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TELECOM REGULATORY AUTHORITY OF INDIA

NOTIFICATION

New Delhi, the 14th September, 2007

DOMESTIC LEASED CIRCUITS REGULATIONS, 2007
No. 10 OF 2007

File No. 404-1/2007-FN.---------- In exercise of the powers conferred under section 36, read with sub-clauses (i), (ii), (iii), (iv), (v) and (vi) 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, namely:-

CHAPTER I
PRELIMINARY

1. Short title and commencement. — (1) These regulations may be called the Domestic Leased Circuits Regulations, 2007.

(2) They shall come into force on their publication in the Official Gazette.

2. Applicability.------ These regulations shall be applicable to every service provider who can access the subscribers directly for provision of Leased Circuits under the terms and conditions of its licence.

3. Definitions. --In these regulations, unless the context otherwise requires,-

(a) "Act" means the Telecom Regulatory Authority of India Act, 1997 (24 of 1997);

(b)"Authority" means the Telecom Regulatory Authority of India established under sub-section (1) of section 3 of the Act;

(c) "Domestic Leased Circuit" means a leased circuit to the premises of a subscriber when such premises are located within India;

(d)"Leased Circuit" means virtual private network using circuit or packet switched (Internet Protocol) technology apart from point to point non-switched physical connections or transmission bandwidth and to which the public network is not connected;

(e)"licence" means a licence granted or having effect as if granted under section 4 of the Indian Telegraph Act, 1885, (13 of 1885) and Indian Wireless Telegraphy Act, 1933 (17 of 1933);

(f) 'licensee' means any person licensed under sub-section (1) of section 4 of the Indian Telegraph Act, 1885 (13 of 1885) for providing specified public telecommunication services;

(g)"Local Lead of Domestic Leased Circuit" means the Leased Circuit between the premises of a subscriber to the nearest exchange which includes Short Distance Charging Center, point of interconnection and point of presence of the service provider from whom the subscriber obtains the Domestic Leased Circuit;

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(h) "Long Distance Charging Area" means one of the several areas into which the country is divided and declared as such for the purpose of charging for trunk calls which generally is co-terminus with secondary switching area;

(i)"Prime Service Provider" means, ----

(A) in case of Domestic Leased Circuit(s) or Local Lead of Domestic Leased Circuit, as the case may be, from two or more service providers in a virtual private network or Closed User Groups, the service provider who is having the agreement with the subscriber for providing such Domestic Leased Circuit(s); .

(B) in case a subscriber procures Domestic Leased Circuit from two or more service providers for the purpose of its Close User Groups, all the service providers providing Domestic Leased Circuit to such Close User Groups and having agreement with such subscriber;

(j)"regulations" means the Domestic Leased Circuits Regulations, 2007;

(k) "Short Distance Charging Center" means one of the several areas into which a Long Distance Charging Area is divided and declared as

such for the purpose of charging for trunk calls and within which the local call charges and local numbering scheme is applicable and such area coincide (except a few exceptions) with revenue tehsil or taluk in such areas;

(l) "subscriber" includes any subscriber or any person or legal entity, which subscribes to, or avails of, any service, being the Domestic Leased Circuit from a licensee;

(m) "service provider" means the Government as a service provider and includes a licensee;

(n) "specified service provider" means a service provider who has been allowed under the terms and conditions of its licence to access the subscribers directly for provision of Domestic Leased Circuits;

(o) all other words and expressions used in these regulations but not defined, and defined in the Act and the rules and other regulations made there under, shall have the meanings respectively assigned to them in the Act or the rules or other regulations, as the case may be.

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CHAPTER II
PROCEDURE RELATING TO PROVISION OF DOMESTIC LEASED CIRCUITS OR LOCAL LEAD OF DOMESTIC LEASED CIRCUIT

4. Request for Provision of Domestic Leased Circuits or Local Lead of Domestic Leased Circuit.------ (1)Any specified service provider,--

(a) who has an obligation under a contract with its subscriber or has any other arrangement with its subscriber to provide Domestic Leased Circuits; and

(b) who does not have adequate Domestic Leased Circuits or resources for to provide the same under such contract or arrangement,

may make a request in writing to any other specified service provider for providing Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be.

(2)Every service provider while making the request under sub-regulation (1) shall intimate, to other specified service provider , along with such

request the following details relating to the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, to be acquired from it, namely :-

(a) specific locations, between which the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, is required;

(b) the number of circuits to be acquired;

(c) the period of lease of the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, to be acquired;

(d) technical information relating to Domestic Leased Circuits or Local Lead of Domestic Leased Circuit to be acquired (including its type, capacity , or bandwidth);

(e) other relevant details.

