

Annex 'A'



TELECOM REGULATORY AUTHORITY OF INDIA

Recommendations

On

Entry Fee And Licence Fee

For ISP Licence with Virtual Private Network (VPN)

16th August 2005

**TRAI House
A2/14, Safdarjung Enclave
New Delhi-110029.**

Executive Summary

1. The Hon'ble TDSAT in its order dated 3rd May, 2005 on ISP-VPN case has upheld DOT's view that VPN was not allowed as a part of ISP license, it, therefore, becomes a separate service. Further TDSAT's order stated that the quantum of entry fee and revenue share to be charged for a separate service from the service provider would require the recommendations of TRAI as per Section 11 (1) (a) (i) & (ii) of TRAI Act.
2. In light of the above judgment, A reference was received from the DOT on 20th June, 2005 seeking TRAI's recommendations on the following issues:
 - Entry fee for ISP with VPN licence
 - Annual Licence fee to be charged from ISP with VPN licensees
3. As per proviso 2 of Section 11 (1) of TRAI Act TRAI has to forward its recommendations within a period of 60 days from the date on which Government sought the recommendations.
4. To ensure transparency while discharging its functions as per Section 11 (4) of TRAI Act, TRAI released a Consultation Paper to solicit comments of stakeholders on "Issues related to ISP License with VPN" on 24th June 2005.
5. After taking into consideration the suggestions of the stakeholders and their comments in Open House consultation, current scenario in the country and international best practices, TRAI concludes that both Layer-2 VPN and Layer-3 VPN services are different and Layer-3 VPN is an integral part of the Internet access and also these have to be regulated very lightly with an overall objective of keeping the cost to consumer low. Therefore, the following fees for ISP with VPN licences are recommended:
 - i) Entry Fee
 - For Layer-2 VPN service **Rs. 30 lakhs**
 - For Layer-3 VPN service **Nil**
 - ii) Annual Licence Fee
 - For Layer-2 and Layer-3 VPN services **Nil**

RECOMMENDATIONS OF THE AUTHORITY

1. Background

- 1.1. The Department of Telecommunications (DOT) allowed provision of VPN services by ISPs with annual licence fee @ 8% of the Adjusted Gross Revenue generated under the licence and one-time entry fee of Rs.10 crore, Rs.2 crore and Rs.1 crore for category `A', `B' and `C' respectively, which was challenged by ISPAI & other ISPs before Honorable Telecom Dispute Settlement Appellate Tribunal (TDSAT).
- 1.2. The Hon'ble TDSAT in its order dated 3rd May, 2005 on ISP-VPN case has upheld DOT's view that VPN was not allowed as a part of ISP license, it, therefore, becomes a separate service. Further TDSAT's order stated that the quantum of entry fee and revenue share if required to be charged for a separate service from the service provider would require the recommendations of TRAI as per Section 11 (1) (a) (i) & (ii) of TRAI Act.
- 1.3. In light of the above judgment, A reference was received from the DOT on 20th June, 2005 seeking TRAI's recommendations on the following issues:
 - i) Entry fee for ISP with VPN licence
 - ii) Annual Licence fee to be charged from ISP with VPN licencees
- 1.4. In order to seek opinion of various stakeholders on Entry Fee and Annual Licence Fee, TRAI issued a Consultation Paper on 24th June, 2005, which provided information on the general introduction to VPN technologies, current national scenario, global scenario regarding VPN and provided the background on various policy/regulatory issues relating to it.
- 1.5. TRAI also conducted an Open House Discussion at New Delhi on 1st August 2005 on these issues, where various stakeholders expressed their opinion/views on various issues.
- 1.6. On the basis of extensive deliberations in the Authority and for reasons spelt out here under, TRAI has finalized its recommendations to the Government on the Entry fee and Annual licence fee for the provision of VPN Services by ISPs as in the following sections.

2. Entry Fee

2.1 Introduction – Differentiation between Layer-2 & Layer-3 VPN services

(i) DOT in its guidelines for ISP licence with VPN has permitted ISPs to provide Layer-2 (data link layer) VPN service and Layer-3 (network layer i.e. IP based) VPN service as defined in ITU-T recommendations and has not permitted Layer-1 (physical layer based) VPN service to be provided by ISP.

(ii) The Hon'ble TDSAT as a part of their judgment held that:

“Thus we observe that though VPN is being defined and discussed by both the parties, including the diagrammatic presentation, on access through Internet as well as on direct leased line. The Respondent mentioned that the VPN provided on direct leased line by ISPs is not allowed. This stand of the DoT we accept because by basic definition of ISP it has to be only Internet based activity. License of ISP permits them the activity concerned with access of Internet and use of its content for IT enabled services.”

