I. Scope of DLD Service:

1. Should the scope of DLD services include intra-circle DLD services?

2. In case intra-circle is included in the scope of DLD service, what impact it would have on the viability of existing operators?

3. If intra-circle is excluded will it be only for the existing six licensees?

Emerging Options:

a. Intra-circle DLD service should be a part of the scope of service for the DLDO. Long distance should encompass all calls, which are not local.

b. Intra-circle DLD service should be excluded from the scope of service for the DLDO in respect of all the Circles.

II. Regulation of Facilities

II.1. Backbone Network for DLD

1. Is the usage of backbone network for national long distance data and voice communication limited to entities specifically mentioned in NTP 1999 namely, public and private transmission companies, Railways, GAIL, ONGC etc.?

2. Can any entity (including service providers) build a network and offer it for voice and data communications? Should these entities be allowed to build and manage networks for closed user groups (CUG) or for private networks?

Emerging Options:

a. The backbone network for DLD should be open for competition. Additional networks should be encouraged. It should not be limited to the entities named in NTP 1999. All FSPs, CMSPs, DLDOs and those entities that have ROW should be permitted to build a backbone network and lease it for voice & data communication. Existing service providers (such as VSAT service providers) should also be authorised to make available their infrastructure facilities to DLDOs.

b. Only the entities named in NTP 1999 and the licensed DLDOs may be allowed to build infrastructure and offer it for voice and data communication to DLDO licensees. Their existing/planned backbone infrastructures should be included for this purpose. Leasing of infrastructure should, however, be restricted to using the right of way, supporting towers, or fibres. Leasing of merely circuits or bandwidth derived from facilities under the control of infrastructure owners should not be permitted.

c. Only licensed DLDOs be permitted to build and manage CUG and private networks involving different licensed service areas. However, this should further be liberalised in due course (MTNL, however, feels that DLDOs should not be allowed to manage networks for CUGs or private network. It should be with the basic service Operators).

d. Any entity may be allowed to build a network and offer it for voice and data communications. Servicing CUGs and managing private networks should be allowed both to the service providers and infrastructure providers. Countries in the initial stages of liberalisation permit entities to provide CUGs and private networks. This transitional phase has passed for India. With the
opening up of DLD competition, there is no longer any need for provisions relating specifically to CUGs.

II.2. Infrastructure owners becoming DLDO

1. Should infrastructure owners be permitted to become service providers?

Emerging Options

a. The infrastructure owners, as mentioned in the NTP 1999, should not be permitted to become service providers. Public utilities like Railways, PGCIL etc. having secure right of ways should concentrate on their core business instead of becoming a DLDO. These entities should only provide their infrastructure for DLD service. They may use their telecom infrastructure only for their captive use. In case they still want to become a DLDO, the infrastructure owners must obtain a separate license.

II.3 Regulation of Infrastructure Providers

1. Should pure infrastructure owners be regulated? If yes, then what should the regulatory mechanism be, as the TRAI Act only regulates service providers?
2. Should pure infrastructure owners be licensed? If yes, what should be the terms and conditions of their license?

3. If they are not under regulation, will the commercial agreement between pure infrastructure owner and service provider be governed by TRAI? For example, will the lease charges be subject to TRAI-notified ceilings or be governed by forces of demand and supply?

Emerging Options

a. There is no need to regulate infrastructure owners directly.
b. The infrastructure owners should get registered with the appropriate authority, and be regulated by the TRAI.
c) Pure infrastructure providers need not be licensed.

II.4 Creation of Adequate Facilities

1. What steps are required to be taken so that there are adequate facilities in future? Should the policy facilitate development of capacities by a few entities, considering economies of scale and scope?

Emerging Options

a. NTP 99 envisages the existence of Re-sellers in the DLD Voice Market. This should be encouraged, as it would support development of infrastructure by the listed entities.
b. Basic & cellular networks should be permitted to interconnect creating a facility to transmit inter-circle traffic, which will provide an incentive to lay additional backbone.
c. Utilities may be allowed to sell RoWs to other parties who could be licensed as infrastructure providers. VSAT operators should also be licensed as infrastructure providers.
d. Build up of telecom infrastructure should be encouraged by way of concessions and tax benefits.
e. Since the primary objective is to develop infrastructure facilities, the national level DLDOs should be required to set up their own infrastructure. Provisioning of facilities should be a basic requirement for granting license to DLDOs.
f. Considering the viability, and economies of scale and scope, it will be desirable to license only one nation-wide, inter-circle, facility-based DLDO initially. This licensee should be required to build a comprehensive nation-wide DLDO network with its own facilities totally independent of DOT. The DLDO may incorporate in its network any existing or planned facilities of existing or new entities other than DOT but it should be its responsibility that the network as a whole is comprehensive and independent of the concerned entities whose infrastructure it proposes to use. This would immediately and effectively double up the available and potential transmission bandwidth in the country and the long distance switching.

