Preliminary Consultation Paper

on

Unified Licensing Regime

New Delhi

November 15, 2003
# Table of Contents

<table>
<thead>
<tr>
<th>Chapters</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>3 - 4</td>
</tr>
<tr>
<td>Chapter 1: Background</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Chapter 2: Various Issues For Consideration</td>
<td>11 - 16</td>
</tr>
<tr>
<td>Annexure A: Guidelines for Unified Access</td>
<td>17 - 22</td>
</tr>
<tr>
<td></td>
<td>Services Licenses..</td>
</tr>
<tr>
<td>Annexure B: International practices</td>
<td>23 - 29</td>
</tr>
</tbody>
</table>
Preface

1. TRAI submitted its recommendations on Unified Licensing Regime to the Government on 27th October 2003, which stated inter alia that:

"… it is recommended that within six months “Unified Licensing” regime should be initiated for all services covering all geographical areas using any technology. The Regime would be finalized through a consultative process, once “in-principle” approval is received from the Government.” (paragraph 7.1)

“Before migration to Unified Licensing/Authorisation, the guidelines would have to be prescribed after consultations with various stakeholders so as to protect the interest of existing operators and to handle competition related issues”. (paragraph 7.4)

"It is recommended that the ultimate objective to the Unified Licensing/Authorisation regime be achieved in a two-stage process. Since growth of tele-density - the primary and immediate national objective - revolves around access network and the need to make available low cost access, it is recommended that the unification of access services at circle level be taken up immediately for which consultations with various stakeholders have already been completed. This should be immediately followed up with steps to define the guidelines and rules for fully unified license/Authorisation regime by gathering details of international practices and the consultation process”. (paragraph 7.6)

2. The Government has approved the Recommendations of the Authority, and the TRAI is preparing a Consultation paper for providing the Guidelines for Unified Licensing. The Authority has already carried out considerable analysis of the issues involved, but it feels that the preparation of the detailed Consultation Paper, would benefit immensely with more comprehensive inputs from various stakeholders so as to fully address the relevant issues. The purpose of this
paper is to obtain such details on the issues relevant for migration to such a Unified Licensing regime from the existing service specific licensing regime. Based upon the comments received, discussion with various stakeholders and its own analysis, the Authority will issue a more detailed consultation paper on the matter. Open House Discussions will be held thereafter.

3. We are hopeful that this preliminary paper would provide the necessary platform for discussing the important issue of migrating to Unified Licensing regime. The paper has already been placed on TRAI's website (www.trai.gov.in).

4. Written comments on this Paper may be provided to Secretary, TRAI by December 7, 2003. No Open-House discussions would be held on the issues raised in this preliminary consultation paper. For any further clarification on the matter, Secretary TRAI or Adviser (MN), respectively, may be contacted at trai07@bol.net.in (Ph No. 26167448) and jsengg@bol.net.in (Ph No. 26106118).

5. No request for extension of time for submission of written comments beyond December 7, 2003 will be entertained. If suggestions come later, we will consider them at the final consultation stage.

Secretary

TRAI
Chapter 1

Background

1. TRAI’s Recommendations on unified licensing, which have been accepted by the Government of India, provide for implementing Unified Licensing for all telecom services within a time bound manner, starting with Unified Access Licensing. Based upon TRAI’s recommendations, DoT has issued guidelines for Unified Access (Basic and Cellular) Service Licence vide their letter No.808-26/2003-VAS dated November 11, 2003. The copy of guidelines is enclosed in Annexure – A.

2. The technological developments in the past have led to offering of the services by one service provider, which were covered under the license of another service provider. This becomes a cause of litigation and dispute. The changes in technology are taking place at a much faster pace now, especially usage of IP based technology and offering very cheap solutions for telecom services with these innovations, e.g., internet telephony. In this fast evolving technological era if we still continue in a service specific regime, with a type of further growth in telecom services in India, we will get into endless litigation and claims on Government, and therefore, we have to abandon service specific licenses at the earliest and adopt a Unified Licensing for all telecom services.

3. The evolving telecommunication technologies, increasing bandwidth capabilities and embedded intelligence in elements of all types of carriage media, possibilities of innovative services through software control both by the operator and the user and increasing use of IP technology are increasingly blurring the boundaries between different services (as they are known today) and eliminating the importance of distance. This blurring of boundaries and ability of operators to encroach on another licensee’s territory have produced innumerable disputes and time consuming litigation in the past. The Licensing Regime has to be such that it not only permits such technological developments to be smoothly and cost effectively made available to consumers but in fact encourages further evolution. Such technological evolution encourages us to propose service and technology neutrality in the licensing regime. At the same time, there is a need to exploit the special strengths of small
niche operators besides the larger or integrated operators - each of whom may have their own business model. A typical example would be an entrepreneur in a rural area wishing to run a telecommunication service in a limited area only, achieving economies, which may not be possible for a larger operator. Thus, it is envisaged that a new licensing Regime – the Unified Licensing/Authorisation Regime – be implemented in which service providers may be able to offer any or all services, using technology of his/her choice with area of operation so defined as to promote greater participation of all types of big and small entrepreneurs.

