

Determination by TRAI on six major issues in connection with signing of an Interconnection Agreement between CMSPs and DOT (now BSNL)

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**I. Background:**

1. An Interconnection Agreement lays down the commercial and technical terms and conditions under which two service providers interconnect their networks so as to enable their customers to have access to the network resources, functions and services of the other service providers in a multi operator environment. Some interconnection terms and conditions relating to the interconnection of Cellular Mobile Service Providers (CMSPs) and that of the DoT (now BSNL)/ MTNL are embedded in the Licence Agreement itself such as charges payable by the CMSPs for accessing a PSTN subscriber of the DOT by a mobile subscriber . However, the licence stipulates that a separate interconnection Agreement has to be signed between the two parties. An Interconnection Agreement has already been signed between the six Basic Service providers and the DOT (now BSNL). Although CMSPs have not signed an agreement with DOT(now BSNL)/MTNL, their networks are interconnected to that of the latter. Negotiations between two sides to resolve the differences having failed, TRAI undertook the task of mediating between the two parties about two years back and since then has been endeavouring to get an Interconnection Agreement signed, based on principles of non discrimination and level playing field.

2. As a result of the mediation efforts of the Authority, the differences between the positions taken by the two parties have considerably narrowed down. Out of 18, the items on which there were differences of opinion between the two parties, the mediation team of TRAI at Secretariat level, has given its considered views on 13 items vide TRAI's letter No. 101-1/97-TRAI(Tech) Vol.4 dated 13.11.2000 for adoption by the two parties. In addition to the remaining five items, COAI raised the issue of Revenue Sharing during their presentation to the Authority on 6-9-2000. Thus, there are six substantive issues which have been examined by the Authority and a `determination` is being issued vide this memorandum.

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3. The Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999 was notified by the Authority on 28<sup>th</sup> May 1999. This was based on a consultation process which began in November 1997, with the release of a consultation paper which brought out the concepts, principles and methodologies relating to telecom tariffs and commercial aspects of interconnection. After extensive discussions, some specific proposals for interconnection charges and revenue sharing arrangements were made in another consultation paper released on 9<sup>th</sup> September 1998. These too were subject to extensive discussions with various service providers and other interested parties, including several national and international experts in the area.

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4. The May 1999 Regulation covers arrangements among service providers for interconnection charges and revenue sharing, for all telecommunication services throughout the territory of India, as also those originating in India and terminating outside India. The same is placed at Annexure **A**.

5. Even after issue of the May, 1999, Interconnection Regulation, the two parties were unable to finalise an Interconnection Agreement. Therefore, the Authority had authorized a team led by the Secretary, TRAI to mediate between the two parties. As a first

step, TRAI Secretariat circulated a draft interconnection agreement, and requested DOT (now BSNL) and CMSPs to submit para-wise comments on this draft. The comments received were subsequently discussed in a number of meetings convened by the Secretary, TRAI. Although agreement could be reached on a large number of issues, difference of opinion persisted between the two parties on 18 issues. At this stage, after the formation of the new TRAI, the CMSPs and BSPs were invited to make presentations before the Authority. During the presentations to the Authority COAI, DTS (now BSNL) and ABTO raised the issues relating to the Number of Points of Interconnect (POIs), revenue sharing and access charges. After examining the comments, it was found that 13 out of 18 issues were of technical nature and the difference of opinion was mostly on technical definitions etc. TRAI gave its opinion as a mediator on these 13 issues on 13.11.2000.

6. The balance five issues dealing with substantive matters have been dealt with in this determination. In addition, during its presentation to the Authority, COAI raised the issue of Revenue Sharing and Access Charges. Although the issue was dealt with by the erstwhile Authority and a specific revenue sharing was stipulated in the May, 1999 Regulation with full justification, it has been submitted by them that this revenue sharing formula needs to be reviewed. Thus, there are six substantive issues on which the Authority has determined as indicated in the following section.