III. Type of Competition

III.1 Facility based Competition

1. Should the entities compete on facilities based operations, services or both?
2. Can there be effective competition in services when there is no effective competition in underlying facilities?

Emerging Options

a. For the initial 3-4 years till satisfactory growth of infrastructure is achieved and the market matures, only facility-based competition be permitted

b) Competition should be allowed both on facilities and services.

III.2 Non-facility Based Competition

1. Should non-facility based competition be introduced? If yes, should terms and conditions for non-facility based service providers be similar to those for facility based service providers?
2. In case of non-facilities based competition should both switch-based and switch-less resale be allowed? If switch-less resale is not allowed then should it be reviewed after a certain time period? What should this time period be?

Emerging Options

a. Non facility based competition should be introduced. Since non-facility based service tantamount to reselling, the service provider need not be separately licensed but permitted to operate as a franchisee of the DLDO.
b. Only switch-based resale may be allowed after few years.
c. Some, however, feel that switch-less re-sale should also be allowed with immediate effect. Both switch-based and switchless resale be encouraged to expand the market as it will offer better incentive to infrastructure providers to invest in expanding the network.
III.3 Emergence of Consolidated Operators

1. Should the policy facilitate emergence of entities with consolidated operations?

Emerging Options

a. In the long run, the policy needs to facilitate the emergence of entities with consolidated operations that are able to exploit economies of scale for efficient service. As per the DOT/MTNL, the present policy framework facilitates and encourages competition in access provisioning and in cellular mobile services. Opening up of DLD will facilitate the emergence of entities with consolidated operations, for which no separate policy is required, as the existing policy does not debar such an occurrence.

IV. Areas of Operation

1. What should be the unit area of operation for licensing DLDOs?
2. Should a combination of different areas of operations, such as national level with circle/regional level, be introduced?

1. If a regional approach is adopted how should regions be defined? How should the issue of the relative unattractiveness of the eastern region be addressed?
2. Should regional operators be allowed to interconnect over borders or should there be an inter-regional operator?

Emerging Options

a. In order to ensure adequate penetration and roll out in all parts of the country so as to facilitate balance growth, only national level DLDOs be permitted. No Regional level licenses. One comment supports two areas of operation namely, Circle and National, with a proviso that the national level DLDO will sell his service through the FSP.

b. A combination of regional and national level be introduced. In the interim phase, we may have unit area of operation as Region, which would consist of more than one circle. Regions may be defined as per the existing definition of the DOT. Alternately, the country may be segmented into four regions as below:

- **East**: States of Bihar, West Bengal, Orissa, Assam and other North Eastern states and Union Territories (UTs), if any, in the region.

- **North**: States of J&K, Delhi, Punjab, Haryana, UP and UTs, if any, in the region.

- **South**: States of A.P., Tamil Nadu, Karnataka, Kerala and UTs, if any, in the region.

- **West**: States of Maharashtra, Gujarat, M.P., Rajasthan, Goa and UTs, if any, in the region.

a. India should adopt an open competition model, whereby the following decisions are left to the
market and should not be pre-determined as part of a licensing regime:

- the most efficient geographical boundaries within which services are provided;
- how many operators are appropriate for a particular region; and
- the competence of potential operators.

a. On the pattern of licensing of ISPs, the new entrants may be given the freedom of obtaining licenses for a State or for a group of States or for the entire country.

b. Market forces would address the unattractiveness of the eastern region. The fixed license fee and percentage of revenue sharing should be kept much lower than for other regions. DLDO be mandated to install a minimum route kilometre/ defined links of backbone network. This should, however, not act as a barrier in commercial terms. Special concessions could be considered for infrastructure providers/ DLDOs for the eastern region.

c. Routes between categories of Towns and not areas should be the units of operation. Cities/Towns may be categorised in terms of Category A, B, C or D to enable wider and uniform coverage. However, some comments indicate that it would be less prudent to consider licensing on the basis of certain inter city routes or regions.

d. Private telecom operators should be free to interconnect their networks across their borders and arrive at an infrastructure, which they may share and also lease to others. This is possible because we are making a distinction between infrastructure and services that the infrastructure can support. However, interconnection amongst the regional operators should not be allowed so that inter-Regional traffic is handled only by the national DLDO.

e. There is also the counter suggestion by the COAI that there is no requirement of regional DLD licenses. The existing license service providers (CMSPs & FSPs) should be permitted to interconnect across boundaries. They will potentially become regional DLDOs. Separate regional approach as such is not required. Regions should be based on Community of Interest. Artificial barriers in terms of Circle wise jurisdictions based on DOT’s management set up should be reviewed.

f. Some comments do not support that the existing operators should interconnect at borders. DOT also feels that connectivity across the service area be permitted only through DLDO.