4. To define and implement such a Unified Licensing/Authorisation Regime, the details of the Guidelines need to be spelt out. As a first step, as mentioned in para-1 above, Unified Access Licensing has already been implemented. TRAI’s Recommendations have already given certain broad outline of the framework for Unified Licensing. These are :-

- The Unified Licensing regime would be initiated for all (or any) services, covering all (or any) geographical areas, using any technology.

- The choice of area/ service under unified licensing regime would be left to the operators.

- The Unified Licensing regime would be implemented through automatic licensing/ authorisation subject to the notification to the licensor and regulatory authority and compliance with published guidelines.

- The objective is to facilitate flexible entry and operations. This is similar to the situation in several countries, which have prepared their regulatory regime for dealing with technological and other developments, which provide for converging services.

It is now necessary to develop the complete scheme for Unified Licensing/Authorisation Regime.
5. Since the key objective in the Unified Licensing/Authorisation Regime is to provide complete flexibility to service providers and assurance of access to the best and most effective service to the customer, using the best technology, under the new Regime, service specific licensing system is to be abandoned at the earliest. Since the Unified Licensing system is not service specific, therefore the annual license fee (As a percentage of revenue share), FDI limits will have to be the same irrespective of the type of service(s) offered by various service providers. The service providers would also have a freedom to provide any other service, which may not be existing today, using any technology at any time.

6. While considering the issue of level playing field, various parameters, like service area, license fee, entry fee, FDI limits for various services, which are different for different services in the existing licensing regime, are to be addressed. Table –1 lists all these parameters for different services. From this table, it is observed that there is a wide variations in all these parameters for different type of services. Quite evidently, these differences between various services will have to be kept in mind while drawing up the guidelines for Unified Licensing Regime. At the same time, it will be necessary to identify all other relevant issues and address the interests of existing service providers.
### Table I. Salient Features of the existing service providers

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Service Area</th>
<th>Connectivity with PSTN</th>
<th>Entry Fee</th>
<th>Annual License Fee (% revenue share)</th>
<th>FDI Limit**</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILD</td>
<td>International</td>
<td>Full PSTN/PLMN Interconnection</td>
<td>Rs. 0.25 Billion</td>
<td>15%</td>
<td>49%</td>
</tr>
<tr>
<td>NLD</td>
<td>National</td>
<td>-do-</td>
<td>Rs. 1 Billion</td>
<td>15%</td>
<td>49%</td>
</tr>
<tr>
<td>Cellular</td>
<td>Circle</td>
<td>-do-</td>
<td>Different for each Circle (Based on Bidding)</td>
<td>Type A - 12%  Type B - 10%  Type C - 8%</td>
<td>49%</td>
</tr>
<tr>
<td>WLL(M)</td>
<td>Circle</td>
<td>-do-</td>
<td>Different for each Circle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed incl. WLL(F)</td>
<td>Circle</td>
<td>-do-</td>
<td>-</td>
<td>5%</td>
<td>74%</td>
</tr>
<tr>
<td>Global Mobile Communication by Satellite</td>
<td>International</td>
<td>-do-</td>
<td>Rs. 10 Million</td>
<td>10%</td>
<td>49%</td>
</tr>
<tr>
<td>VSAT</td>
<td>National</td>
<td>No Interconnection</td>
<td>Rs. 3 Million</td>
<td>10%</td>
<td>49%</td>
</tr>
<tr>
<td>Radio Paging Service Providers</td>
<td>City wise and Circle wise</td>
<td>One Way Interconnection with PSTN</td>
<td>Please see the note below*</td>
<td>5%</td>
<td>74%</td>
</tr>
<tr>
<td>Internet Service Providers</td>
<td>National, Circle wise, SSA wise</td>
<td>-do-</td>
<td>Rs. 1</td>
<td>Nil</td>
<td>With gateways- 74% Without gateways – 100%</td>
</tr>
<tr>
<td>Public Mobile Radio Trunked Service</td>
<td>City wise and Circle wise</td>
<td>Limited One way</td>
<td>Nil</td>
<td>5%</td>
<td>49%</td>
</tr>
<tr>
<td>Infrastructure Providers Cat I</td>
<td>NA</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>100%</td>
</tr>
<tr>
<td>Infrastructure Providers Cat II</td>
<td>National</td>
<td>Full PSTN/PLMN Interconnection</td>
<td>Nil</td>
<td>15%</td>
<td>74%</td>
</tr>
</tbody>
</table>

*Note: Entry fee by Radio Paging Service Providers will be based on date of migration to revenue sharing regime. The same is under consideration by DoT.** conditions apply

7. The first phase of Unified Licensing which has been achieved through a Unified Access Licensing, has two important features:
   - The entry fee for Unified Access License is the amount paid by the fourth cellular mobile operator for a specific circle applicable for cellular mobile service;
   - The focus is on each circle separately and not for the country as a whole.
A Unified License would allow the Licensee to provide any telecom service in the service area of service provider’s choice. Normally, in other countries, which have adopted regimes such as the Unified Licensing, the focus is on allowing easy entry and charging for spectrum separately. The International Practices followed in some of the countries as already mentioned in TRAI’s Recommendations on Unified Access Licensing are given in Annexure –B.