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5. Obligation of the specified service provider, to whom request has been made under regulation 4 , to provide Domestic Leased Circuits or Local Lead of Domestic Leased Circuit(s).------ (1) The specified service provider to whom request has been made under regulation 4 for provision of the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit(s), as the case may be, shall, within thirty days of receipt of such request, send to the specified service provider who made such request(hereafter referred to as the requesting specified service provider),------

(a) a confirmation of its ability to provide the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be;

(b) a demand note giving therein the relevant details (including charges and payment schedule), in case the other specified service provider to whom request has been made under regulation 4, confirms its ability to provide the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be;

(c) details of payment schedule for providing the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be;

(d) likely date of provisioning of the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, by the specified

service provider .

(2) In case it is not feasible for a specified service provider, to whom request has been made under regulation 4, to provide the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, to the requesting specified service provider, due to reason of non-availability of capacity or technical non-feasibility, the specified service provider shall, within thirty days after the receipt of the request, intimate the same in writing indicating the reasons thereof to the requesting specified service provider.

6. Maintenance of records in certain cases.------ In case a specified service provider, to whom request has been made under regulation 4 to provide the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, is unable to provide the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, and intimates the reasons thereof to the requesting specified service provider, the service provider, to whom request has been made under regulation 4, shall, maintain record of each such case mentioning therein the reasons thereof and such records shall be maintained for all such cases for a period of one year beginning from the date of such intimation.

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CHAPTER III
RATES FOR PROVISION OF DOMESTIC LEASED CIRCUITS OR LOCAL LEAD OF DOMESTIC LEASED CIRCUIT

7. **Tariff for Domestic Leased Circuits or Local Lead of Domestic Leased Circuit.--------** (1)The rates for the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, provided by a specified service provider to another specified service provider under these regulations [other than those cases falling under sub-regulation (2) and regulation 8] shall be such as specified under Schedule IV to the Telecommunication Tariff Order 1999, or, as may be notified by the Authority under sub-section (2) of section 11 of the Act, as the case may be.

(2) In case the rates for the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit as referred to in sub- regulation(1) have not

been specified under the Schedule IV to the Telecommunication Tariff Order 1999, or, notified by the Authority under sub-section (2) of section 11 of the Act, the rates in such a case for the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit provided by a specified service provider to another specified service provider under these regulations shall be such as may be mutually agreed upon between such service providers.

8. Provision for Domestic Leased Circuits or Local Lead of Domestic Leased Circuit on "Rent and Guarantee Terms" or "Special Construction basis" or "Contribution basis in certain cases.------(1) In case, the specified service provider, to whom request has been made under regulation 4,-

(a) is unable to provide the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, to the requesting specified service provider who made such request, due to reason of non-availability of capacity or technical non-feasibility;

(b) has intimated to the requesting specified service provider, the reasons thereof under sub-regulation (2) of regulation 5,

the specified service provider, to whom request has been made under regulation 4, shall give an option to the requesting specified service provider to acquire the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, on "Rent and Guarantee Terms" or "Special Construction basis" or "Contribution basis" as may be offered by it to the requesting specified service provider.

(2) The specified service provider, to whom the request has been made, under regulation 4 shall,---

(a) on receipt of confirmation from the requesting specified service provider, to whom such option had been given under sub- regulation (1), for providing the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, on "Rent and Guarantee Terms" or "Special Construction basis" or "Contribution basis", as the case may be;

(b) on receipt of requisite payment from the requesting specified service provider,

provide the requesting specified service provider, the Domestic Leased

Circuits or Local Lead of Domestic Leased Circuit, as the case may be, on "Rent and Guarantee Terms" or "Special Construction basis" or "Contribution basis" as may be agreed upon between them.

(3) Nothing contained in the Schedule IV to the Telecommunication Tariff Order 1999 shall apply to the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, provided on "Rent and Guarantee Terms" or "Special Construction basis" or "Contribution basis" as may be agreed upon between them under sub- regulation (2).

CHAPTER IV
SECURITY RELATING TO DOMESTIC LEASED CIRCUITS OR LOCAL LEAD OF DOMESTIC LEASED CIRCUIT

9. Security and monitoring arrangements (including lawful interception) in relation to Domestic Leased Circuits.------- (1) A specified service provider, who owns the resources and provides the Domestic Leased Circuits to the subscriber, shall, without prejudice to any other law for the time being in force and the terms and conditions of its licence or any other instructions issued by the Government or any of its authorities or agencies or any liability of such subscriber,----

(a) be responsible for bona fide use of its Domestic Leased Circuits so provided and be responsible for any misuse thereof;

(b) be responsible for security and monitoring arrangements for Domestic Leased Circuits(including lawful interception) so provided to the subscriber.