V. Degree of Competition

1. What should the competition policy be? Should full, restricted, or limited competition be introduced?
2. What should be the optimum number of players in a DLD segment?
3. If limited competition policy is adopted, then should it be duopoly or multipoly?
4. In case duopoly is adopted then should it be national or regional duopoly?
5. In case regional duopoly is adopted, should there be interconnection at borders or should a separate entity be licensed as an inter-regional operator?
6. In case of national duopoly should it be implemented by licensing one of the public sector operators? Alternatively, should it be implemented by application of the Canadian Stentor model by licensing an association of existing operators such as FSPs and CMSPs?

7. In case multipoly is adopted, should it be two national operators, two regional/circles operators or one national and one regional/circles operator?

8. In case of restricted competition policy, what should be the mechanism to restrict entries? Should there be a monetary entry barrier and/or performance obligations? What would be the optimum level of such barriers? Should there be restriction on the number of entrants? Should there be any time
frame for licensing? Should licenses be available on demand or should it be one-time?

Emerging Options

a. Only limited competition at the national level is to be permitted for the first five years. The suggested number of operators could be three, including DOT.
b. Alternate suggestion is for duopoly to begin with i.e. DOT plus one more DLDO to be operated at the national level. However, another comment states that India is too large a country to be left to only two DLDOs, who may form a cartel.
c. Policy should be neutral enabling open entry. There should be no limit on the number of DLD companies just like in the case of ISPs. Market forces should be allowed to determine the number of players.
d. Permit basic and cellular operators to arrange Inter Circle interconnection for offering DLD service. This would mean restricted competition, which would not need policy decisions like number of parties to be licensed, selection of parties etc. They could form a national consortium or a number of regional consortia. Operators concerned would decide whether to roll out network on a regional or national basis. Utilities and existing VSAT licensees should be allowed to offer direct services. The policy could be reviewed after 4 to 5 years.
e. Regional operators should interconnect with the national DLDO for carrying traffic beyond regions. Interconnection between regional operators may not be permitted in view of there being a separate national DLDO. Percentage of revenue sharing for regional DLDO and national DLDO be fixed to cover the regulatory costs and USO contribution, keeping in view the market size, likely infrastructure cost and anticipated ROCE.
f. Full competition in the long term should follow the limited competition for the first 3-5 years. All parties listed in NTP 1999 be given automatic license and allowed entry as a service provider after three years time frame. While there may be full competition in services, competition in networks could be limited.
g. Licensing should be based on an open competition in a transparent manner. Entry should be linked to the eligibility criteria in terms of technical qualification and the bid bonds. If the number of eligible bidders is less than or equal to the total number of licenses proposed, each one of them should be given the license based on the reserve price in terms of one time entry fee without calling for any financial bids. For this the tender should specify the number of licenses that are proposed to be given in each category as also the reserve entry fee that would be applicable to each license. In case the number of eligible bidders is more than the number of licenses available, financial bids should be invited, but only in respect of one time entry fee. The proposed revenue sharing percentage must not be put to bid. The top bidders should be selected, but H2 or H3 should not be asked to match the bid of the H1, so long as H2 is above the reserve price. In case of full competition, there should not be any time frame for issuing licenses. But if there is only limited competition, all the required number of licenses should be issued at one time.

VI. **Time frame**

1. **Limited competition has generally been adopted as a transitional arrangement. Should the time frame for limited competition be specified? If yes, what should be the appropriate time frame?**

Emerging Options

a) Limited competition, which could be reviewed after three to five years followed by full competition. Some agencies, however, feel that under the transitional arrangement it may be premature to specify any fixed time frame at this stage.
a. Full competition should be introduced without any transition period.