8. TRAI is separately working on spectrum related issues which inter alia includes spectrum allocation, procedure, efficient utilisation of spectrum and spectrum pricing. Similarly, competition related issues including Merger & Acquisition guidelines are also being worked out separately. Both these consultation papers will be issued separately.

9. **Concept of Class License:**
A class license establishes a set of general conditions, which are widely publicised among the class of service providers / companies concerned. Any service provider / company may participate in the activities under the class license provided that they comply with the terms and conditions in this category of license. In Malaysia, such a concept exists in the Converged Licensing Framework, where sets of licenses that do not require high degree of regulatory control are provided under Class License. For example services that fall under this category include Public Mobile Radio network Service, Radio Paging Service, Broadband Point to Point and Point to Multipoint Wireless Internet network, Internet Access Service, Messaging service etc. In Malaysia, Class Licenses are annually renewable and entered into Register. The registration fees payable for a one-year registration under a Class License is RM 2500.

10. **Concept of Facility based and non-facility based license:**
There could be a single license for all networks / services the operator intends to operate / offer. The licensees could be categorised into Facilities based Operators (FBOs) and Service Based Operators (SBOs). The Facility based operators (FBOs) can build telecommunications network for the carriage of telecommunications traffic. The range of telecommunication services to be provided over the licensees’ facilities can include backbone/wholesale bandwidth capacity and interconnection/access services to other licensed telecommunication operators. The Service Based
Operators (SBOs) would provide the telecom services to the end user. They may not set up their own networks or infrastructure to provide services to end-users.

11. The structure of various licences in the proposed Communication Convergence Bill is as follows: -
   i) Network infrastructure facilities:- to provide or own telecom infrastructure including towers and ducts and broadcasting infrastructure including cable and broadcasting distribution.
   ii) Networking services:- to provide Bandwidth services, Fixed links and Mobile links.
   iii) Network application services:- to provide public switched telephony, public cellular telephony, global mobile personal services by satellite, IP telephony, Radio Paging, Public Mobile Radio Trunking, Public Switched data services and Broadcasting(Radio and TV)
   iv) Content application services to provide Satellite Broadcasting, subscription Broadcasting, terrestrial free to air TV broadcasting, and terrestrial Radio broadcasting
   v) Value added network application services: - to prove Internet services, Unified messaging services etc.

In the proposed Convergence Bill it is also mentioned that the Commission may, grant licenses either singly or jointly for one or more of the categories of facilities or services specified therein.

12. Information regarding the framework such as given above is to be kept in mind for identifying the issues relevant for migrating to the Unified Licensing regime. The various relevant issues for consideration are mentioned in Chapter 2.
Chapter 2

Various Issues For Consideration

1. After taking into account TRAI’s recommendations on Unified Access Licensing Regime, technological developments, terms and conditions of existing licenses, International Practises, etc. various issues for consideration could be classified under following categories :-

   i) Ambit and type of Unified Licensing
   ii) Registration charges
   iii) Entry fee paid by existing service providers
   iv) Service Area
   v) Rollout obligations
   vi) License fee
   vii) Business case of (existing) service provider, especially stand-alone operators
   viii) Interconnection and PSTN connectivity
   ix) Numbering Issues
   x) Others issues

These issues are discussed below :-

Ambit and type of Unified Licensing :-

2. Should we consider all existing and other new services as they emerge, under the ambit of Unified Licenses, and also include existing licenses like Infrastructure Providers (IP- I & II) who don’t provide services to the end customers under the existing Regime, or keep them outside the Ambit of Unified Licensing?
3. Based upon the entry fee paid, the existing service providers could be classified in two categories

   i) Zero or very low entry fee like ISPs, PMRTS, VSAT, etc.
   ii) High entry fee like CMSPs, BSOs, NLDOs, ILDOs, etc..

Based upon this criterion, should we classify the first category under ‘class license category’, which will be a sub-set of Unified Licensing? The concept of class license is already briefly described in Chapter –1 of this paper. ‘Class Licensees’ shall pay token registration charges and meet some relatively easier entry and operational conditions.

4. Should we consider prescribing Licenses under two categories viz. Facility Based and Non-facility/service Based? The concept of facility based and non-facility service license is already explained in Chapter –1.

Registration Charges:

5. What should be the criterion for fixing the registration charges under Unified Licensing Regime? Should it be nominal charges covering say administrative charges like in other countries where this registration/Authorisation process has been implemented or should it be a function of entry fee paid by existing service providers?

6. Should registration/authorization charges be the same for class licenses, if such a concept is introduced? Under such situation should we at all have separate category of class license.

7. Should registration/Authorisation charges be the same for facility based and service based (non-facility based), if such a concept is introduced?

