

TELECOM REGULATORY AUTHORITY OF INDIA

15th June, 2001

Determination under Section 11(1)(b)(i) and (ii) of the

Telecom Regulatory Authority of India Act 1997

Subject: Dispute between Bharat Sanchar Nigam Limited (BSNL) and Bharti Telenet Ltd. (BTNL) Relating To Handing Over of STD Traffic-Determination by TRAI

I. Background

1. Bharti Telenet Limited (BTNL) had brought to the notice of TRAI on 2nd March, 2001 that BSNL was not accepting BTNL traffic originating in other LDCAs and brought on BTNL Network for handing over at BSNL Trunk Automatic Exchange (TAX) located in the Ujjain Long Distance Charging Area (LDCA). BTNL had, therefore, requested the Authority to intervene in the matter. Subsequently a similar request was received by the TRAI in respect of Indore TAX on 26th April 2001. In a communication dated 25th April, 2001, BSNL had informed BTNL that transit traffic from BTNL i.e. traffic originating in some LDCAs other than Indore, would not be accepted from the next day at the BSNL TAX at Indore.

2. Taken together, BTNL's complaint to the TRAI relates to non-acceptance by BSNL at Ujjain and Indore TAXs, the STD traffic from BTNL, originating in other LDCAs, i.e. other

than these two LDCAs, and terminating in BSNL network. According to BTNL, BSNL should accept all calls originating from any of the LDCAs, in any TAX situated in their licensed area without any restriction being imposed on them about the origination of the traffic handed over. BTNL are of the view that they should be free to hand over their calls at any of the BSNL TAXs within the licensed area i.e. M.P. Circle, for further carriage.

3. In both the cases i.e. in respect of Ujjain and Indore TAXs, BTNL approached TRAI requesting for an intervention by the Authority in their favour. The Authority had asked BSNL to maintain status quo ante in view of a similar representation made by BTNL in respect of Ujjain. The Authority decided to examine both the cases i.e., relating to Ujjain and Indore together. Accordingly both the parties were asked to make a detailed presentation to the Authority on 10th May, 2001.

-

II. Summary of the points made by both the parties in their presentation to the Authority in support of their respective contentions

(a) Points Made By BTNL

4. During the presentation, BTNL reiterated their stand that they should be free to handover their STD traffic at any TAX of BSNL, i.e. without any restriction about its origin. According to BTNL, the License has provided them the necessary flexibility in choosing the points of interconnection (POI), at which they could handover STD calls to BSNL for further carriage on the latter's Network. This flexibility was required by them to optimise their Network and to earn higher revenue from such calls.

5. According to BTNL, one of the reasons for non acceptance of transit traffic in Indore/ Ujjain TAX put forward by the BSNL to them is that such a handover is not in conformance with the National Routing Plan (NRP) of the DOT. To counter this argument, BTNL has contended that the NRP was a Plan drawn up only for the DOT (now BSNL) Network and that it will not be fair to ask BTNL to conform to this plan. They further contended that the NRP is an internal document of DOT, which has not been amended to take care of the dynamic situation of the liberalization of the telecom market and the entry of private BSOs. BTNL stated that optimization of their Network usage required that BTNL be free to carry its traffic on its Network, as far as possible, and be permitted to hand over the Inter-Network STD calls to BSNL at any point, within the service area, without any restriction about its origin and its ultimate destination.

6. BTNL also referred to provisions in the License Agreement at Clauses 1.7.2.3 & 1.7.6.5, which respectively stipulate that for Routing Plan, the details in the Interconnect Agreement may be referred to, and that Licensee is free to build his own Network for carrying the traffic entirely on his own network, within the Circle/ Service area. This, according to BTNL, meant that it could deliver its calls at any POI within the service area, to the other operator i.e., BSNL, at present.