VI. **Implementation Issues**

VII.1 Access Arrangements

1. Should the modality of access be pre-selection or dial around? In case dial around is chosen initially then what should be the time period for introducing pre-selection?
2. In initial stages pre-selection will also require facilitation of carrier selection through a neutral selection process such as ballot. What should be the modality?
3. Should CACs with dialling parity be introduced for the APs also?
4. Should DLDO be allowed to set up STD PCOs (without bypassing the AP)? Should the policy make it mandatory for existing PCO operators to give their customer a choice of DLD operator?

**Emerging Options**

a. Choice of DLDO should be provided to every subscriber.

b) DLDO should be allowed to access the subscribers of FSPs and CMSPs.

c) The modality of access should be both through dial-around as well as by pre-selection. It will be best initially to adopt code-based dial around access, till carrier selection becomes technically feasible. Carrier selection should be introduced latest by 3 years of opening of DLD services.

d) Pre-set Carrier selection in the initial phase based on destination ABC Key-in code. At a later stage when the new National Numbering Scheme is in place, a degree of dynamic selection may be possible.

e) Inter-connection arrangements should be in conformance with national telecom plan following the Switching and Traffic Routing Plans. Over the years, the interconnection has been established in accordance with DoT network hierarchy, which more or less gives seamless operations and feasible interconnections. Developed from this, the charging plans have been drawn up and calls are switched at LDCAs (Long Distance Charging Centres) as unit, which may not be disturbed.

f) DLDO should not be permitted to set up STD PCOs. They may, however, operate on franchise basis.

g) If the code based dial around access is adopted, there should be no difficulty in users routing the call through the DLDO of their choice and it can be made obligatory for the PCO operators to permit such choice. The policy should make it mandatory for existing PCO to give their customers a choice of DLDOs subject to technical feasibility. This would be in line with the NTP 1999. On the other hand, if pre-selection is adopted, choice will have to be entirely of the PCO operator. It will just not be feasible to give the users any choice in the matter.

a. DLDOs may be prohibited from giving differential DLD rates to end-users of PCOs DLDOs should be allowed to carry interstate calls and not allowed to enter local loops of the APS.
VII.2 Interconnectivity at Borders

1. Should the entities be allowed to interconnect at borders, as envisaged in NTP’99? Will the entities need a license? Should the terms of license be preferential?

Emerging Options

a) Existing entities (FSPs and CMSPs) should not be allowed to interconnect at borders. They may interconnect within their service areas. The border crossing by these operators should be permitted only through DLDO. No doubt NTP’99 envisages such interconnection; it is, however, premature and it may work against the viability of DLDOs. It is best that this be reviewed say after five years when the question of further opening of DLD operations is considered.

b) The existing licensees should be allowed to interconnect at the borders. Allowing inter-circle connectivity to circle operators would give incentive for quicker rollout of the network. There should be no need to issue license for such interconnects.

c) Regional networks may be encouraged through such free interconnection between Circle Networks. No separate regional licenses are, however, favoured.

d) Entities may be permitted to interconnect at borders, only if they have acquired appropriate DLD license.

VII.3 Interconnectivity with VSNL

1. What should be DLDOs' status vis-à-vis international calling services? Should DLDOs be allowed to provide this service to customers? In case DLDO is only a carrier then what should be the revenue sharing arrangement between FSP/CMSP and DLDO? Should it be in accordance with the TRAI Interconnection Regulation or based on commercial negotiation?

Emerging Options

a) Interconnectivity of FSPs and CMSPs with VSNL should, be through the DLDO. The access deficit of FSPs should be covered by the DLDO.

b) DLDO should not be allowed to provide access service to the customers for international calling.

c) The revenue sharing arrangement between VSNL, DLDO and access provider should be based on commercial negotiations in line with TRAI's recommendations.

a. The consumer should have the right to choose his preferred DLD Carrier for the carriage of domestic portion of his international call. PCO operators should give choice of DLD operators to customers, if technically feasible, to support different tariff packages offered by different DLDOs by a single charge indicator. The technical feasibility and costs involved will have to be examined before making it mandatory for the PCO operators to offer choice of DLD to the customers.

b. DLDO should be allowed to provide this service for Non-PSTN traffic.

c. While Access Providers (AP) may directly connect with the VSNL, DLDO should certainly be allowed to handle international traffic as a carrier between APs and VSNL in competition with DOT. Revenue sharing should ideally be based on commercial negotiations. It may become necessary for TRAI to intervene and provide suitable guidelines/ benchmarks.
VII.4 Bundling

1. What should be the regulatory mechanism to prevent anti-competitive behaviour through bundling?

Emerging Options

- All anti-competitive behaviour including bundling may be regulated by TRAI. The competitive safeguards contained in the TRAI Act are, however, inappropriate, inadequate and non-specific. They are non-specific and discretionary and there is no transparency in the rules and "how" they will be administered. In most other regimes, specific provisions relating to competitive safeguards are provided. The provisions should be comparable with those included in the legislation in Hong Kong, Singapore, Australia and U.K Acts. Industry specific authority in telecommunications legislation is preferred over corresponding provisions in anti-trust legislation.