8. Should the registration charges be same whether service providers provide all telecom services or even one service or should it be additive depending upon the services provided by the service provider?

9. Should the registration charges be dependent on the extent of geographical coverage?
Entry fee paid by existing service providers:-

10. For the existing service providers who use spectrum for providing telecom services, entry fee paid includes spectrum charges. Should it be divided in two parts, i.e. Registration charges and Spectrum charges?

11. While fixing up the registration charges, how the level playing field aspect be addressed in case the entry fees paid by existing service providers is higher than prescribed registration charges? This issue is more relevant for the services, which may not use spectrum like NLD, ILD Services, etc. because the difference cannot be adjusted in spectrum charges for such services.

Service Area:-

12. Though service area is left to the choice of service provider but still one could argue that service areas should be specified for different services or a minimum area be specified. If so, which factors and options may be considered for service areas?

13. Should the Unified License also have service area similar to Unified Access License (provision of these services at the circle level), plus NLD/ILD at the national level, and freedom to give services under the class license at any level of geographical coverage? Should we retain the existing service areas with inter circle connectivity to Unified Access Licensee and with more flexibility to services under class license?

14. Should a distinction be made for service area if the concept of class license or facility based and non-facility based licenses are introduced?

15. The possibility of “niche” operators has been discussed earlier in the context of rural or not so popular areas or some new service. Should the service area be quite different for such operators.
**Rollout Obligations:**

16. Should there be any rollout obligations under Unified Licensing Regime? If so, what should be the minimum rollout obligations for the various types of services, and could this minimum differ across different services, e.g. an SDCA for fixed line and a city for internet service provider or class licenses, or for NLD/ILD at least a certain number of long distance routes for NLD or at least certain number of countries (regions) for ILD.

17. Suppose no rollout obligations are specified how to ensure ubiquitous coverage for all services?

18. Will the concept of facility based and service based service provides and non-specification of minimum rollout obligation help in efficient utilisation of infrastructure?

**License Fee:**

19. Considering the fact that a part of license fee (at present 5%) is to be contributed to Universal Service Fund and there is a variation from zero to 15% in the existing license fee, what should be the level of license fee under Unified Licensing Regime?

20. Is it appropriate and feasible to have the services under a class license to have no or small revenue share License Fee. If so, what should be the rate of the fee;

21. The Government may feel concerned about the revenues coming from the License Fee and may view a reduction as an unattractive policy option. Would it be appropriate to consider revenues from growth to be more relevant than the revenue from License Fee? Suggest the growth model to address this issue.

**Business case of (existing) service provider, especially stand alone operators:**

22. The unified Licensing regime would give rise to a situation with a number of integrated service providers, and the regulatory concern with respect to a stand alone operator would become more compelling. Certain issues that arise in this regard include:

   i) How would the stand-alone operator’s competitive interests be protected under the new Licensing regime;
ii) Should there be any minimum conditions that should be specified to protect the interest of the stand-alone operator. If so, what should be these conditions;

iii) What incentives, if any, may be devised for operators (e.g. ISP, PMRTS, VSAT etc.) becoming willing to move from their present License to a new License with a wider coverage?

**Interconnection and PSTN connectivity:** -

23. The interconnection regimes for different types of services are not the same. This was the case also with respect to the interconnection among fixed line and cellular mobile. With more services being covered, we would need to consider further differences in this regard. Likewise, there is another matter, which becomes relevant, namely the extent of PSTN connectivity provided to different services. For example, services like VSAT have no PSTN connectivity whereas services like PMRTS have limited PSTN connectivity. With a Unified Licensing regime such distinctions and differences would be difficult to maintain.

Issues that arise in these cases include:

i) How do the differences in interconnection regime affect the details of the Unified Licensing regime? What should be the interconnection regime applicable to the new services/service providers giving more than one service under the same License?

ii) What should be the criteria for infrastructure sharing among the operators, and infrastructure “sharing” for the same operator who operates in two distinct and/or distant regions?

iii) Should the restrictions on PSTN connectivity which are prevalent at present for some services, be done away with. If not, why and under what conditions should these restrictions apply?

**Numbering Issues:** -

24. At present Numbering Scheme for WLL(M) service is SDCA specific because mobility was permitted within SDCA only. Now, with the unlimited mobility, should the numbering scheme for WLL(M) services be revised? If yes, the suggestions in this regard. Also, from the trends abroad and in India too, in some states, it is clear that
the number of cellular mobile subscribers are likely to exceed the fixed access (PSTN) subscribers. Should, therefore, access to mobile service be through ‘9’ level codes without explicit SDCA/LDCA identity? Or, the numbering plan be reviewed considering the future requirements and trends including e-NUM?