Therefore, two types of VPNs i.e. Layer-2, which does not need access to Internet and Layer-3, which needs access to Internet have been differentiated.

(iii) Also, it is observed that the Layer-3 VPN, which works in the IP (Internet Protocol) domain, can also be configured by users themselves through their access to Internet without any additional service provided by the ISPs. The individual users can log on to the VPN created by corporates themselves as an application service on the Internet. **Therefore, it is not possible to regulate Layer-3 VPN service separately from Internet access.**

(iv) In addition, as Govt. is already working on the action plan for migration from IPv4 to IPv6 protocol, which has an inbuilt feature for VPN service, it will be difficult to distinguish Layer-3 VPN service from the normal Internet access. Increasingly, because of technological evolution, Layer-3 VPNs have become an international trend and inseparable part of Internet services. **Being based on ‘Best-Effort’ Public Internet and hence incapable of providing end-to-end QOS guarantees, availability & security, the Layer-3 VPN is not comparable or substitutable with end-to-end connectivity like Layer-1 VPN as well as QOS enabled VPN at Layer-2.**

(v) **Therefore, it can be concluded that Layer-3 VPN cannot be separated from the normal Internet access and hence no**

additional regulatory burden is warranted for the same, over and above the requirements of the existing ISP licence.

- (vi) On the other hand, Layer-2 VPN, which works on data link layer making use of technologies like Frame Relay, ATM and VLAN, is different from Internet, as it is not based on IP. This, therefore, is an additional distinguishable service being permitted to the ISPs over and above their existing licence and hence there is a case for consideration of additional levies for Layer-2 VPN service.

2.2 Summary of Stakeholders' Comments

- (i) It was highlighted by many stakeholders during Open House Discussion that VPN services by ISP make use of resources from Access Providers, NLDOs and ILDOs and are provided as value added services making use of these resources, thereby complementing instead of competing with them. In other words, ISP-VPN service providers are customers for lease line resources from Access Providers, NLDOs and IP-II & ILDOs.
- (ii) The stakeholders, who represented Consumer Organizations, SMEs and ISPs and constituted the majority who expressed views in writing or during the Open House Discussion, are of the view that there should not be any entry fee for ISPs for provision of VPN service and this segment should be regulated lightly in line with prevailing international practices and the Govt's policy of encouraging Internet and ICT growth in the country. They further opined that there should not be any entry barrier for the ISPs who wish to offer this service, as they are not in conflict with any other service provider especially NLDOs, ILDOs and UASLs. In addition, they stated that both leased line and VPN service are complementary to each other and in fact VPN service has opened up the market for lease line circuits. It was also mentioned that ISPs lease last miles as well as long distance resources from NLDOs/ UASLs for provisioning of VPN for its customers, which is increasing the market for the leased lines for telecom operators.
- (iii) Some stakeholders mentioned that the imposition of entry fee on the ISPs would reduce the competition in the market place and at the same time the cost of service to end users would go up. In case prohibitive entry fee is levied for this service, it will create a monopolistic situation, as only big players would be in a position to afford such level of entry fee. In case, if any entry fee is to be levied it should be only nominal so that it doesn't create a barrier for ISPs willing to offer the benefits of this new technology to consumers. It was also mentioned that this service is vital to businesses of SMEs as it increases their efficiency, productivity and cost effectiveness.