- Bundling in general benefits public. Bundling should be left to the market forces in the interest of consumers. Mixed bundling may be permitted along with tariff reporting requirement to the TRAI. Packaging of tariffs "local + DLD" should be allowed as it benefits customers. DLDO should, however, be prohibited from entering into any discriminatory/bundled pricing with any one of the APs.

- Unbundling of services is essential with the introduction of competition in DLD. Less scope for bundling in case there is a sufficient competition.

- Certain regulatory safeguards would be necessary for introduction of competition in DLD through stand-alone DLDOs in view of the response of access arrangements both by dial-around and pre-selection. Compulsory offer of unbundled services with separation of accounts pertaining to complimentary segments viz. Local and DLD along with bundling offer indicating TRAI approved tariff may be made to the customers.

- Interconnect arrangements must be transparent, reasonable and sufficiently unbundled so that the new entrant only pays for the network elements it uses and for a fair proportion of relevant overheads. This can only be fully achieved by SMP operators providing detailed cost apportionment methodologies linked to Regulatory accounts. The appropriate basis for interconnect charges is Long Run Incremental Cost (LRIC) as this is the effective charge that would apply in a competitive market.

VII.5 Bypass

1. Since a bypass by a DLDO will result in avoidance of payment of access charge, what should be the appropriate policy on bypass of local access by the DLDO?

Emerging Options

- DLDO should have connectivity to the access providers only, and not have last mile connectivity/direct access to the customers of the access providers. This would not result in any bypass of local access by the DLDO.

- By-pass should not be permitted. In case of bypass, there should be some payment for bypassing local Access Providers. However, there should be no payment for setting up PCOs.

- Bypass can be allowed if regulation permits so in view of USO fund contributed by the DLDO.

- Pre-selection or dialled access to a DLDO, who is not an AP, should be introduced on the basis of interconnect charge.
VII.6 Universal Service Obligation

1. What should be the contribution of the DLDO to the USO fund?

Emerging Options

a. All DLDOs, including the incumbent, should be obliged to pay a proportion of their revenue to finance the USO. This could be in the form of a specific USO levy or it could be as part of the revenue sharing arrangement. 5-7 percent of the revenue may be a suggestion for contribution towards Universal Service deficit. The contribution of the DLDO to the USO fund should include direct long distance revenue and also the revenue from value added services. It may also be proportionate to the revenue earnings of the DLDOs vis-a-vis other Access Providers/service providers. The mechanism to arrive at the extent of contribution should be worked out by the TRAI and legislated.

b. The extent of obligation for universal service on infrastructure owners should be low and not too onerous so that it helps in the development of infrastructure.

c. USO should be funded from the license fee.

d. USO levy should not form part of license fee payable by operators but be in the nature of a surcharge levied on the subscribers'/users' bills and should be in addition to the cost of service payable under the appropriate tariffs.

e. No contribution for USO by the DLDO as the provision of DLD communication itself would advance the spread of USO.

f. The percentage revenue sharing (as license fee) should take care of the Government Revenue (levy/tax), USO fund, regulatory expenses etc. All such license fee/revenue share determination be made by adjusting the existing service-tax (@ 5 percent).

g. Private DLD operators and the incumbent may not be made to contribute more than 1% and 2% of net revenue towards the USO fund, respectively. The contribution towards regulatory expenses should not exceed 0.01% of the net revenue for the new DLDO and 0.05% for the incumbent.

h. A mechanism for levy of Access Deficit Charge will be needed. Whilst access deficit contribution proposal may be economically justified and sound, it has drawbacks in practice. The UK experience of access charges is that they constitute a barrier to entry. The UK actually waived payment of most access charges for new entrants before they were finally abolished. It limits incentive for incumbents to rebalance or to improve efficiently in the access network. There are no drawbacks in new entrants avoiding access charges by providing their own direct connections to customers.

i. One time entrance fees and the shared revenue of 2% should be put in a pool called Universal Telecom Access Fund (UTAF). This fund should be at the disposal of TRAI and it should cover the costs of licensing and regulation and oversight. Also the fund may be utilised for helping the placement of Public Telephones in villages.