25. Under Unified Licensing Regime, should we have SDCA based STD Codes or the codes be reduced say to LDCA level?

**Others issues :-**

26. A number of other policy issues on which inputs would be useful for a more comprehensive assessment include:

   i) Should the existing service providers have an option to continue under the present licensing regime (with present terms and conditions) or migrate to new Unified Regime.

   ii) Under Unified licensing regime should there be special provisions for Service Providers with Significant Market Power.

   iii) At present the FDI limit is different for different telecom services. To what extent this difference of FDI limits for different telecom services be maintained in the unified regime. How can we have same FDI limit for all services under unified licensing regime?

27. Should we consider models of Australia/ Singapore/ Malaysia /European Union or any other model for implementing Unified Licensing?

28. Should reselling be permitted under the Unified Licensing Regime?

29. If reselling is permitted then what should be the registration charges, license fee and other terms & conditions for these category of service providers?

30. Some new Service Providers may also like to provide services like billing, customer care, Directory enquiry, interconnect exchange services, etc. or any other service with or without setting up their own network or infrastructure. What should be the registration charges, license fee and other terms & conditions for these category of service providers?
SUB: GUIDELINES FOR UNIFIED ACCESS(BASIC & CELLULAR) SERVICES LICENCE.

Given the central aim of NTP-99 to ensure rapid expansion of teledensity; given the unprecedented expansion of telecom services that competition has brought about; given the steep reductions in tariffs that competition has ensured; given the fact that advances in technologies erase distinctions imposed by earlier licensing systems; given the fact that even more rapid advances in technologies are imminent; given the steep reduction in costs of providing telecom services; given the rapid convergence of tariffs for wireless services; given the fact that the provision of such services at the cheapest possible rates and by the most reliable mode is the sine qua non for India to consolidate its position as a leading hub of Communications systems, Information Technology, IT enabled services, and of establishing itself as a leader in new disciplines such as bioinformatics and biotechnology; given the recommendations of TRAI in this regard; Government, in the public interest in general and consumer interest in particular and for the proper conduct of telegraphs and telecommunications services, has decided to move towards a Unified Access Services Licensing regime. As a first step, as recommended by TRAI, Basic and Cellular services shall be unified within the service area. In pursuance of this decision, the following shall be the broad Guidelines for the Unified Access Services License.

(i) The existing operators shall have an option to continue under the present licensing regime(with present terms & conditions) or migrate to new Unified Access Services Licence (UASL) in the existing service areas, with the existing allocated/contracted spectrum.

(ii) The license fee, service area, rollout obligations and performance bank guarantee under the Unified Access Services Licence will be the same as for Fourth Cellular Mobile Service Providers (CMSPs).

(iii) The service providers migrating to Unified Access Services Licence will continue to provide wireless services in already allocated/contracted
spectrum and no additional spectrum will be allotted under the migration process for Unified Access Services Licence.

(iv) In addition to services permissible under current licences, Cellular Mobile Service Providers (CMSPs) may also offer limited mobility facility existing within Short Distance Charging Area (SDCA) as permitted to Basic Service Providers at appropriate tariffs through concepts such as home-zone operations, etc.

(v) The Unified Access service providers are free to use any technology without any restriction.

(vi) No additional entry fee shall be charged from CMSPs for migration to UASL. For Basic Service Operators (BSOs), the entry fee for migration to the Unified Access Services Licence for a Service Area shall be equal to the entry fee paid by the Fourth Cellular Operator for that Service Area, or the entry fee paid by the BSO itself, whichever is higher. While applying for migration to UASL, the BSO will pay the difference between the said entry fee for UASL and the entry fee already paid by it.

(vii) Notwithstanding anything stated in para (vi) above, no additional entry fee will be paid by the existing Basic Service Providers where no Fourth CMSP had bid despite repeated attempts.

(viii) Those Basic Service Operators who do not wish to migrate to the full mobility regime, would only be required to pay the additional fee for Wireless in Local Loop (M), with mobility confined strictly within Short Distance Charging Area, as prescribed separately.

(ix) Some of the Basic Service Licensees have provided following features/facilities to their subscribers:

   (a) Over the air activation/authentication of the subscriber wireless access terminal outside one SDCA by pressing/punching certain keys/numbers such as *444N;

   (b) Use of the same subscriber wireless access terminal in more than one SDCA;

   (c) Multiple registration or temporary subscription facilities in more than one SDCA using the same subscriber terminal in wireless access systems.

In such cases of migration to Unified Access Services Licence, the Basic Service Licensees shall in addition to the Entry Fee based on the principles stated in para (vi) and (vii) above, pay till the date of payment from the date of their having signed the Basic Service Licence agreement, a penal interest @ 5% above Prime Lending Rate (PLR) of State Bank of India.
prevalent on the day the payment became due, i.e. the date they signed the Licence Agreement. The interest shall be compounded monthly and a part of the month shall be reckoned as a full month for the purposes of calculation of interest.

(x) The Service Areas for Unified Access Services Licence will be as per the existing Cellular Mobile Telephone Service Licences. BSO wishing to migrate to UASL will be permitted to operate in the service area in which it is already operating. It is, however, clarified that BSOs in Delhi, Haryana and UP(West) service areas, on migration to UASL, will have service area as that of CMSP in Delhi, Haryana and UP(West) service areas respectively. Since the service area for the Unified Access Service Licensees will be as per existing CMSPs, existing BSOs in Maharashtra, Tamil Nadu and West Bengal service areas will be required to hold two unified licenses (one for Mumbai Metro city and the other for the rest of Maharashtra and so on).