7. BTNL also claimed that the issue of hand-over of traffic was linked to revenue earnings and the flexibility given to the Licensee to hand-over traffic, was in order to help the BSOs derive

maximum benefit from carrying calls up to any Point of Interconnect (POI), and retain a corresponding portion of the revenue. In this context, BTNL cited Clauses 1.7.8.6 and 1.7.8.10 of the License Agreement. These clauses give the methodology for inter-carrier settlement i.e, payment to be made by the originating network operator to the terminating network operator for usage of the latter's network.

8. In addition, BTNL also referred to Clauses 2(i), 2(iv) and 2(vi) of a DOT (now BSNL) letter of 12.5.1998 in support their contention. This is a letter addressed by DOT Headquarters to CGMs of six telecom Circles, where basic service licenses are issued. It deals with Inter-connection of Networks of the BSOs with that of BSNL in case of large capacity switches with RSUs.

(b) Points Made By BSNL

9. In their presentation to the Authority, BSNL referred to the stipulations in Clause 1.7.3.2 of the License Agreement, according to which the incumbent i.e. DOT's (now BSNL's) Network is required to be interconnected with the licensees' Network at equivalent levels. Within a SDCA, the licensee and the DOT (now BSNL) are to adhere to an Integrated Numbering and Charging Schemes and the Inter-connections are at the levels of local & tandem exchanges, while Long Distance Inter-connections are required to be provided between two

LDCA TAXs i.e., of the BTNL and BSNL within a LDCA. This Clause from the License Agreement has been retained as Clause 2.1.2 in the Interconnect Agreement. According to BSNL, both these clauses i.e., of License Agreement & Interconnect Agreement stipulate interconnection of the two Networks i.e. of the incumbent and new entrant, at equivalent levels in the two charging areas i.e., SDCA and LDCA. For this purpose, the new entrant (licensee) is required to build a parallel Network within a LDCA with identical levels in the Network Hierarchy, starting with the SDCA, which is the source and sink of traffic, both local and long distance.

10. In their submission, BSNL stated that they 'switch' and 'route' Long Distance STD traffic on their Network, in accordance with the Routing discipline stipulated in the National Routing Plan and 'dimension' their network accordingly. They further stated that the stipulations in the License Agreement and the Interconnect Agreement quoted in pre-para, oblige the Licensee also to adopt the Routing discipline as stipulated in the NRP. BSNL itself follows the same handover and Routing discipline which it wants the licensee i.e., BTNL to follow, i.e., in accordance with the License/ Interconnect Agreement as well as Network Routing Plan.

11. BSNL explained that for TAX dimensioning, they take into account the number of DELs forecast at the end of the planning period which is 3 to 5 years. A thumb rule of 6% of the DELs in a LDCA, gives the number of trunk termination in a LDCA TAX required to cater to the traffic generated in a LDCA. In a multi-operator environment, all the operators will be required

to dimension their respective Long Distance Networks based on the originating & terminating traffic generated by the total number of DELs in a LDCA. If the traffic originated in some other LDCA is also to be transited, then the task of planning and dimensioning the Long Distance Network in a Circle will become too difficult.

12. BSNL further stated that as per the National Routing Plan, the handover of traffic has to be as per the Hierarchical Routing Plan. This plan is adhered to by BSNL for their own Intra-Network calls. In support of their contention, BSNL referred to Clause 1.7.6 of the License Agreement, which deals with traffic routing and interconnection of Licensee's Network with DOT's (now BSNL) Network. In accordance with clause 1.7.6, the Traffic Routing and Numbering in Licensee's network will have to conform to the National Numbering and Routing Plans. In this context, BSNL pointed out that clause 1.7.6.5 of the License Agreement actually supported their contention, rather than that of BTNL. Clause 1.7.6.5 was presented by them to the Authority, which states as follows:

"Inter-connectivity for STD/ISD calls shall be ordinarily only between DOT's LDCC TAX and Licensee's LDCC TAX. In case Licensee does not have his own TAX in the LDCC, STD/ISD calls from Licensee's SDCC Tandem/ Local exchange in an SDCA in the LDCA shall be routed to DOT's LDCC TAX. This requires the Licensee to connect to the nearest DOT TAX even for Intra-Circle calls that may be between two LDCCs. However, the Licensee is free to have his Network for carrying the traffic entirely over his own Network within the Circle/ Service Area."