VII.7 Customer Billing

1. Should the regulator make it mandatory for the AP to provide customer-billing service to the DLDO at reasonable terms? Should the regulator specify the reference terms and conditions including cost-based charges for this service?

Emerging Options
a. The Regulator should make it mandatory for the APs to provide customer-billing service to the DLDO at reasonable terms. Since AP only has the ability to deny telecom facilities to the defaulters, such a provision is the most practical and cost effective solution, which is necessary in order to reduce bad debts. The Regulator should frame the model terms and conditions. Operators through bilateral negotiations may arrive at the commercial arrangements. If mutually acceptable agreement can not be arrived at within a specified time frame (say 3 months), the Regulator should have the mandate to intervene. DLDO will give the customer bill to the AP, who will make collections through his regular customer bills as AP. Collection will be made by AP. Terms to be settled bi-laterally.

b. Billing by DLDO requires 100% Caller Line Identification (CLI) which is presently not available. The access provider should be duly compensated for the administrative expenses to set this up. This could be based on incremental cost based charges.

c. Customer Billing may not to be a mandatory service to be provided by the AP to the DLDOs. It may be left to the market forces and be subject to commercial arrangements between APs and DLDOs.

VII. 8 Business Service Networks

1. Should business service networks be permitted in view of bypass of USO and access deficit?

Emerging Options

a. Business service network may be permitted only for private use of business with adequate safeguards to prevent bypass and adequate compensation to USO funds and access deficit. They should not connect to other public networks like PSTN, CMTS, DLDO etc.

b. The DLDO/s should be permitted to provide closed user group networks. Third party connections through such closed user groups should not be permitted. These closed user group networks will no doubt result in bypassing the APs and escape any charges on account of access deficit, which TRAI may impose. However it should not necessarily mean bypassing the USO levy which can be imposed on all billing by the DLDO/s and APs.

c) Business service networks may not to be permitted.

VI. Selection Criteria and Licensing

VIII.1 Eligibility Criteria

1. What eligibility criteria should be set?

Emerging Options

a. Both private and public sector companies and their consortia should be eligible on equal footing.

b. Eligibility criteria may be based on techno-commercial capabilities of the bidders including suitable weightage to the Network roll out plan, experience in telecom sector, existing resources, technical capabilities, manpower availability and financial soundness. The companies participating to become DLDO need not necessarily have any prior experience in operating DLD or AP service.

c. To be eligible the DLDO must submit a detailed roll-out plan with indicative details of the traffic forecasts, and plans for the construction of transmission and switching networks including the technologies and products proposed to be used. They must also submit a financing plan with sources of financing and letters of commitment from various financiers.

d. Infrastructure providers listed in NTP 1999 should be given automatic license to provide DLD
services at terms no less favourable than other operators.

VIII.2 Selection Criteria

1. What selection criteria should be set? What should be the weightage accorded to each technical parameter? Should the criteria favour existing service providers, planning to become a DLDO by interconnecting at borders?

Emerging Options

a. To prevent non-serious players from bidding, entry barriers such as right amount of entry fee may be stipulated apart from pre-fixing the minimum performance commitments.

b. Selection criteria may include Ownership parameters; Experience in constructing/operating modern telecom backbone; Financial soundness backed by bank guarantee for sufficiently large amount as in the ISP Model; Capability in telecom business; Adequate Bank guarantee.

c. The selection criteria should be based on technological superiority, resulting into creation of most efficient network resource, operational efficiency and the lowest prices at which various service product offering to customers can be made meeting the corresponding quality of service standards prescribed by the TRAI.

d. Entry should be in terms of the eligibility criteria of technical qualification and the bid bonds. If the number of eligible bidders is less than or equal to the total number of licenses proposed, each one of them should be given the license based on the reserve price in terms of one time entry fee without calling for any financial bids. For this purpose, the tender should specify the number of licenses that are proposed to be given in each category as also the reserve entry fee that would be applicable to each license. In case the number of eligible bidders is more than the number of licenses available, financial bids should be invited, but only in respect of one time entry fee. The proposed revenue sharing percentage must not be put to bid. The top bidders should be selected, but H2 or H3 should not be asked to match the bid of the H1, so long as H2 is above the reserve price.

e. License should be available on demand without any entry fee. The purpose of entry fee of government revenue can be met through revenue share.

f. Only registration and no selection.