(2) A Prime Service Provider, who ---

(a) builds up the end-to-end Domestic Leased Circuits or virtual private network or Closed User Group,

(b) utilises the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, of one or more other specified service providers for the purpose of providing the Domestic Leased Circuits to the subscriber ,

shall, without prejudice to any other law for the time being in force and the terms and conditions of its licence or any other instructions issued by the Government or any of its authorities or agencies or liability of

such one or more other specified service providers, -

(i) be responsible for bona fide use of its Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, so provided and be responsible for any misuse thereof;

(ii) be responsible for security and monitoring arrangements for Domestic Leased Circuits(including lawful interception).

(3) In case a subscriber avails resources from two or more specified service providers to build-up a leased circuit or virtual private network or Closed User Group, in such a case, all such two or more specified service providers having agreements with such subscriber, shall be the Prime Service Providers, and, without prejudice to any other law for the time being in force and the terms and conditions of the licence of such service providers or any other instructions issued by the Government or any of its authorities or agencies or any liability of such subscriber,-

(a) be severally and jointly responsible for bona fide use of their Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, and be severally and jointly responsible for any misuse thereof;

(b) be severally and jointly responsible for security and monitoring arrangements for Domestic Leased Circuits(including lawful interception) provided to such subscribers.

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CHAPTER V
MISCELLENEOUS

10. These regulations not to apply in certain cases. –Nothing contained in these regulations shall apply to any --

(a) matter or issue for which any proceedings, before any court or tribunal or under the Consumer Protection Act,1986 (68 of 1986) or any other law for the time being in force, are pending; or

(b) matter or issue for which a decree, award or an order has already been passed by any competent court or tribunal or authority or forum or commission, as the case may be.

(c) agreement, relating to provision of the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, entered

before commencement of these regulations.

11.Application of other laws not barred. –The provisions of these regulations shall be in addition to, and not in derogation of, any other law for the time being in force.

12. Inspection and Auditing.----- (1) The Authority may, if it considers it expedient so to do, and to ensure compliance of the provisions of these regulations, by order in writing, direct any of its officers or employees or through one or more persons appointed by the Authority to inspect any the records maintained under regulation 6, and submit to the Authority a report in respect of such inspection.

(2) The Authority, if it considers it expedient so to do, may require any specified service provider to whom a request has been made under regulation 4, to,--

(a) get the records maintained under regulation 6 audited through one or more officers or persons appointed by the Authority and submit the report in respect of such audit to the Authority;

(b) get the records maintained under regulation 6 audited through an independent agency as may be specified by the Authority and submit the report in respect of such audit to the Authority.

(3) The cost of inspection by one or more persons appointed by the Authority under sub-regulation (1) or the audit under clause (b) of sub-regulation (2) shall be borne by the concerned specified service provider

(4)The Authority may, by order or direction, from time to time, intervene, for the purpose of protecting the interest of the subscribers or specified service providers or for monitoring and ensuring provision of the Domestic Leased Circuits or Local Lead of Domestic Leased Circuit, as the case may be, under these regulations so as to promote and ensure orderly growth of the telecom sector

(Lav Gupta)
Principal Advisor(FN)

Note.-----The Explanatory Memorandum explains the objects and reasons of the Domestic Leased Circuits Regulations, 2007.

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EXPLANATORY MEMORANDUM TO DOMESTIC LEASED CIRCUITS REGULATIONS, 2007 (10 OF 2007)

1. INTRODUCTION

1.1 Generally Leased Circuit is a facility for communication between two or more designated points set aside for exclusive use by a customer. It could be set up as one or more point-to-point connections or as Virtual Private Network (VPN) over a shared network. Public switched network should not be connected with the leased circuit. This service may be provided over facilities owned or operated by a service provider or over transmission capacity sold or leased by another service provider. It may use terrestrial or satellite facilities, may use any media copper, fiber or wireless and may be provided through passive, circuit switched or packet switched network. Leased circuit–does not involve central office switching operations. Unlike broadband, a leased line is not contended or shared but delivers dedicated guaranteed bandwidth

1.2 ITU defines Leased Circuit as "a two-way link for the exclusive use of a subscriber regardless of the way it is used by the subscriber."

1.3 **Domestic Leased Circuits (DLC)** are important elements in the telecom market that telecom service providers provide to connect two or more customer sites or customers to their own or other service providers networks.