- (iv) It was mentioned that incidence of high entry fee can in fact result in death of competition with just one stroke of licensor as only six big ISPs out of a total of 180 operational ISPs have opted for the amended licence for this purpose (this was confirmed by DOT vide their letter dated 22nd July 2005). This would send wrong signals across to prospective investors who may reconsider their decisions to invest in this sector.
- (v) It was further mentioned that IP based VPN services (Layer-3) are different from leased line services and both cannot be regulated with the similar regulation. Leased line services are normally regulated as PSTN service whereas VPN services are regulated like ISPs. As already mentioned, it was opined that both leased line and VPN service are complementary to each other and in fact VPN services expand the market for lease line circuits. VPN is a value added service and it cannot be compared with raw bandwidth service (like lease line service) and there should not be any entry barrier to provide such a value-added service, as it will eliminate it from the market place to the disadvantage of customers.
- (vi) It was opined that if any entry fee is to be calculated for the ISPs with VPN license, the regulator must take into consideration the size of the relevant market for the VPN service. It was also stated that the lease line market is a fraction of total revenue of NLDOs and ILDOs whose main business is voice traffic and VPN is still a fraction of lease line market. Leased lines as an input to ISP-VPN service constitute around 60-70% of their total revenue from VPN services.
- (vii) It was mentioned that the regulator has to keep the interest of the customers/consumers in mind before deciding the level of entry fee/revenue share.
- (viii) It was also suggested that entry fee for ISP VPN should be similar to VSAT license, which is a CUG network for providing end-to-end connectivity. It was also mentioned that VSAT operators are also providing VPN services and entry fee for VSAT services is very nominal being Rs. 30 lakhs only and hence one should work out entry fee for ISPs with VPN service on the basis of VSAT services licence.
- (ix) The views expressed by NLDOs were, however, quite different. The common thread in their views was that VPN services directly compete with the leased line services (Layer-1) provided by them and therefore, they have a direct impact on the revenues earned by these companies. They further opined that they have paid substantial entry fee to obtain NLDO licence and they provide these Layer-1 services only because of this licence. In their view, therefore, if the ISPs were to provide VPN service they must also pay an entry fee and a licence fee to ensure level playing field.
- (x) One of the NLDO mentioned that business potential for VPN services by ISPs is the same as that for leased lines, which is of the

order of 50% of their NLD revenue and can directly erode into this service. Thus it calls for levying an entry fee of the order of 50% of the entry fee for NLDOs.

- (xi) It was mentioned by another NLDO that entry fee should be a direct derivative of estimated market size, in line with the licence fee paid by CMSPs. For VPN, as the market can be taken to be of the order of about Rs. 350 crore, on the pattern of CMSP licensor, one could work out the entry fee of Rs. 10 crore for Category A, Rs. 2 crore for Category B and Rs. 1 crore for Category C for ISPs for the VPN services by ISPs.
- (xii) Yet another NLDO stated that the quantum of entry fee should be worked out based on NLDO entry fee in proportion to the size of the VPN service market (revenue) as a percentage of total revenue of an NLDO. The amount so worked out may turn out to be a very small amount instead of Rs. 10 crores, Rs. 2 crores, Rs. 1 crores for different categories respectively as prescribed by the Govt. It was also mentioned by the NLDO that both leased line and VPN services are complementary to each other. VPN service revenue is a very small percentage of total NLD revenue, but leased lines revenue would be of much higher percentage of total NLDO revenue. Some of the IP-IIs mentioned that VPN services by ISPs should be levied no Entry fee but there should be a requirement of Performance Bank Guarantee as in case of IP-IIs.
- (xiii) It was also mentioned by some ISP that the VPN service was the legitimate right of the ISPs and NLDOs were providing this service without any licence and therefore, NLDOs should be levied additional fee for providing this VPN service, which is provided for in the ISP licence only. It was mentioned that there is no level playing issue between ISPs and other categories of telecom operators over provision of VPN service, as these are not identical. ISPs pay for leased lines to other telecom operators and the requisite incidence of licence fees is already borne in the input therein.

2.3 Analysis of Stakeholders' Comments

- (i) Comments received on the Consultation Paper, responses during Open House Discussions and other inputs have been analyzed to evaluate emerging options on the issues as detailed in the following paragraphs. This analysis is the basis of Authority's Recommendations in the matter.
- (ii) Stakeholders views on need for entry fee and its quantum were sharply divided with the ISPs and beneficiaries of VPN service arguing that Govt. should treat VPN on Internet as an Internet service and continue to regulate it with the existing approach of light handed regulation, while the NLDOs argued that on grounds of VPN on

Internet competing with their layer-1 service and for reasons of level playing field, their should be an Entry fee on ISP with VPN licences. They did however differ on the quantum of Entry fee.

- (iii) Regarding the level playing field issues raised by some of the NLDOs, the percentage of inter-circle leased line revenue vis-à-vis the NLD revenue of NLD operators was of the order of 13% for the year 2003-04 as depicted below:

| NLD revenue of NLDOs for the FY 2003-04 | | | |
|---|---|---|--------------------|
| (Rs. in crores) | | | |
| Name of the operators | Inter-Circle Voice Calls Revenue | Inter-Circle Leased Circuits Revenue | NLD Revenue |
| All NLDOs combined | 1775 | 268 | 2043 |
| <i>Source: Accounting Separation Reports of Operators– 2004</i> | | | |

This ranged from 0.5% to 24% for different NLDOs and is showing an upward trend. Intra-circle lease line revenue of NLDOs not been taken into account for this comparison purpose because intra-circle traffic is not the exclusive right of NLDOs. On this basis, the claim of some of the NLDOs regarding high percentage of leased line revenue out of the total NLD revenue, therefore, does not appear to be justified from level playing field point of view.