## II. Determination By The TRAI On The Six Substantive Issues

Although, as indicated at **Annexure-B**, there are six issues on which agreement has not been reached between the two parties, they can broadly be placed under two categories, namely, Number / level of Interconnection and Access Charges.

**A. Number / Level of Interconnection** - Following four issues are covered under this category:

(a) Interconnection of MSC with the switching nodes of BSNL (S.No. 1 of Annexure B)

(b) Network interconnectivity between PLMN & PSTN (S.No.2 of Annexure B)

(c) Routing of Mobile originated calls (S.No. 3 of Annexure B)

(d) Routing of Mobile terminated calls (S.No. 4 of Annexure B)

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### **COAI's Views:**

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1. The provision of multiple POIs at every technically feasible location was ordered by TRAI in their order dated 25<sup>th</sup> April 1997 in the PSTN to Mobile tariff dispute of 1997. Quoting the Order of the erstwhile TRAI, the COAI has requested for interconnection at a level lower than LDCA or TAXs in the telecom Circles, i.e., at SDCA level, which will mean providing interconnection at the level of local networks. They have sought to justify such interconnection as according to them the issue of multiple POIs at SDCA level is closely linked to lower tariffs for customers. The thrust of their argument is that in

absence of multiple POIs, calls are required to be hauled to the SSA TAX, which may result in higher call charges for both PSTN and cellular subscribers.

2. In regard to technical feasibility and technical integrity of the network, COAI submitted that these have to be defined in such a way that competition is encouraged, and that there is no denial of flexible interconnection to CMSPs by the incumbent BSPs. They further contended that such flexibility will result in lowering of tariff to the end- customers.

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**DTS's (Now BSNL's) Views:**

3. According to DTS (now BSNL), interconnection at a level lower than that of LDCA or TAXs poses serious difficulties relating to operation and maintenance of a large number of Points of Interconnect. There are about 2650 SDCA's in the country. Interconnection at SDCA level will imply handling too many interconnection links and POIs. Some kind of technical regulation is required in regard to charging, revenue sharing and to ensure QoS at these POIs. Presently, there are only two operators and there are 322 LDCA's. Even in the present arrangements, if BSNL provides POIs at all Level I and II TAXs at the LDCA level, the number of POIs will be around 600. This figure will be 1288, as soon as four cellular operators are licensed in each service area as per NTP 1999. This itself is a very large number. However, if POIs are provided at SDCA level, the number of POIs required for four operators would be 10,600. It will be a rather unmanageable task to operate and maintain such large number of POIs and provide for inter network accounting and settlement, as well as to manage the necessary technical arrangements at all these POIs. This highly decentralized type of interconnection will also violate the network hierarchy as Circle Cellular networks cover a large geographical area and as such should be interconnected only with the corresponding long distance network of the Circle.

4. Another point made by DOT (now BSNL) relates to the clock stability in the local exchanges below Level II TAXs. According to DOT (now BSNL), their accuracy is not of the same level as that of Level I TAX. Therefore, BSNL pleaded that number of POIs should be limited to a maximum of 3 to 4 in a Circle, i.e., Level I and a few Level II TAXs which are of the new technology type having higher clock stability. Also Level II interconnections should be based on the justification of a high usage route between GMSC & the Level II TAX. According to them, such an arrangement will be manageable as it

will enable building up of necessary capabilities whenever required, by appropriate upgradation of the limited number of gateway switches in order to meet all the future technical feasibility requirements such as intercarrier charge billing system based on CCS7 signalling. BSNL have further contended that the problem of bypassing STD networks of BSPs will also get aggravated with increased number of POIs as that could result in the mobile operators destinations becoming available on local call charge basis plus air time instead of STD call charges, as at present.

### **ABTO's Views:**

5. ABTO was of the view that the points of interconnection for interconnecting the cellular mobile network and the basic network should be at the level of a Level I TAX only, which can perform all gateway functions such as capability to analyse dialed digits required for routing of all types of calls, capture information regarding charging to the originating exchange and also ensure integrity of the network in accordance with National Fundamental Plans relating to switching, traffic routing and charging etc. It should also be possible to communicate with other switching points through CCS-7 signalling, and also ensure QOS on the interconnecting link and to minimize costs incurred in providing the links.