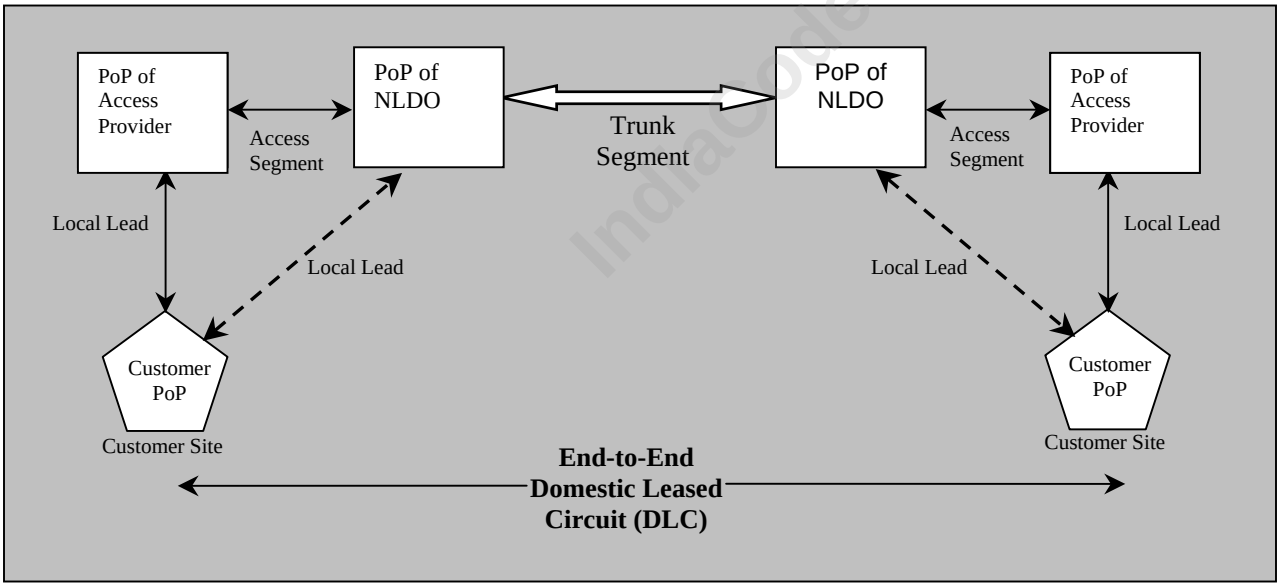
1.4 The various elements of an end-to-end Domestic Leased Circuit (DLC) include the following segments:

(a) Local Lead (To the nearest Point of Presence (PoP)/Point of Interconnection(POI) of Access Provider or National Long Distance Operator)

(b) Access Segment

(c) Trunk Segment

The schematic diagram indicating various elements of a Domestic Leased Circuit (DLC) is given below.



NLDO: National Long Distance Operator PoP: Point of Presence

Figure1. Schematic diagram of a Domestic Leased Circuit(DLC)

1.5 **Local lead** forms an essential part of the DLC. This is also referred to as terminating segment, partial circuit, tail end, local end or local leased circuit. In instances where the local lead consists of copper links, it is usually known as a local loop. It is like a leased circuit from the customer's premises to Point of Presence (PoP) or Point of Interconnection (PoI) to the network operator from whom the customer obtains leased line capacity. The local lead may be

provided by a service provider other than that having contract with the customer for provision of DLC.

1.6 Local lead is part of the service provider's access network. It could take diverse forms: for a telephone customer it would primarily be copper pairs, for broadband users it could be copper pairs or fiber, for connecting enterprise EPABX it could be copper or fiber, for leased line it could be copper, fiber or wireless.

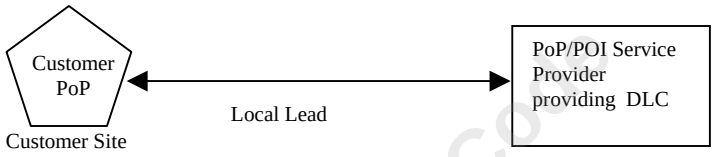


Figure2. Schematic diagram depicting local lead

1.7 **Virtual Private Netwrok (VPN)** achieves the same purpose as physical leased circuits. VPN is configured within a public network (a carrier's network or the Internet) in order to take advantage of the economies of scale and management facilities of large networks. Therefore, in most situations, VPNs provide a user organization with the same capabilities as leased lines but at a much lower cost. Though a VPN is usually architectured using the shared public infrastructure, privacy and security are maintained through security procedures and tunneling protocols. In effect, the protocols used, by encrypting data at the sending end and decrypting it at the receiving end, send the data through a "tunnel" that cannot be "entered" by data that is not properly encrypted. An additional level of security involves encrypting not only the data, but also the originating and receiving addresses.

