Do you have any other suggestion regarding framing of guidelines for collocation charges?

Ideally, the procedure and framework for collocation should have been framed at the time of introduction of competition in the sector, because this was part and parcel of the competitive scenario and provision of interconnection to new entrants.

With the passage of time and more than 550 million customers in the segment, the industry has more or less stabilized on interconnection and collocation processes and procedures.

It would thus be reasonable that TRAI should not prescribe a framework that requires a radical shift in the current procedures and processes but only establishes broad guidelines and methodologies, leaving the rest for mutual negotiations.