### **Determination by TRAI:**

6. Taking account of the views expressed by both the parties, the Authority is of the view that while there is respective merit in arguments put forward by both the sides, in the interest of customers, multiple points of interconnect should be provided between the two networks. TRAI, however, appreciates the point that, if POIs are to be provided at the SDCA level, the number of POIs will become very large, which will be difficult to manage. The cellular network in circles cover a large geographical area and should therefore normally, be interconnected at the level of long distance network.

7. Further, maintaining the integrity of the network and conformance to fundamental technical plans are important considerations, which need to be kept in view. The Authority also considers that providing POIs at the SDCA level may result in an increase in the requirement of USO funding due to the likely adverse effect of such interconnection regime on intra-circle STD revenue of Basic Service providers. Nonetheless, the over all approach has to be one that gives greater operational flexibility by permitting a larger number of POIs than as at present. TRAI is, therefore, of the opinion that whereas for metro cellular operators who provide service in the metro cities of Delhi, Mumbai, Chennai and Kolkata and its adjoining areas, the lowest level where interconnection ( at the request of interconnection seeker) should mandatorily be provided by the BSNL/BSO is up to the level of tandem exchanges, for Cellular Telecom Circle operators covering a large geographical area, it should be with the long distance network of the circle i.e., at the TAX level. The normal routing hierarchy for all types of intercircle and internetwork calls is to hand over the call to a Level I TAX, which in turn routes the incoming traffic lower down the hierarchy i.e. to Level II and then to the local network at the SDCA level. This normal hierarchy should be followed for calls originating in mobile network and terminating in a fixed network. However, for traffic terminating in the LDCA, the Gateway MSCs may at the request of the interconnection seeker, be directly connected to Level II TAXs, i.e bypassing Level I TAX, in order to give the cellular operator greater flexibility and smoother flow of traffic. POIs below TAX and tandem level may also be provided with mutual agreement.

8. In accordance with the stipulation contained in pre para, the incumbent i.e. BSNL will provide the interconnection requested by the cellular operator within three months at the TAXs of both the levels i.e., I & II. If the incumbent is unable to provide the sought interconnection within three months, the matter should be referred to the expert committee working under the aegis of TRAI, which will look into the reasons for the delay and attempt a resolution thereof. This Committee has representatives of ABTO, COAI, BSNL, MTNL and VSNL and is chaired by Secretary, TRAI. The Committee will try to resolve all disputes relating to interconnection arrangements amongst service providers.

9. In accordance with the Government guidelines relating to NLD services, the NLD operators will be asked to have matching capability of CCS-7 signalling in their gateway TAXs from day one. The interconnection arrangement should be in accordance with the National Fundamental Plans relating to switching, routing, traffic, charging etc.

10. The Authority notes that its decision is in conformance with the practice followed in a number of countries. Some of these are indicated below:

Mexico	Telemex is under an obligation to interconnect with mobile and long distance operators. The POI is determined by negotiation. For mobile services, the <u>Tandem level in each province</u> has been selected as the Point of interconnection
<b>Japan</b>	POI is at <u>interconnecting gateway switch</u> level
<b>Philippines</b>	The <u>tandem switch</u> of multiswitch local exchange carrier (MS LEC) shall be interconnected to the CMTS network at the nearest point provided that the POI is established within the LEC's service area.
<b>Germany</b>	Access from Mobile to PSTN network has to be provided on the <u>level of long distance exchanges</u>
<b>ITU recommendations</b>	As per ITU-T recommendation Q.1001 interconnection between mobile and PSTN network is at <u>Transit Exchange level</u> .

**B. Access Charges-** Following two items are covered under this category:-

- (a) Access charges as per TRAI (S.No.5 of Annexure B);
- (b) Access charge related issue raised during presentation by COAI (S.No.6 of Annexure B)

11. The above can be covered under two issues i.e., Revenue Sharing and Notional TAX, which are discussed in the following sections.