- (iv) Regarding another level playing field issue between leased line providers and ISPs with VPN viz. VPN services at Layer-2, competing unfairly with Layer-1 services provided by NLDOs, it is to be noted that Layer-2 VPNs are based on the leased line infrastructure provided by Access Providers and NLDOs. This constitutes a major part of the input cost for VPN being 60-70% of VPN services revenue. Therefore, Layer-2 VPN services while providing private networks, in fact are complimentary in nature to Layer-1 services and are not entirely in competition with them. Also, Layer-3 VPN, which can also be configured by any user who is having access to Internet without any additional service by an ISP and which are 'best effort' and not guaranteed QOS services, can in no way be a competitor to leased line service, which is provided at Layer-1 (physical layer).

2.4 Consideration for Determining the Entry Fee

- (i) Historically, the grant of licence was considered, as conferring of a concession, by Govt. for which the Govt. was required to be compensated through payment of a fee by licensee. Apart from using licence fee as a mode of selection (award of licence to the highest bidder), Entry fee also used to be seen as a means for augmenting Govts. budgetary resources. In a market where competition is limited, there is some scope for levying entry fee on the service providers wherein imposition of entry fee may be justified for the purpose of mopping up Govt. revenues and also a selection criterion for entry of limited numbers of operators. NTP 1999 introduced a paradigm shift in this wherein augmentation of resources for the exchequer does not appear to be the objective of levying entry fee. TRAI also, in its various recommendations, has suggested that a better way for generating revenues for the government while at the same time popularizing services through easier affordability, is to minimize the input costs and to levy taxes such as service tax on the output viz. the service rendered.
- (ii) Authority has also noted that currently the purpose of Entry fee is to ensure that non-serious players are discouraged on one hand and on the other hand Entry fee should not become a barrier for new players in the market. It should also be based upon the revenue generation capability and market size of the particular service segment and number of players likely to obtain the licence.
- (iii) The government has clearly stressed on the growth of Internet through its aggressive targets for Internet connections and broadband connections by the year 2010. Clearly at the back of the mind has been the tremendous push and impetus, which the Internet and its associated services can provide to the economy. All steps taken with regard to the Internet and the Internet based services whether it relates to the entry fee, the annual license fees, the ease of entrepreneurs to enter the market and offer of VPN or other value added services, etc. have to be kept in mind while determining the imposition and quantum of the Entry fees and the license fees.
- (iv) In a scenario where a value added or ancillary Internet based service offers a substitutability vis-à-vis service already being provided by another category of service provider, the question of maintaining level playing field arises. Careful thought has to be given as to what weightage should be given to the level playing field aspect as compared to the fact that advancement in technology has made available a similar but cheaper service.

So far as the VPN service is concerned, it is evident that this service provided as Layer-3 Internet based service does compete, at least functionality-wise, with the Layer-1 or Layer-2 type of service provided using physical leased lines offered by NLD and UAS Licencees. There is, at the moment, however, a question of quality of service since against a dedicated service, this Layer-3 service based on Internet is a “best effort” service. It is to be noted that Entry fee for NLDO is Rs. 100 crores. Another side of this argument is the fact that a VSAT service provider also offers CUG (Closed User Groups) connectivity based on dedicated leased connections and the Entry fee for a VSAT service provider is Rs. 30 lakhs.

- (v) The Layer-3 service is provided by an ISP based on Public Internet i.e. the ISP does not lease any long distance infrastructure from the NLDOs. However, in the case of Layer-2 service, NLD infrastructure in the form of physical leased lines has to be necessarily hired by the ISPs providing Layer-2 VPN service. This implies that the Layer-2 ISP contributes towards the revenues of the NLDOs while competing with the Layer-1 service provided by the NLDO.
- (vi) The number of players in any service determines the level of competition and as proved in the case of cellular mobile service, adequate competition ensures low tariffs and therefore phenomenal growth. Thus, while debating and deciding upon the quantum of Entry fee, the aspect of competition has to be kept in mind. This consideration favours a low Entry fee.
- (vii) It is observed that only a few big ISPs have opted for the amended licence to provide VPN services resulting in a threat to open competition for this segment. Such trend may send wrong signal across perspective investors having adverse impact on investment in the sector. Also the main business of NLDOs is voice traffic, leased line market being a small part of their total revenue. VPN which are services further a small part of this segment make use of leased lines upto 60 to 70% of the cost.
- (viii) The amount of Entry fee has to necessarily take into account the overall size of the market and the likely share of the various types of methodologies (Layers) for providing the VPN service.
- (ix) On an analysis of international best practices for some of the countries, it was found that VPN services are lightly regulated / unregulated in many countries and only a nominal licence fee is levied for provision of such services. For example, no licence fee is levied for such services in USA, Canada, Australia, Malaysia, Philippines and Japan and most of the EU countries whereas in