Virtual Private Network VPNs are widely used by enterprises to create wide area networks (WANs) that span large geographic areas, to provide site-to-site connections to branch offices and to allow telecommuters to dial up their company LANs.

1.8 Service Providers in DLC and VPN segment

1.8.1 As on date, domestic bandwidth is provided to the end users by following categories of Operators in the country:

a) National Long Distance Operators (NLDOs)
b) Access Service Providers (BSOs/UASPs)

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1.8.2 As per the guidelines of Department of Telecommunications (DOT) dated 14th December 2005, the IP-II category has been abolished and no new IP-II licenses will be granted. The erstwhile IP-II players were provided option to migrate to NLD/ILD service license by paying the requisite licensing fee for each licence. Further, IP-II licensees not interested in migrating to NLD/ILD shall not be permitted to provide national/international leased line/bandwidth to individual subscribers as per existing IP-II license guidelines. As per the guidelines of DOT dated 14th December 2005, NLDOs can only access the subscribers for provision of Leased Circuits/Close User Groups (CUGs).

1.9 Demand for Leased Line and VPN

1.9.1 According to analysis of IP VPN services by IDC, the market for domestic VPN was around Rs. 216 Crores in 2003 and is expected to reach Rs 831 Crores by 2008 as shown in Table 1 below

INDIA IP-VPN SERVICES MARKET REVENUE FORECAST, IN CRORES OF RUPEES, 2003-2008						
Year	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
National IP VPN	215.6	329.5	474.9	586.8	704.1	830.9
International IP VPN	14.7	32.9	61.5	108.3	186.4	310.3
Total	230.3	362.4	536.4	695.1	890.6	1141.2

Source: IDC Report, 2003

Table 1

A similar analysis carried out by Frost & Sullivan, shows almost similar revenue projections:

IP VPN MARKET: REVENUE FORECASTS (INDIA), 2003-2009		
Year	**Revenue (Rs. Crores)**	**Revenue Growth Rate**
2003	226.80	-
2004	281.70	24.1
2005	387.90	37.6
2006	508.50	31.5
2007	672.30	32.0
2008	894.60	33.1
2009	1198.35	33.9

IP VPN Market: Revenue Forecast (India), 2003-2009 Source: Frost & Sullivan

Table 2

1.9.2 TRAI's Consultation Paper on "Issues Related to ISP Licence with Virtual Private Network (VPN) Dated 24th June 2005" expected point-to-point leased line market to reach Rs 1400 Crores by 2006-07

REVENUE ON ACCOUNT OF DOMESTIC LEASED CIRCUITS (IN CRORES OF RUPEES)					
Actual Revenue			**Projected Revenue**		
FY	2002-03	2003-04	2004-05	2005-06	2006-07
Revenue (in Crores)	577	783.52	901.05	1081.26	1405.63

Source: TRAI's Consultation Paper on "Issues Related to ISP Licence with Virtual Private Network (VPN) Dated 24th June 2005"

Table 3.

1.9.3 Revenue from point-to-point leased line reported by service providers under Basic/Unified Access License and National Long Distance License are Rs. 905 Crores and Rs. 1291 Crores

respectively for the year 2004-05 and 2005-06. It may be noted that this amount does not include the revenue generated through VPN services under Internet License. Thus the Domestic Leased circuit market is growing at very fast pace.

1.9.4 From the available data the aggregate DLC market (including VPN) is estimated to be Rs 3000 cr by 2008 and Rs 4500 cr by 2010.

1.10 Importance of DLCs to the economy: leased lines are and will remain a key component for the economic growth of the country. In addition these are crucial building blocks for e-business, e-governance, Internet access, BPO and IT industry. Financial, ITES, and manufacturing sector are expected to lead the IP VPN Market growth. In the financial sector banks are automating and expanding their branch networks to smaller cities. The need to connect these branches would drive the uptake for VPNs. VPNs are also being seen as a more cost effective alternative to point to point connections like VSATs. Trends by vertical segment in Indian IP VPN services over the 2003-2009 period were also given in the Frost & Sullivan Report on "Market Engineering Research for the Indian IP VPN Market."