(xi) The existing BSOs after migration to Unified Access Licensing Regime may offer full mobility; however, they will be required to offer limited mobility service also for such customers who so desire.

(xii) A total of additional Entry Fee to be paid by existing Basic Service Operators in respect of each of its service area for migration to USAL is given at Annexure-I.

(xiii) Request for migration to UASL shall be made in writing by the concerned service provider. The payment of additional Entry Fee and penal interest, if any, is to be made along with and not later than the date of such request in writing for migration to Unified Access Services Licence.

(xiv) If on verification Department of Telecommunications comes to the conclusion that the entire amount due for migration to UASL has not been paid by the applicant, it shall be intimated to the applicant to pay the difference. The concerned applicant will be bound to pay the said difference in full within 3 working days from the date of receipt of the demand; failing this the application will be rejected and the amounts paid by the applicant, if any, shall be refunded within a period of 15 days from the date of receipt of the demand from DoT. However, no interest shall be payable by DoT for the amounts deposited for migration to UASL. While applying for migration to UASL the existing licensee shall also certify as hereunder:

“I have carefully read the guidelines for providing Unified Access Services Licence. I have complied and/ or agree to fully comply with the terms and conditions therein”.

(xv) Consequent upon migration, the Licence will be termed as Unified Access Services Licence. The relevant applicable conditions of the existing licence agreements will get modified to the extent of the
conditions stated above. The amended Licence shall be set out in
detail separately.

(xvi) The LICENSOR reserves the right to modify these Guidelines or
incorporate new Guidelines considered necessary in the interest of
national security, public interest, consumer interest and for the proper
conduct of telegraph / services.

(xvii) With the issue of these Guidelines, all applications for new Access
Services Licence shall be in the category of Unified Access Services
Licence.
Annexure-I

Additional Entry fee to be paid by the existing Basic Service Operators for migration to Unified Access Service Licence.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the Operator</th>
<th>Service Area Of BSO</th>
<th>Date of signing of licence agreements</th>
<th>Entry Fee paid by BSO(in Rs.Crores)</th>
<th>Entry Fee paid by 4th Cellular Operator(in Rs. Crores)</th>
<th>Additional Entry Fee to be paid for migration to UASL(in Rs.crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reliance Infocom Ltd.</td>
<td>Rajasthan</td>
<td>20.7.2001</td>
<td>20</td>
<td>32.25</td>
<td>12.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UP(East)</td>
<td>20.7.2001</td>
<td>15</td>
<td>45.25</td>
<td>30.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maharashtra</td>
<td>20.7.2001</td>
<td>115</td>
<td>392.66</td>
<td>277.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>189+203.66*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Karnataka</td>
<td>20.7.2001</td>
<td>35</td>
<td>206.83</td>
<td>171.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Punjab</td>
<td>20.7.2001</td>
<td>20</td>
<td>151.75</td>
<td>131.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AP</td>
<td>20.7.2001</td>
<td>35</td>
<td>103.01</td>
<td>68.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Haryana</td>
<td>20.7.2001</td>
<td>10</td>
<td>21.46</td>
<td>11.46</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kerala</td>
<td>20.7.2001</td>
<td>20</td>
<td>40.54</td>
<td>20.54</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UP(West)</td>
<td>20.7.2001</td>
<td>15</td>
<td>30.55</td>
<td>15.55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>West Bengal</td>
<td>20.7.2001</td>
<td>0+78.01*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td>78.01</td>
<td>53.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MP</td>
<td>20.7.2001</td>
<td>20</td>
<td>17.4501</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bihar</td>
<td>20.7.2001</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Himachal</td>
<td>20.7.2001</td>
<td>2</td>
<td>1.1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Orissa</td>
<td>20.7.2001</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tamil Nadu</td>
<td>26.9.2001</td>
<td>79+154*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50</td>
<td>233</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delhi</td>
<td>20.7.2001</td>
<td>50</td>
<td>170.7</td>
<td>120.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A &amp; N**</td>
<td>20.7.2001</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>RTL</td>
<td>Gujarat</td>
<td>18.3.1997</td>
<td>179.0859030</td>
<td>109.01</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Tata Teleservices Ltd.</td>
<td>Gujarat</td>
<td>31.8.2001</td>
<td>40</td>
<td>109.01</td>
<td>69.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Karnataka</td>
<td>31.8.2001</td>
<td>35</td>
<td>206.83</td>
<td>171.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AP</td>
<td>4.11.1997</td>
<td>161.47(old)</td>
<td>103.01</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tamil Nadu</td>
<td>31.8.2001</td>
<td>50</td>
<td>233</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>79+154*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50</td>
<td>233</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delhi</td>
<td>31.8.2001</td>
<td>50</td>
<td>170.7</td>
<td>120.7</td>
</tr>
<tr>
<td>4.</td>
<td>TTL(Mah.)Ltd.</td>
<td>Maharashtra</td>
<td>31.8.2001</td>
<td>189+203.66*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>532.55(old)</td>
<td>392.66</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Bharti Telenet Ltd.</td>
<td>Karnataka</td>
<td>29.10.2001</td>
<td>35</td>
<td>206.83</td>
<td>171.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Haryana</td>
<td>8.10.2001</td>
<td>10</td>
<td>21.46</td>
<td>11.46</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------</td>
<td>--------</td>
<td>-------</td>
<td>-------</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MP</td>
<td>28.2.1997</td>
<td>35.33 (old)</td>
<td>17.4501</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tamilnadu</td>
<td>29.10.2001</td>
<td>50</td>
<td>79+154*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>233</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delhi</td>
<td>29.10.2001</td>
<td>50</td>
<td>170.7</td>
<td>120.7</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Shyam Telelink</td>
<td>4.3.1998</td>
<td>29.29(old)</td>
<td>32.25</td>
<td>2.96</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>HFCL Infotel Ltd.</td>
<td>7.11.1997</td>
<td>177.59(old)</td>
<td>151.75</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