g. No entry barrier/ high revenue share. Sri Lankan model of 1% of capital expenditure to be paid to the Government can be adopted. (Hughes Escort)

h. Entry fee may be linked to the investment proposal as a percentage of the same rather than a fixed amount. A reasonable figure should be 3% of the investment.

i. Other suggestion in regard to the selection criteria mentions the following:

- One time entry fee – 25% weightage;
- Contribution to USO fund in terms of percentage of gross revenue – 25% weightage; and
- Revenue sharing based on net revenue – 50% weightage.

a. Total networth of the company should not be less than the anticipated investment in 5 years of the DLDO operations. In case of joint venture with a foreign company, the networth of the Indian partners should not be less than 1.5 times the anticipated investment in first five years of the DLD operations. That of foreign partners should not be less than 0.5 times of the anticipated investment in first five years of the DLDO operations. In addition, weightage to be given in respect of the following:

- One time entry fee- 40% weightage;

- The quality of roll-out plan, time frame for coverage of all essential POP’s particularly those in Eastern Region including North East, J&K, Himachal and Hills of Uttar Pradesh and the connecting transmission and switching network – 30% weightage.
The quality of feasibility project report covering realistic costing and revenue studies and typing up of funds to finance the project and secure the necessary expertise – 30% weightage.

VIII.3 Evaluation Criteria

1. What should be the evaluation criteria? In case the evaluation criteria require relative weightage for technical and financial proposals then what should be the appropriate weightage?

Emerging Options

a. Technical proposals be evaluated first followed by evaluation of financial proposals of short listed bidders. The selection should be based on competitive financial bids.
b. 50% weightage each for technical/operational experience and financial proposal.
c. More weightage to financial capability in respect of infrastructure providers; and more weightage to technical capability for DLDOs.
d. Minimum net worth for facilities based operators should be in a range of Rs.500-800 Crore. No weightage be given to the net worth of foreign promoters.
e. Speed of the rollout and commitment towards USO.
f. For selection criteria - higher weightage to financial resources in comparison to technical capacity to install and operate network. Appropriate attitudes to consumer benefit. Judgements will have regard to reputation of the members of applicant consortium.

VIII.4 Structure of License Fee

1. What should be the modality for estimating entry fees in case of full, restricted and limited competition that is not based on bidding?
2. How should license fee be estimated? Should it be related to perceived profitability of operations or for recovering regulatory expenses? What percentage of its revenue should an operator contribute?

Emerging Options

a. The highest license entry fee and a fixed percentage of revenue (which could be fixed say at 0.1 percent) should be the basis.
b. 5% of the intra state and inter state revenue of a particular state may be the entry fee for every private telecom operator wanting to be a domestic DLD company in that state.
c. One time entry fee may be spread out over a period of one year to be paid in 4 instalments.
d. Revenue sharing should not be more than 2% and be payable at the end of every quarter after accounts are settled between the Company and the Ministry of Communications.
e. Small entry fee as a percentage of revenue sharing of anticipated traffic of DLDO.
f. Entry fee should be based on annual business potential. It should be high enough to prevent non-serious players but should not be very high to impact tariffs. In view of the NTP 1999 objective, best international practices should be considered.
g. License fee should be based on viability, considering a minimum rate of return required for any worth while business proposition. License fee should be enough to fund gross of licensing, regulation and USO obligations.
h. Entry fee be based on competitive bidding. The percentage of revenue sharing be also determined by competitive bids.
i. Entry fee as a suitable percentage of Investment Plan and Revenue projected. Revenue sharing
for license fee should not exceed 1%.

j. In open competition, a fee of Rs.2 lakhs as entry fee; in limited competition an entry fee of Rs.1 Crore; and in restricted competition appropriate fee in the vicinity of Rs.10 lakhs. License fee to support only cost of issuing and administering the license. License fee should be estimated on the basis of perceived profitability of operations.

k. The license fee should, on an average, not exceed 5% of the gross revenue of operators. There is some justification of grading the license fee according to the potential for earning. Following graded scheme is suggested.

- Revenue generated in Metro Cities 10%
- Revenue generated from Ahmedabad, Bangalore, Hyderabad and Pune: 8%
- Revenue generated from other cities of more than 2 lakh population: 6%
- Revenue generated from all other stations except those in North East, J&K, Himachal Pradesh, Hills of Uttar Pradesh, tribal Districts of Madhya Pradesh, Rajasthan, Orissa and Bihar and Sikkim: 4%
- Revenues generated in North East, J&K, HP, Hills of UP, Tribal districts of Madhya Pradesh, Rajasthan Orissa and Sikkim: 2%

This license fee would be distinct from any USO levy and would be payable by the Licensee. USO levy would on the other hand be levied on the subscribers'/users' bills and would be in addition to the cost of service payable by them under the appropriate tariffs.