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IP VPN Market: Trends by Vertical Segment (India), 2003-2009							
Vertical Market	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
	(%)	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**
FMCG	35	25	20	20	20	15	15
Healthcare	25	20	20	20	25	20	20
Telecom/IT/High Technology	31	31	30	25	20	20	20
Banks	0	7	10	15	15	20	20
Government	5	5	5	5	5	10	10
Education	0	7	8	8	10	10	10
Others	5	5	7	7	5	5	5
IP VPN Market: forecast 2003-2009 Source: Frost & Sullivan							

Table 4

1.11 Leased Lines are normally used by businesses that need high quality 24/7 interconnection, with SLA (Service Level Agreement), between geographically separated offices to run critical applications with fast upstream/downstream speeds or access to the internet. For example, remote workers accessing office-based applications will be retrieving rich multimedia data from their office databases that would require high downstream bandwidth. Knowledge Process Outsourcing (KPO)/companies and businesses providing valued added services might require high upstream bandwidth to upload large volumes of data. Internet Service Providers (ISPs) also make use of DLCs for connecting their customers to their Node for provision of leased line Internet access. Access to DLCs is therefore a critical requirement for new businesses and service providers.

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1.12 Keeping in view the emerging competition arising out of certain policy initiatives of the Government like reduction in the entry barriers and license fee payable and increase in the scope of the service i.e. allowing the NLDOs to access the subscriber directly for provision of leased Circuits/Closed User Groups (CUGs), entry of number of players and increasing competitive pressure, Domestic Leased Circuit Market including the IP VPN Market is expected to grow at a healthy rate in the coming years.

1.13 The telecom services provided by the service providers to their end users largely depend on the quality and timely availability of such leased circuits. Competition in supply of all segments of end-to-end connectivity is vital to deliver retail products at a reasonable price to users. *New entrants generally find it difficult to compete in domestic leased line market because of non-availability of parts of DLC, specially the access part.* The Authority is of the view that

customer should have the ability to choose their preferred service provider of DLC without artificial and anti competitive constraint limiting their choices as they are able to do in other segments of the telecom sector

1.14 In today's multi operator, multi service scenario, the term access has a wide range of meanings. The Authority recognizes that in markets where some service providers rely on essential facilities provided by others for delivery of their services, it is appropriate to establish a framework to ensure that the market functions effectively.

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1.15 In view of the above, the Authority is of the opinion that service providers shall meet other service providers' request for a complete DLC or access in terms of local lead, since denial of such request by the service provider or adduction of unreasonable terms and conditions having a similar effect, would hinder the emergence of a competitive market, or would not be in the end-user's interest. The *Authority therefore, after due diligence, decided to issue these regulations*.

1.16 These regulations provide a framework to ensure transparency, predictability and reasonableness and allow provision of DLC/local lead in a non-discriminatory manner. The Authority has not opted for compulsory mandation but would watch and take necessary steps as warranted by the situation in future.

1.17 These regulations deal specifically with domestic leased circuits and recognizing that access is essential part of building up a DLC, it becomes necessary for service providers not only to provide DLC on

request from other service providers but also the local lead in the access network in cases where the contracting service provider is able to build rest of the DLC except the local lead.

1.18 While providing DLC and/or local lead, service providers have obligation to apply equivalent conditions to other service providers providing equivalent services, and provide services under the same conditions and of the same quality as it provides to its own customers unless there are specific SLAs specifying different terms and conditions of the provision.

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1.19 Consultation Process In order to enhance competition in Domestic Leased Circuits (DLC), the Authority initiated a consultation process in November 2006 and issued a consultation paper on "Measures to Enhance Competition in Market in India" dated 17th November 2006. Open House Discussion on the subject was also held at Delhi on 29th January 2007.

1.20 The Authority in its consultation paper Dated 17th November 2006 highlighted various issues related to promotion of competition in country's Domestic Leased Circuits (DLC) market. Following issues were raised by the Authority in the Consultation paper.

(i) Limiting Factors for competition in DLC Market

(ii) Whether the operator with Significant Market Power (SMP) be mandated to provide local lead for DLC and also for engineering CUGs to other operators.

(iii) Responsibility for the Security issues.

(iv) Whether there is a case for considering provision of DLC as an interconnection element and needs to be included in RIO(Reference Interconnect Offer)

(v) Any other measures for promoting effective competition in DLC market.

2. EXAMINATION OF MAIN COMMENTS MADE AND ISSUES RAISED BY STAKEHOLDERS

2.1 The Authority has taken various comments and inputs of the stakeholders into consideration and analysed the matter in detail. For the sake of clarity the comments made and issues raised by stakeholders are given in italics followed by consideration and decision of the Authority on the points.

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2.2 ISSUE 1: Limiting Factors for competition in DLC Market

2.2.1 The comments received from the stakeholders on this issue are summarized below in points (a) to (m) and dealt with in the paragraphs following thereafter.