## **B.1 Revenue Sharing:**

### **COAI's Views:**

12. COAI in their representation dated 15<sup>th</sup> June 2000, demanded parity with FSPs in respect of revenue sharing arrangements for domestic long distance calls i.e. in (approx.) 60:40 proportion. As per CMSPs, access charges have to be cost based, non-discriminatory and equitable. The principle of cost based interconnection charges has been accepted by the TRAI in the May, 1999 Regulation on Interconnection. The regulation states, In Section III, Point 3 (i) *'Interconnection charges shall be cost based, unless as may be specified otherwise.'*

13. The principle of non-discrimination and equity should be observed by the incumbent FSP in provision of interconnection with respect to access charges, quality of interconnection, resources allocated for interconnection, etc.

### **Determination by TRAI:**

14. The issue of access charges has already been addressed by TRAI in its regulation **The Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999 ( 1 of 1999)**. This regulation was issued after due consultation with all stake holders including service providers, and after taking into account the charges prescribed in the licence agreement duly signed by the CMSPs with the DOT.



15. The May 1999 Regulation had, in fact, taken note of the issue which is now being raised by cellular mobile service providers. This issue was also raised in the Consultation Paper of the 9<sup>th</sup> September 1998 in the context of tariff consultations. In its May 1999 Regulation, the Authority had noted that the revenue sharing regimes for long distance calls from basic service subscribers and from cellular mobile subscribers were not the same. The prevailing regimes were those embedded in the licenses for the respective service providers, and the Authority had followed the main features of these different regimes in specifying revenue shares for basic and cellular mobile service providers in the May 1999 Regulation.

16. In the May 1999 Regulation, after examining the issue whether the prevailing system should be altered, i.e. whether cellular mobile service providers should get a share of the revenue from long distance calls, the Authority had decided against any such change. The main reasons for this decision are provided in paragraph 33 of the Explanatory Memorandum to the Regulation, which states as follows:

*“The second consultation paper had raised a question of whether, similar to basic service providers, cellular mobile service providers should get a share of the long distance call revenue. Cellular mobile service providers had been in favour of such revenue sharing, but basic service providers were against it. The Authority has decided not to provide for such revenue sharing. An important reason for this decision is that while basic service providers have an access deficit to make up from long distance and international call charges, the situation regarding cellular mobile sector is different. For the latter, profitability has been built into the specified tariffs that are based on `median` cost estimate (and not on a lower estimate based on costs of an efficient service provider). Rentals cover capital costs and half of the license fee (for service providers in the metro area). The other half of the license fee, operational costs and a profit margin is taken into account in the calculation of the air time charge of Rs. 6 per minute. Moreover, tariff forbearance has been specified for supplementary services, which also provide a basis for substantial revenues, and tariff flexibility has been offered for cellular mobile tariffs for, inter alia, long distance calls made within the circle to other subscribers of the cellular mobile service provider. There does not, therefore, seem to be a basis at present to provide for revenue sharing between cellular mobile and basic service providers for long distance calls made from cellular mobile.”*

17. This should not, however, be taken to mean that the Authority is of the opinion that the present regime should continue even in a multioperator environment in which a call will be transported over the facilities of three or more network operators. With the entry of another network provider, or in a multi-operator network, the Authority will have to address the issue of demarcating usage charge for origination, transit and termination. The May 1999 Regulation has mentioned these concepts in the definitions for “originating/transit/terminating service provider” and “usage charge”. In particular, “usage charge” is defined as the charge by a service provider for carriage/delivery/collection of telecommunication messages in its network. In fact, the May 1999 Regulation has taken note of the fact that the prevailing system would have to be changed. Accordingly, in paragraph 29 of the Explanatory Memorandum to the Regulation, it is stated that:

*“To begin with, it must be re-iterated that the revenue sharing arrangements specified in this Regulation are interim, and are not based on detailed cost analysis. Application of an access/carriage charge regime will provide more logically tenable usage charges. That requires a detailed assessment of the underlying costs. It would, moreover, imply major changes to the existing revenue sharing arrangements, and hence an analysis is required also of the revenue implications for service providers. This is so also for suggestions made by ABTO regarding revenue sharing principles. Till any access/carriage charge regime is implemented, a system of revenue sharing must be in place to give effect to the commercial relationships arising through interconnection.”*

18. To properly implement an access/carriage charge regime, it is necessary to have separate costs for various elements of the network (see also paragraphs 6 and 7 of the Explanatory Memorandum to the May, 1999 Regulation). The Authority is in the process of specifying accounting separation that will provide the relevant costs for the usage based charging regime. Once the requisite arrangements have been made in this regard, the present regime would be modified to bring in a new regime applicable to a multi-operator network, in which one operator will have to pay the other operator for usage of his network resources for carriage of a call.

19. The Authority, however, recognizes that a change in the present arrangement may be required on account of the fact that cellular mobile service providers incur billing & collection costs and bad debt costs on the amount of revenues they collect from their subscribers and pass on to the basic service providers for carriage of calls on the fixed network of Basic Service Provider. Based on the experience of such costs normally incurred, the Authority determines that 5% of such pass through revenue, paid to the basic service providers may be retained by the cellular service providers for such calls made by their subscribers.

## **B.2 Notional TAX:**

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### **Background:**

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20. DOT in its order dated 29.1.1997 prescribed tariff for calls originated from PSTN to CMTS network for intra circle and inter circle calls. For inter circle calls, the Order specified that these calls were to be charged at the pulse rates applicable from the originating TAX to the designated notional TAX in the called Circle, i.e. the normal STD rates upto the called notional TAX.

21. Aircel Digilink India Ltd and others, filed a petition No. 1 of 1997 in TRAI challenging the above tariff order. The Authority vide its order dated 25.4.1997, quashed the above tariff order dated 29.1.1997. DOT filed a review petition in TRAI on 26.5.1997 for reviewing its order dated 25.4.1997 inter alia to keep alive and intact the tariff fixed for inter-circle PSTN to mobile calls. DOT argued that if the TRAI's order were followed, the PSTN subscribers would have to pay different rates for access to the same mobile subscriber in a circle depending on the routing of a call, if the concept of notional TAX is not followed.

22. TRAI vide its order dated 22.8.1997 allowed the review petition and modified its order dated 25.4.1997 and clarified that the impugned order of 29.1.1997 stands quashed only with regard to intra circle and not inter circle calls.

23. DTS vide its order dated 3.3.2000 has only reiterated its earlier tariff order dated 29.1.1997 for inter circle calls.

**VIEW OF COAI:**

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24. In its presentation made before the Authority COAI wanted the charging for PSTN/Mobile Inter Circle Calls to be distance based which is in accordance with both DOT and TRAI's established principles. Therefore, according to COAI, charging as per Notional TAX for Inter-Circle calls is illegal, unjustified, arbitrary and incorrect. Accordingly, COAI has sought immediate intervention of TRAI in order to protect the interest of consumers.

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**DOT's (Now BSNL's) Views:**

25. As per DOT (now BSNL), PSTN originated inter circle calls should be charged at the pulse rates applicable from the originating TAX to the notional TAX in the called circle. The traffic will be handed over to the nearest POI from the Notional TAX. The charging of such calls are based on the distance between the TAX at POI of the calling circle and Notional TAX of the called circle. For example, a call originated by PSTN subscribers at Dehradun to Cellular Subscribers in Karnataka Circle shall be charged as per the distance between Dehradun and Bangalore because the Notional TAX in Karnataka is at Bangalore.