13. In the light of the above, according to BSNL, the interconnectivity for STD Inter-Network calls has to be between BSNL's LDCC TAX and Licensee's LDCC TAX in the same LDCA. In the event, however, that the licensee does not have his own TAX in the LDCA, he could directly

bring traffic from his SDCA Tandem/ Local exchange to the nearest DOT(now BSNL) TAX even for onward transmission/carriage to any other TAXs.

14. BSNL further brought to the notice of the Authority, their apprehension that any violation of Network Routing discipline of near-end handover would result in a revenue loss to them, due to their getting a lower than 40% share of Long Distance revenue from the private operator, in this case BTNL, as carriage charge.

15. According to BSNL in their written submission, not following the National Routing Plan (which is also linked to other Plans, such as for Charging and Numbering), would also make it difficult for them to implement the National Network Management Systems (NMS) for Optimal Routing of Inter TAX National Long Distance traffic as is stipulated at clause 1.7.3.13 of the License Agreement. This NMS is to supervise and manage the traffic of both BSNL & BTNL TAX Networks in an integrated manner.

16. BSNL further submitted that the new Basic Service and National Long Distance Guidelines also provide for the operators to adhere to the National Routing Plan. The provision of other services, including paging, voice mail, cellular mobile, etc. was also based on the National Routing Plan.

17. BSNL also stated that the DOT letter of 12th May, 1998 addressed to CGMs of six telecom Circles was an internal letter, and does not in any manner alter the conditions under the License Agreement or the Interconnect Agreement.

III. Determination by the Authority

18. The Authority has duly considered all the points made by both the parties in support of their respective positions. Both the sides have quoted various clauses of the License Agreement & Interconnection Agreement signed between erstwhile DOT as the Licensor and also as an operator and the Licensee i.e, BTNL in this case, in support of their contentions.

19. The crux of the issue is to determine the relevant TAX of BSNL where the STD traffic originating in the BTNL Network and terminating in the BSNL network is to be handed over. Clause 1.7.3.2 of the License Agreement and Clause 2.1.2 of the Interconnect Agreement, provide for interconnectivity between DOT (now BSNL) and Licensee's Networks at equivalent levels. Clause 2.1.2 of the Interconnect Agreement reads as follows:

Clause 2.1.2 (Interconnect Agreement)

"The Licensee's Network shall have Inter-connectivity with DOT's Network at the equivalent level at a Local/ Tandem exchange and at the LDCC TAX".

In terms of the License Agreement, the Licensee is required to engineer a Network with identical structure as that of DOT (BSNL) with similar Levels and Hierarchy. The interconnections are required at corresponding levels i.e. for local calls at the level of local and tandem exchanges within a SDCA, and for long distance (STD/ISD) traffic at level of LDCC TAX within a LDCA. The Licensee is required to install for the purpose of interconnection either a dedicated TAX in each LDCA or designate a local cum tandem exchange as LDCC TAX in terms of Clause 1.7.6.3 which reads as under:

Clause 1.7.6.3

"The Licensee may install TAX in the LDCC in which it wants to operate. This could be an Integrated Local-cum-Tandem exchange. This will be known as Licensee's LDCC TAX."

20. In this context Clause 1.7.6.5 of the License agreement is also relevant and is reproduced below:-

Clause 1.7.6.5

“Inter-connectivity for STD/ ISD calls shall be ordinarily only between DOT’s LDCC TAX and Licensee’s LDCC TAX. In case Licensee does not have his own TAX in the LDCC, STD/ISD calls from Licensee’s SDCC Tandem/ Local exchange in an SDCA in the LDCA shall be routed to DOT’s LDCC TAX. This requires the Licensee to connect to the nearest DOT TAX even for Intra-Circle calls that may be between two LDCCs. However, the Licensee is free to have his Network for carrying the traffic entirely over his own Network within the Circle/ Service Area.”