VIII.5 NETWORK OBLIGATION OF DLDO

1. Should network obligations be imposed on a DLDO? What should be the basis? What should be the target and timeframe?

Emerging Options

a. The DLDO must undertake an unqualified commitment for providing Points of Presence (POP) at least in each state capital and circle headquarters and 80% of the LDCAs in each circle within a period of 5 years.

b. Commitment to provide a network of latest technology.

c. Demonstration of capacity/ capability.
d. Financial strength, Investment Plan and Funding Mechanism and other resources for net work roll out.

e. Extent of the rollout proposed.

f. The Government should not prescribe or proscribe any technology. The only requirement should be that the network of the DLDOs should be able to interconnect with any other license system with whatever technology it has got.

g. Reputation of the operator and its responsiveness to the needs of the end-user.

h. In case of unlimited competition network obligation should be imposed to DLDO in terms of creating a minimum capacity for backbone and TAX switching in a time bound manner; Establishing network within (say 3- 5 years) with assured annual progress; Covering all Circles within 3 years; Connecting all the FSPs within two years of date of license etc.

i. Network obligations should be imposed on DLDO so as to ensure the implementation of a sector policy and a well-laid out network roll out plan. DLDOs must provide connectivity at least at each State Capital and each Circle HQ of the Region and least at 50% of LDCAs.

j. An agreed list of PoPs for inclusion in the bid document.

k. No network obligations on DLDOs.

VIII .6 LICENCE PERIOD AND TERMS & CONDITIONS OF DLDO

1. What should be the license period for a DLDO?
2. What should be the terms and conditions for a DLDO license agreement?

Emerging Options

a. The parameters suggested in the Consultation Paper for eligibility, selection and evaluation be adopted. Entry fee should cover regulatory and other fixed expenses incurred by the Government to finalise the suggested approach. Terms and conditions of license as listed in the Consultation Paper.

b. The license period for the DLDO be 15/ 20/ 25/ 30 years with a provision to extend it for a period of 10/20 years at a time.

c. The terms and conditions of the DLDO license agreement be decided by the Government. (DOT).

d. Penalty provisions for failure to meet the terms in the licence fee.

e. Prices of the services should be totally independent of the license fee as a rule so that they reflect the efficiency of an operator in providing a quality service product. Ideally the burden of license fee should be borne through his achievement of better operational efficiency rather than through a charge from the customer.

f. Licensing conditions should be kept to minimum checks of technical competence and sound finances. Decisions on the geographical scope of the market, the number of entrance, services they provide and how they provide those services be best left to the market.

g. Terms and Conditions should cover Committed technical parameters; Interconnection; Numbering plan; Anti-competitive conduct; Abuse of dominant position; Information to be furnished to the TRAI; Tariff regulation; Rights of way; Sharing of facilities; Quality of the network; Network roll out obligation in terms of provision of nation wide services with (say 80%) geographical coverage within 2 years; Network availability of at least 95 %; Time frame for delivery of the network; License fee payments; Penalty for non- performance on availability, quality of service, etc.

Other Issues

- Free Calls - A regulatory mechanism to compensate the APs for the free call units.

- Same Quality of Service standards be applied to DLDO as are applied to FSP.
The proposals in this paper do no address measures to deal with anti-competitive behaviour by the incumbent, such as predation, denigration, unfair cross subsidy. It is assumed that these are covered by general competition law.

It is known that currently the quality of service on IP packet switched voice is not equal to the current toll quality but world wide efforts, including those by the International Telecommunications Union are on, to bring up and IP telephony to the current circuit switched standards. Efforts are also on to make all the intelligent services that are available on the PSTN now, into the Internet telephony also. Government should not prohibit or prescribe a particular technology. It should only mention the end result, i.e., if a customer offers voice, it shall be delivered as voice, if he offers packets, they should be delivered as packets, if he offers text, it should be delivered as text but that the carriage and transmission could be in whatever form is most economically and technologically sustainable.

DLDO should provide national directory maintenance services and enquiry to the customers for long distance.

TRAI may recommend a model license agreement to the licensor.

In Australia, resale competition and limited facilities based competition was introduced in 1990. In 1997, full competition was permitted. These policy changes have resulted in significant benefits for Australian consumers, both businesses and residential.