case of Hong Kong and Singapore, a nominal annual fee of USD 750 & USD 5000 respectively is payable.

2.5 Recommendations regarding Entry Fee

- (i) Based on the above analysis of inputs from various stakeholders, international best practices, various consideration involved in determining the optimum Entry fee and in the interest of encouraging the development of a modern and efficient Internet infrastructure in the country, which promises connectivity at reduced costs to end users and recognizing that Layer-3 VPN being an integral part of Internet access, it is highly appropriate that there should not be any entry fee for Layer-3 VPN service.

Therefore, Authority recommends levying of 'nil' Entry fees for the ISPs to provide Layer-3 VPN service.

- (ii) Regarding Layer-2 VPN, it provides the connectivity to end user making use of data link layer and forwarding techniques of Frame Relay, ATM, VLAN etc. without requiring an access to Internet. In that sense, it is providing an additional distinguishable option to provide a service to their customers over and above the existing services, there is a case for levying an appropriate licence fee in the form of one time Entry fee. This fee should be nominal to keep the entry barrier to its minimum so that this technological development is encouraged for the benefit of consumers. The issue of level playing field with NLDOs is also not found to be very pertinent as the VPN service to be provided by ISPs is different in nature and in no way substitutable to end-to-end guaranteed connectivity provided by leased lines. Also, leased lines which constitute a substantial part of the cost of ISP-VPN services are taken from Access Providers and NLDOs, therefore, this service enhances the market size of lease lines and complements lease line services in the market.
- (iii) The quantum of entry fee for this category of VPN can be similar to the Entry fee charged for VSAT licensees who are providing domestic end-to-end connectivity to the CUG users in the country. The scope of this service is to provide data connectivity between various sites scattered throughout India. Presently, VSAT licensees are also allowed to provide Internet service directly to customers after obtaining ISP license. Like the ISP-VPN service, the VSAT licensee also has no interconnection with PSTN, as it is restricted to provide service in a CUG environment only.

Therefore, Authority recommends levying of one time Entry fee of Rs. 30 lakhs for the ISPs to provide Layer-2 VPN service.

3. Annual Licence Fee

3.1 Summary of Stakeholders' Comments

- (i) Most of the stakeholders (consisting of individual users, SMEs, ISPs) were of the view of keeping the revenue share to the minimum as any such levy will be passed on to the customers and will make the service more expensive. VPN services are to be provided by ISPs as a technological innovation and should not be taxed in any manner. Another view expressed was that levying revenue share on VPN services by ISPs will be contradicting the best international practices in this regard. It was mentioned that the ISPs pay revenue share indirectly at the time of leasing the resources from the NLDOs @ 15% which is built up in the cost of leased lines. Imposition of any licence fee in the form of revenue share on ISP VPN services again would increase the tariff of service to the end users, thus ultimately reducing competitiveness of the nation. This incidence would also amount to double taxation on the same service.
- (ii) It was also mentioned that an integrated NLDO who is also an ISP has the advantage of cost on the leased line resources since the sale of leased lines to ISP wing is an internal accounting procedure and thus the ISPs wing of NLDO would be in a position to offer VPN services at a lower cost. Therefore this will put the standalone ISP providing VPN at a disadvantage and hence in an uncompetitive position. Also, the commercial viability of standalone ISPs will be adversely affected by levy of any revenue share on them.
- (iii) It was further mentioned that the licence fee if any should be imposed just to recover the administrative cost only and levied on the revenue generated from VPN services only and should be similar to the entry fee being charged in the neighbouring Asian countries. High entry fee could be contra-productive and may deprive the government of increased avenues of taxation in the form of service tax on higher revenue. Payment for leased lines by ISPs to NLDOs/UASPs includes license fee payable by the respective leased line providers. The extent of the cost of leased lines for ISPs providing VPN services is of the order of 60-70% of their VPN revenues.
- (iv) On the other hand, some NLDO mentioned that if no revenue share is put on VPN services they will offer low tariff than NLDOs who are paying 15% of revenue share on a similar service. Another NLDO mentioned that revenue share for VPN should be minimum just to recover the administrative cost. Yet another NLDO mentioned that revenue-share for VPN services should be of the order of 6% as

levied on Infrastructure Providers (IP-II) and should be on the revenue generated from VPN services only.