21. A reading of Clause 1.7.6.3 together with that of Clause 1.7.6.5 of the license agreement clarifies that all types of long distance calls (STD/ISD) are to be handed over by the Licensee to the nearest LDCC TAX of BSNL. Since BSNL has a TAX in each LDCA, this would imply a handover of all long distance traffic in the same LDCA, in which it has originated.

22. Clause 1.7.6 stipulates the terms of Traffic Routing and Interconnection with DOT network and reads as under:-

Clause 1.7.6

-

“Traffic routing and numbering in Licensee’s Network will be such that they are as per the National Numbering and Routing Plans. In conformity with Routing and Numbering plan, the Inter-connection plan will be as per the following clauses”

Clauses 1.7.6.1 to 1.7.6.7 detail the interconnection plan which as per the main Clause 1.7.6 quoted above will have to be in conformity with the National Routing and Numbering Plans. The Numbering and Charging plans shall always be adhered to by both DOT as well as Licensee. In this context Clause 1.7.3.6 is also relevant and is reproduced below for ready reference.

Clause 1.7.3.6

“All planning activities of the Licensee for providing Intra-Circle connectivity will be coordinated with the planning activities of DOT. Any circuits leased by the Licensee from DOT shall not be resold as leased circuits to a third party.”

Read together these clauses clarify that inter-Network connectivity will have to be at equivalent levels, and that Traffic Routing and numbering in the licensee's network shall have to be as per the National Numbering and Routing plans. This would normally result in Near End handover of traffic by the licensee to the DOT (now BSNL) for onward transmission by them.

23. In all these considerations, however, the import of the concluding sentence in clause 1.7.6.5 can not be overlooked which is as under :-

“However, the licensee is free to have his network for carrying the traffic entirely over his own network within the circle/service area.”

This has also been referred to by the BTNL in their representations. This provision does give the licensee the option of carrying an STD call entirely on his own network within the circle/service area. In accordance with this provision a licensee may carry an STD call without handing it over at the near end to BSNL if it does not utilize any part of the latter's network and manages origination, transit and termination of the call entirely on his own network. This is a situation in which the call is entirely handled by the network of the Licensee . Further, although not quite explicitly this provision also gives the licensees the option of a far end hand over for termination in the other operator's network.

24. While coming to the aforesaid conclusion that the concluding sentence of Clause 1.7.6.5 gives the licensee option of a far end hand over, the Authority has taken note of Clause 1.7.6.6 which deals with handing over of STD calls originating in DOT's (now BSNL) network but terminating in the licensee's network. The Authority observes that only BSNL has been given the option of a far end hand over for such calls. The main reason for such a provision in the license from the very beginning, would appear to be the ubiquity of the BSNL network and absence of licensee's LDCC TAX in all SDCAs at that point of time. Now that the position in regard to the availability of licensee's TAXs and interconnecting backbone has changed

significantly, the Authority is of the view that consistent with the principles of level playing field both the parties to the interconnection viz. namely the Licensees and the BSNL should be permitted near end as well as far end hand over of calls for termination in each other's network. Such an arrangement would be consistent with the National Routing Plan as also with practices followed in some other countries with well developed and long established interconnection regimes.¹

This conclusion also implies that there can be no intermediate hand over of calls by either the licensee or the BSNL.