### **Proposed Determination by TRAI:**

26. The Authority does not subscribe to the concept of notional TAX. It is of the view that BSNL shall designate a Level-I TAX as the Gateway TAX for all inter circle calls terminating on the mobile network of the circle. Between any two circles, i.e., originating and terminating, the inter circle call will be charged for carriage on the fixed network, based on the radial distance between the originating LDCC & the LDCC in which the terminating designated TAX is situated. Different Level I TAXs can be designated for terminating calls from different circles, in case a circle has more than one Level I TAX. This is in accordance with the regulation issued by the Authority on Interconnection in May, 1999.

### *TRAI'S DETERMINATION ON 5 ISSUES*

<b>Col (1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>
<b>S. No.</b>	<b>Clause in Draft Interconnect Agreement</b>	<b>Response by COAI</b>	<b>Response by FSP</b>	<b>Proposed Determination by the Authority</b>

Col (1)	(2)	(3)	(4)	(5)
S. No.	Clause in Draft Interconnect Agreement	Response by COAI	Response by FSP	Proposed Determination by the Authority
	Page 15, Clause 2.1.2	<p>CMSP's networks may have interconnectivity with FSP's network at any number of technically feasible POI requested by the CMSP subject to technical feasibility and integrity of the network. <u>The MSC shall interconnect as appropriate at its location with the local/Tandem/TAX exchange of FSP.</u></p> <p><u>However, the CMSP shall have the option of having another direct connectivity to TAX at the same location</u></p>	<p>The CMTS Provider's network may have interconnectivity with FSP's network at a technically feasible POI subject to integrity of the network as detailed in para 2.1.3.</p> <p>Decision to declare a POI as technically non-feasible, shall be taken by the head of circle. Reasons for technical non-feasibility should be recorded and made known to all concerned.</p>	<p>The CMTS providers network may have interconnectivity with FSP's network at the level of a Gateway TAX. These Gateway TAXs are the Trunk Automatic Exchanges which have the capabilities and functions as defined in sl. 1 of TRAI's formulation on 8 issues ( Annex. II)</p>

Col (1)	(2)	(3)	(4)	(5)
S. No.	Clause in Draft Interconnect Agreement	Response by COAI	Response by FSP	Proposed Determination by the Authority
		<p><u>subject to technical feasibility and network integrity.</u> Decision to declare a POI as technically non-feasible, shall be taken by the head of circle. <u>The reasons for non-feasibility and the time frame by which the POI will be feasible will be intimated to the CMSP within 30 days of request. If not satisfied, CMSP can approach TRAI for a final decision.</u></p>	<p><u>Feasibility will include technical characteristics/ capabilities and physical availability of ports for interconnection.</u></p>	
2	Page 24, clause 2.3.0	<p>Network interconnectivity : <u>Both-way</u> connectivity will be provided based on technical feasibility</p>	<p>Network interconnectivity : Connectivity will be provided based on technical feasibility from TAX as well as</p>	<p>NETWORK INTERCONNECTIVITY: Network interconnectivity will be provided based on technical feasibility from TAX as well as TANDEM in</p>

Col  (1)	(2)	(3)	(4)	(5)
S. No.	Clause in Draft Interconnect Agreement	Response by COAI	Response by FSP	Proposed Determination by the Authority
		<p>both from TAXs and Tandems / <u>Local Exchanges</u> in the city where MSC is located. However, <u>both-way</u> connectivity to TAX will be only for outstation calls and <u>both-way</u> connectivity to Tandem / <u>Local</u> will be for Local and outstation calls. In case of failure of either of the links, alternate routes (<u>both from transmission and switching point of view</u>) will be provided for, as part of the network configuration wherever possible. To provide flexibility, adequate MSC codes may be</p>	<p>TANDEM in the city where MSC is located. However, connectivity to TAX will be only for outstation calls and connectivity to TANDEM will be only for local calls. While providing multiple POIs in a service area, one POI in an SSA(LDCA) will be given subject to technical feasibility and integrity of network. The connectivity of PSTN shall be with MSC only.</p>	<p>the city where MSC is located. However, connectivity to TAX will be only for outstation calls and connectivity to TANDEM will be only for local calls. Multiple POIs in a service area will be given subject to technical feasibility and integrity of network. The connectivity of two networks shall be at the level of Gateway TAX/Gateway MSC..</p>