3.2 Analysis of comments of Stakeholders

It can be concluded that majority of stakeholders are of the view of having nil / minimal revenue share for the VPN services so that the cost of service does not increase for the end users. As about 60-70% cost for providing VPN services by ISPs consist of leased line from telecom operators who already are paying the licence fee in form of revenue share, no additional revenue share on VPN services appears to be appropriate in order to avoid double taxation.

3.3 Consideration for Determination of Annual Licence Fee

- (i) The annual licence fee, as a percentage of revenue share should normally be restricted to cover only the administrative costs incurred in the management, control, enforcement and regulation of licences as well as for contribution to rural telecom development through Universal Service Obligation (USO) wherever applicable. It has to be ensured that undue financial costs are not imposed on value-added service providers, which will inhibit the deployment of such services. This would in turn defeat the objective of harnessing economic advantages, which the country would have exploited through new value added services.
- (ii) As discussed in Section 2, there does not exist any case for levying any entry fee / revenue share for Layer-3 VPN service because of its inseparability from the Internet access service. Levying any revenue share for Layer-2 VPN may have the complications of the separating accounts for the purpose of identification of revenues attributable to these two categories of VPNs. Also, as discussed earlier as majority of the costs of a VPN service provided by ISPs consist of the leased line charges (60-70% of VPN services revenue) over which the licence fee in the form of revenue share is already paid for, any levy of licence fee on such VPN service will result into double taxation.
- (iii) On the other hand, Layer-1 service which is basically leased line service provides dedicated end-to-end connectivity with QoS guarantees, high availability & security. Therefore Layer-2 VPN & Layer-3 VPN services by ISP's don't compete with Layer-1 leased line service and there is no equivalence for the purpose of level playing field & hence different revenue share can be levied on these types of services. In any case, inline with the objective to

keep the input costs low in its recommendations on unified licensing regime dated 13th January 2005, TRAI has recommended the annual license fee in form of revenue share to be 6% of AGR for all the telecom services including Layer-1 leased line services.

- (iv) The burden of licence fee as a revenue share should not be so high as to become deterrent to affordable service provision. Since the fee will inevitably get reflected in the cost of providing service to the consumer, high licence fee would defeat the objective of making the Internet services widespread and for being used for the overall development of the country. Higher the annual licence-fee, the greater would be its adverse impact upon the end-users and upon affordability of such services. Being an important means for integration of economy, VPN services become a crucial resource for trade and business and consumers at large, which needs to be provided at an affordable cost. In fact, both NTP 1994 and NTP 1999 have envisaged provision of widely accessible world-class Internet services of good quality at affordable prices to Indian consumers in public interest.
- (v) In most of the countries the rationale behind low licence fee is to barely recover the cost of administering a licence and its regulation. Such fee should be proportionate to the work involved in the issue, management, control and enforcement of the individual licence. This is in consonance with the worldwide economic environment of lowering the licence fee for telecom services in general and Internet based services in particular. An analysis of the information available from few countries indicated that a nominal annual license fee is charged in Singapore (USD 5000) and Hong Kong (USD 750) and 'nil' in USA, Canada, Australia and Japan, Malaysia, Philippines and most of the EU countries.

3.4 Recommendation regarding Annual License Fee

The Authority has made its conclusion about the annual licence fee based on the above analysis and taking into account the current policy, international scenario and with a view to keep the end user tariff minimum. It is also considered that the VPN services being allowed to existing ISPs only and hence may not put additional burden on the regulator and licensor for the purpose of administration. Also, any revenue share on VPN revenues for ISP will result into double taxation for the major part consisting of input costs. There being no case for treating the Layer-3 VPN separate from the existing Internet service, there exists no justification for levying any revenue share on this service. Also, levying a revenue share on Layer-2 VPN by ISPs will create complications for its separation from revenue from other category of VPN.

The Authority, therefore, recommends that there should be no annual licence fees (revenue share) levied on VPN services by ISPs both at Layer-2 and Layer-3.