25. In arriving at this conclusion the Authority has carefully examined the BTNL's contention that the National Routing Plan would be applicable only to BSNL, it being an internal document for BSNL. Such a contention is clearly not supported by Clause 1.7.6 of the license agreement entitled "Traffic Routing and Interconnection with DOT network"

Note1 An example of such practice is the interconnection regime established in Germany. The call hand over principles in vogue there are as follows:-

"Termination traffic should be handed over to Deutsche Telekom network as close as possible to its destination (Far End Hand Over);

Origination traffic should be handed over to the network as close as possible to the origin (Near End Hand Over)."

which requires the Traffic Routing and Numbering in licensee's network to be such that these are in conformity with the National Numbering and Routing Plans (NRP). The NRP, therefore, is clearly applicable to the licensees (BTNL) network also.

In view of this, BTNL's contention that they are free to hand over calls to BSNL at any of the latter's LDCC TAXs irrespective of the fact that whether or not such hand over is in conformity with the extant National Routing Plan, is untenable. In this context, the Authority has also taken note of Clause 1.7.3.13 of the license agreement which provides for a common National Network Management System (NMS) under the control of the DOT (now BSNL) and obliges the Licensee to provide necessary subsystems and equipment for the operation of the NMS. The operation of NMS implies that all operators adhere to a common National Routing Plan so that temporary alternate routes can be created by dynamic commands from a common NMS in order to get over situations of congestion which may arise either due to disaster or catastrophic failure of facilities of any of the operators.

26. There is no denying that the general framework of the routing plan provides for a Hierarchical Routing with exceptions called "high usage routes". Such routes can be justified between level II TAXs based on techno economic viability, and are required to carry traffic which originate and terminate in these two TAXs i.e. these high usage routes do not carry any transit traffic to other TAXs. These high usage routes may be used by both the operators for far end hand overs, provided for in the license agreement as per Clause 1.7.6.6 thereof.

27. BTNL has quoted in support of their contention of transiting traffic at any of the TAXs, a DOT letter of 12-5-1998. This letter was an internal communication addressed by the DOT to some of its General Managers. In this connection the Authority has noted that in its letter dated

24-5-2001 DOT has clarified that their letter dated 12-5-1998 does not alter the license agreement and interconnect agreement. BSNL have also confirmed vide their letter of 23-5-2001 that the stipulations contained in the DOT letter of 12-5-1998 have not been embodied into any agreement between BSNL and the licensees. The contents of this letter do not appear to have been conveyed to any of the licensees nor any action thereupon appears to have been taken to effectuate it with any kind of mutual agreement. The Authority had endorsed to the BTNL a copy of its letter dated 18-5-2001 seeking clarification from BSNL. No response has been received from BTNL to this endorsement. The Authority is, therefore, of the view that BTNL have not succeeded in drawing any support for their case from the aforesaid letter dated 12-5-1998 of DOT addressed to its field operatives.

28. In the light of the foregoing the Authority has come to the following conclusions:-

- (i) BSNL's refusal to accept at Ujjain and Indore, the STD inter network traffic for calls originating in other LDCAs is in accordance with the stipulations in the license agreement as well as interconnect agreement signed by both the contending parties.
- (ii) Clause 1.7.6.5 of the license agreement gives the licensee option of carrying an STD call entirely on his own network within the circle/service area.
- (iii) This clause (1.7.6.5) also gives the licensee the option of far end hand over of calls to BSNL for termination only. The licensee may, therefore, also use his network to carry inter-Network calls to the Far End and hand over in the terminating LDCA/SDCA to the DOT (now BSNL) in the same manner as is permitted to the

DOT (now BSNL) in the license agreement. The BSNL should not refuse such Far End hand overs from licensees received by them for termination within the LDCA.

- (iv) Intermediate hand over of calls for transiting is not in conformity with the license agreement as well as Interconnect Agreement and, therefore, neither the licensee nor the BSNL is obliged to accept any such hand over of calls.

The Authority determines and orders accordingly. This Order is made under Section 11(1)(b)(i) and (ii) of the Telecom Regulatory Authority of India Act 1997. Though this Order has been made in relation to the specific complaint relating to Madhya Pradesh Circle, it will have general applicability in similar interconnect scenarios.