Col (1)	(2)	(3)	(4)	(5)
S. No.	Clause in Draft Interconnect Agreement	Response by COAI	Response by FSP	Proposed Determination by the Authority
		allotted to CMTS Provider <u>based on network configuration.</u>		
3	Page 24,  Clause 2.3.2	Mobile Originated Calls: In case of Mobile to PSTN calls, calls for all destinations i.e. intra- circle, inter-circle and International can be delivered by CMTS provider at any POI on TAX/Tandem/Local Exchange subject to technical feasibility and integrity of network.	Mobile Originated Calls: In case of Mobile to PSTN calls, calls for all destinations i.e. intra- circle, inter-circle and International <u>shall be delivered by CMTS provider at any POI on <u>level-I TAX only.</u></u> <u>Terminating calls in the LDCA wherever POI exits will be handled by that POI of the LDCA alone.</u> <u>At other POIs on level II TAX, calls terminating in that</u>	MOBILE ORIGINATED CALLS: Intra circle Mobile to PSTN calls shall be delivered by CMTS providers at the LDCA `s Gateway TAX. The inter circle, national and international calls shall be routed through Level- I TAX only.

Col (1)	(2)	(3)	(4)	(5)
S. No.	Clause in Draft Interconnect Agreement	Response by COAI	Response by FSP	Proposed Determination by the Authority
			<u>LDCA covered by the TAX concerned only shall be accepted.</u>	
4	Page 25,  Clause 2.3.3	Mobile Terminated Calls:  In case of PSTN to Mobile Calls wherever there is a POI on <u>TAX/Tandem/ Local Exchange</u> within a SSA or adjacent SDCA, the calls <u>shall</u> be handed over at the POI; and where there is no POI within SSA or adjacent SDCA, the calls <u>shall</u> be handed over to the <u>nearest POI specified by the CMSP.</u>	Mobile Terminated Calls:  In case of PSTN to Mobile Calls wherever there is a POI on TAX within a LDCA, the calls can be handed over at the POI and where there is no POI on TAX within LDCA, the calls can be handed over to the MSC using FSP's network as per FSP's routing plan. <u>Inter- circle and international calls will be delivered at level-I TAX in the</u>	MOBILE TERMINATED CALLS: In case of PSTN to Mobile Calls wherever there is a POI on TAX within a LDCA, the calls can be handed over at the POI and where there is no POI on TAX within LDCA, the calls can be handed over to the MSC using FSP's network as per FSP's routing plan. Inter-circle and international calls will be delivered at level-I TAX in the service area.

Col  (1)	(2)	(3)	(4)	(5)
S. No.	Clause in Draft Interconnect Agreement	Response by COAI	Response by FSP	Proposed Determination by the Authority
			<u>service area.</u>	
5	Page 49, Clause 6.4.1	Access charges shall be payable in accordance with the rates, terms and conditions as {determined by the TRAI from time to time} <u>or as agreed mutually from time to time.</u>	<p><u>6.4.1 : For the purposes of calculating the access charge, the point at which the calls are delivered to FSP's network is treated as originating point in accordance with the clause 2.3.2[v1][v2].</u>  <u>The calls will be measured from the point of entry to destination.</u></p> <p>-</p> <p><u>6.4.2 : Total access charge will be calculated based on the higher per unit call rate of PSTN network as fixed by TRAI from time to time.</u></p>	<p>For the purpose of calculating the access or carriage charges the point at which the calls are delivered to FSP's network is treated as originating point in accordance with item no. 3 above. The calls will be measured from the point of entry to destination.</p> <p>Total access charges will be calculated based on the higher per unit call rate of PSTN network as fixed by TRAI from time to time {as specified for example in Regulation called `The Telecommunication Interconnection (Charges and Revenue Sharing) Regulation, 1999 dated May 28,1999.}.</p>