*For BSOs in MH, WB and TN the entry fee of fourth cellular MH+Mumbai, WB+Kolkata and TN+Chennai has been taken.

** Now A&N is a part of WB service area for cellular.
**International Practices**

A number of countries are migrating towards the concept of authorisation or converged licensing for wireline and wireless services. This has been encouraged due to technological developments, consumer demand, long-term sustainability of telecom service providers, and optimum utilisation of resources. The scenario of converged licenses in some countries from Asia-Pacific and Europe is discussed below. Many of these markets have high mobile and wireline penetration rates, and converged services are being driven by a very competitive marketplace.

1. **Australia**

   The Telecommunications Act 1997 opened the Australian market to further competition, placing no limits on the number of general carrier licences. In Australia, there is an open licensing regime for telecommunications with no distinction being drawn on the basis of the technology used. The Regulatory framework encourages Fixed-mobile convergence. Licenses are general telecom licenses. The Australian Communications Authority (ACA) administers the regime that licenses telecommunications carriers. A carrier license allows the owner(s) of a network to supply carriage services to the public subject to obligations set out in its license, the Telecommunications Act 1997, and any additional conditions imposed by the Minister. Carriers are individually licensed and pay application and ongoing licence fees that recover the costs of regulating the industry. There is an application charge of a nominal amount of $10,000 which is payable before the application can be processed. Carriers are required to pay an annual license charge. This comprises a $10,000 fixed component and a variable component based on carrier’s eligible revenue. Service providers are not subjected to any licensing requirements but are required to comply with a range of obligations including the standard service provider rules set out in Schedule 2 of the Telecommunications Act. One.Tel was the first Australian telephone company to offer users the opportunity to merge mobile, long-distance, fax and Internet services on one bill. Instead of having to make multiple payments every month or quarter, only one payment per month is required. Most new entrants into the telecommunications market can now offer a full range of fixed
and mobile services. Some of these companies act as resellers of mobile network capacity for one of the three mobile operators. Generally all mobile operators offer mobile VPN services.

2. Denmark

In Denmark, Executive Order No. 786 of 19th September 2002 does not require a service provider to obtain a licence. He need not take any action or await a decision from the National IT- and Telecom Agency before launching the service, and no specific payment on the part of the service provider is required. Interconnection to other networks is subject to the telecommunications regulation on competition and interconnection. A separate authorisation for frequencies is, however, required.

3. European Union

Single Regulatory framework as a result of EU Directive

The European Parliament and the Council gave a set of five directives to its Member States so as to provide for a single Regulatory framework for all transmission network and services. These directives are

a) Directive 2002 / 21 / EC which provides a common regulatory framework for electronic communications network and services;

b) Directive 2002/20/EC on the authorization of electronic communications network and services

c) Directive 2002/19/EC on access to, and interconnection of, electronic communications network and associated facilities;

d) Directive 2002/22/EC on universal service and user’s rights relating to electronic communications network and services

e) Directive 97/66/EC on the processing of personal data and the protection of privacy in the telecommunications sector

The directive dated March 7, 2002 on the Authorisation of electronic communications networks and services recognizes that

“2. Convergence between different electronic communications networks and services and their technologies requires the establishment of an authorization system covering all comparable services in a similar way regardless of the technologies used.”
Article 3 (General authorization of electronic communications networks and services) of the Directive requires

“2. The provision of electronic communications networks or the provision of electronic communications services may, without prejudice to the specific obligations referred to in Article 6(2) or rights of use referred to in Article 5, only be subject to a general authorization. The undertaking concerned may be required to submit a notification but may not be required to obtain an explicit decision or any other administrative act by the national regulatory authority before exercising the rights stemming from the authorization. Upon notification, when required, an undertaking may begin activity, where necessary subject to the provisions on rights of use in Articles 5, 6 and 7.”