(a) Competition in Leased Circuit Market is not limited.
(b) Competition required that competing operators should build adequate infrastructure.
(c) Lack of will of private operators to develop infrastructure in all parts of their service area.
(d) Private operators should be mandated to roll out their own networks to enable customers to have a choice.
(e) Sharing of resources with incumbent.
(f) Incumbent do not want to share their capacity for the last mile.
(g) Difficulties and cost of getting ROW
(h) Prices for DLC elements, timeframe of delivery
(i) High cost and no fiscal incentives for laying copper
(j) Microwave spectrum fee to be rationalized.
(k) Absence of interconnect regulations
(l) Govt policy for DLCs in rural areas

(m) *It should be mandated that one operator should provide local lead for DLC or CUG to other operator.*

2.2.2 Along with the above comments, the Authority has also taken note of other factors that were responsible for limiting competition in DLC market. The Authority also recalled various recommendations given to the Government from time to time on the subject. The Government has also taken decisions either suo-moto or based on recommendations of the Authority that have resulted in removal of some of the barriers. Some of the examples are:

Reduction of entry fee from Rs 100 crores to to Rs. 2.5 Crore and reduction of license fee from 15% to 6% for for NLD Licenses. IP-II service providers have also been allowed to migrated to NLD license. NLD Licensees and IP-II service providers after migration to NLD license can now access their subscribers directly for lease/data circuits for CUG and are expected to build their own last mile access network for end-to-end connectivity.

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2.2.3 The Authority is of the view that further steps need to be taken to enhance competition and to exploit full potential of DLC/VPN segment. Exploitation of this market will not only benefit the service provider and the country's economy but also provide ability to the customer to choose service provider of DLC/VPN. New entrants generally find it difficult to compete in domestic leased line market because of non-availability of parts of DLC, specially the access part and financial non-viability of expanding network in greenfield areas. ***The Authority is therefore of the opinion that there is an urgent need to issue regulations to comprehensively remove the remaining limiting factors to competition in the DLC /VPN segment***.

2.3 ISSUE 2: Whether the operator with significant market power (SMP) be mandated to provide local lead for DLC and also for engineering CUGs to other operators.

2.3.1 The comments received from the stakeholders on this issue are summarized below in points (a) to (d) and dealt with in the paragraphs following thereafter.

(a) Concept of SMP is not relevant after 10 years of entry of private operators.
(b) Incumbent is not always SMP. In case of optical/metro Ethernet and long distance bandwidth in lucrative areas Pvt. operators are SMP.
(c) Incumbent should be mandated to provide DLC/ local lead to avoid duplication of resources.
(d) Incumbent should provide local lead with disclosed and transparent terms and conditions.

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2.3.2 Taking stock of the current market situation and deployment of different technologies specially in the access network the Authority feels that narrowing the obligation to only selected service providers would be a retrograde step. The concept of SMP is therefore not very relevant at this stage and any service provider who has spare capacity of copper, fiber or wireless should share it with other service providers. The available capacity of all service providers should be fully utilized for the benefit of the consumers. ***The Authority also expects that further development of the network would also continue in the long-term interest of the service providers and the consumers.***

2.3.3 The Authority also noted that a provision already exists in the "The Telecommunication Tariff (Thirty Sixth Amendment) Order, 2005" dated 21st April 2005 to provide domestic leased circuits through utilisation of spare capacity when such capacity is available and when not available, on Rent and Guarantee Terms/ Special

Construction/Contribution basis. The relevant clause is reproduced here:

Clause 2(b) " It is mandatory for domestic leased circuits to be provided through utilization of spare capacity when such capacity is available and when not available, on Rent and Guarantee / Special Construction /Contribution basis etc. schemes, under the provisions of TTO relating to reporting requirement."

The Authority is of the view that there is a need not only for providing DLC but also for providing local leads in case the service provider having contract or arrangement with the customer requires them.

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2.3.4 The Authority has also observed that though mandate was available in the mentioned TTO, the quality of implementation would further improve if a framework or modality is prescribed through these regulations. There is also a need to make it obligatory for the service providers to intimate to the seeker within a specified time frame the availability of the DLC/local lead or otherwise. The provider should also intimate in writing to the seeker the reasons thereof. A record of all cases where the requests could not be met should be kept by the providers for future reference.

2.4 Issue 3: Responsibility for security Issues in case of usage of resources from multiple service providers in a CUG Network:

2.4.1 The comments received from the stakeholders on this issue are summarized below in points (a) to (h) and dealt with in the paragraphs following thereafter.

(a) *It will be highly inappropriate to make the prime service provider (in most cases BSNL) responsible for the security issues. It will be double penalty on BSNL along with the penalty of unbundling of local lead.*
(b) *Disputes will arise among the service providers and objective of unbundling will not be met.*
(c) *In view of security issues, difficulty in coordination in case of fault leading to service deterioration usage of resources from multiple service providers is not recommended.*
(d) *All the service providers are to be responsible for security issues.*
(e) *The prime service provider responsible for security issues.*
(f) *The complete responsibility of security issues must be with in the CUG's themselves specially if customer forms his own CUG by procuring links from multiple providers*
(g) *In case customer gets into an agreement with prime service provider for Managed Services, like VPN's, it should be the responsibility of prime service provider.*
(h) *Segment wise responsibility of the service provider to be fixed.*

2.4.2 In this matter, the Authority noted that the licensor has already issued instructions vide its letter no. 824-42/2000-LR dated 15.07.2003 regarding utilization of resources by CUG customers through multiple licensed service operators for establishing CUG networks. The contents are, in fact, equally applicable to the provision of a leased line wherein an attempt is made to provide the long distance segment of the circuit from one operator and the local segment from another. The first paragraph, inter alia, indicates that a leased line with circuits taken from different operators on different segments is entirely permissible and does not require any approval or permission from the DoT, and a latter paragraph indicates that this has to be done through mutually agreed commercial agreements between the operators. Further, the last paragraph states that it shall be the responsibility of the operators to ensure that the telecom resources are used for genuine and lawful purposes.

2.4.3 The Authority noted the concern of the service providers that the incumbent is reluctant to provide `local lead' connection as well as partial built up option to the competing service providers for the provision of leased circuits to their customers, on the plea that the incumbent has to ensure genuine and lawful use of the resources. Therefore these operators are finding it difficult to provision the resources for CUG/ Data Networks in a proper/ timely manner to their customers. In view of the above the Authority felt that there is immediate need for defining the responsibility for security issues in case of usage of resources from multiple service providers in a CUG Network.

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2.4.4 The decision of the Authority regarding the responsibility of security issues in case of usage of resources from multiple service providers in a CUG Network is:

In case of usage of resources from multiple service providers in a CUG Network, the prime service provider, who is having the agreement with the customer and arranges end-to-end solution to its customers by utilising resources from different service providers, should be responsible for security issues. In case, a user/customer procures sources from different service providers to engineer a CUG, then all the operators involved in the CUG having agreement with user/customers are the prime service providers and responsible for security issues.

2.5 Issue 4: considering provision of DLC as an interconnection element and its inclusion in RIO (Reference Interconnect Offer)

2.5.1 The comments received from the stakeholders on this issue are summarized below in points (a) to (f) and dealt with in the paragraphs following thereafter.

(a) The unbundling of local loop cannot be equated with interconnection.

(b) Interconnection amongst the operators is to ensure communication among the subscribers of interconnected operators or through them with any other operator's subscriber. In the case of unbundling of this type (for CUG), one operator hires capacity from other operator for connecting its subscriber at both end of the circuit. Thus, there is no case for terming this as interconnection.

(c) Provision of copper local lead should be considered as interconnect element to be included in RIO.

(d) Provision of DLC as an interconnect element is a welcome step.

(e) Provision of DLC should be part of RIO which should be mandated to be issued by incumbents.

(f) Due to imbalance in the negotiating power of incumbents and other private operators, it should be included in RIO.

2.5.2 The Authority noted that as per normal practice RIO is issued by Significant Market Power (SMP). As mentioned earlier different service providers may be significant market power in different access technologies and asymmetric regulation in the local segment is not considered necessary at this stage. **The Authority has therefore preferred to watch the developments after promulgation of these regulations and inclusion of provision of DLC/Leased Circuits in RIO is not considered necessary at this stage.**

2.6 Issue 5: **Any other measures for promoting competition in DLC market.**

2.6.1 The comments received from the stakeholders on this issue are summarized below in points (a) to (h) and dealt with in the paragraphs following thereafter.

(a) There is enough competition. Service providers should develop own infrastructure
(b) Right of Way (ROW) issues to be taken care of.
(c) Review price ceilings for various DLCs. Discounts to be transparent and non-discriminatory.
(d) Restrictions in NLD/ILD licences to be removed
(e) Fiscal incentives for infrastructure
(f) Permission to commission multiple service providers circuits at customer premises
(g) Incumbent should provide DLC in a time bound manner
(h) Speed up RF spectrum allocation

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2.6.2 A number of issues raised have either been addressed earlier or through these regulations. Right of way (ROW) is still a crucial factor and needs to be addressed so that more access/last mile is built by various service providers who have been permitted to do so. However, the complexity of the issue due to involvement of the various state agencies, the Authority does not find it appropriate to address this issue in the present regulations.