The Service specific licenses will be replaced by authorizations in the EU Countries. The Member States are however, permitted to impose a set of conditions to the general authorizations, for example financial contributions to funding Universal Service, Administrative charges to cover costs which will be incurred in the management, control and enforcement of the general authorisation scheme and of rights of use and of specific obligations as referred to in Article 6(2), (which may include costs for international cooperation, harmonisation and standardisation, market analysis, monitoring compliance and other market control, as well as regulatory work involving preparation and enforcement, of secondary legislation and administrative decisions, such as decisions on access and interconnection) accessibility of numbers, interoperability of services etc.

For the use of Radio Spectrum, grant of numbers and rights to install facilities the relevant authorities may impose separate fees. Specifically, in case of spectrum Member States can grant such rights on the basis of selection criteria, which must be objective, transparent, non – discriminatory and proportionate.

4. Finland

There are more than 90 telecommunications service providers in Finland including local, long distance, international and mobile operators. The annual
telecommunications turnover is about FIM 16,000 million (about USD 2,800 million). As a result of continuous telecommunication liberalization new licensing procedure was adopted as of June 1 1997. A license is now mandatory only if an operator provides mobile telecommunications service, which requires frequencies, i.e. effectively a unified license is available if frequency spectrum is obtained.

Before 1994, local and long distance services in Finland were provided by different companies. Forty-five locally based operators (later known as Finnet Group) provided local services. Telecom Finland (now called Sonera) was the traditional monopoly long-distance and international operator. It also provided local services in remote areas of the country. The Finnish market was fully liberalised at the end of 1994, enabling the Finnet Group and Sonera to compete in each other's markets. In the mobile market Sonera, Radiolinja, Finnet group and Telia Finland were the key players. Sonera and Radiolinja have GSM and DCS1800 licenses. Telia Finland and Finnet group have DCS1800 licenses. Sonera used its DCS capacity to enhance the GSM market and to offer homezone service. Telia also offered a homezone tariff on its GSM 1800 network at a level that put it into competition with fixed line services. In terms of convergent services, no other market in the world is as advanced. Finland was one of the first countries where convergent services became available. The first DECT-based public access service and the first mobile centrex solutions were introduced in Finland, and a mobile VPN service was launched in 1991. In the beginning of 1999, almost 60% of the population had a mobile phone. This rate was higher than the wireline penetration rate in Finland.

Helsinki Telephone Company, the largest local telephone company within Finnet group, had launched a unique flat-rate low mobility DCS1800 service, called Cityphone. This was integrated within the PSTN numbering plan and offers single billing and a single voicemail box. Calls to fixed line number are automatically diverted when the fixed phone is not answered. Calls between the fixed number and related mobile numbers are also cheaper than standard PSTN rates.
5. **Germany**

Germany has been slow to liberalise its telecom markets. Mobile competition was first introduced in 1992 and fixed markets were fully deregulated in 1998. The Regulatory Authority for Telecommunications and Posts (RegTP), was established in January 1998. It has been a strong and effective body in maintaining fair competition. RegTP encourages convergent services, and most of the German mobile operators have fixed licensee as a shareholder and they can provide integrated fixed and mobile services. Unified licensing has been actively promoted in Germany by the service providers. Viag Interkom, one of the key players in Germany, is using an integrated network to offer fixed and mobile services. Most converged services in Germany are based on mobile VPN services and on personal numbering. Mobile tariffs have tended to be high in Germany, but competition has led to tariff reductions and several initiatives in new pricing structures, including homezone tariffing. German operators are already on course to offer a wide range of fixed and mobile convergent services viz. personal numbering and homezone services.

6. **Malaysia**

In Malaysia, the licensing framework is formulated to be both technology and service neutral. The framework permits that communications infrastructure can be used to provide any type of communications service that it is technically capable of providing. Recognizing the fact that the legislation governing the communications industry was outdated and no longer representative of the merging market realities, the Government of Malaysia enacted a new convergence legislation, which comprises the Communications and Multimedia Act, 1998 (*CMA*) and the Malaysian Communications and Multimedia Commission Act 1998 (*MCMCA*). The introduction of CMA and MCMCA goes beyond the issue of unified licensing but in this paper this issue has been considered only to the extent of addressing unified licensing of fixed and mobile services. So far as unified licensing for wireline and wireless services in Malaysia is concerned, there are four categories of licenses viz. Network Facilities Providers, Network Service Providers, Application Service Providers and Content Application Service Providers.
The applicable license fees for each type of licence are as follows:

a) Application Fee - RM10,000.00 (non refundable)
b) Approval Fee - RM50,000.00
c) Annual Fee - 0.5% of Gross Annual Turnover or RM50,000 - whichever is higher

There are rebate clauses in License Fee for R&D and other activities.

7. Singapore

In Singapore, a Unified-licensing framework has already been implemented. The basic intention of the framework is to have a single license for all networks / services the operator intends to operate / offer. The licensees have been categorised into Facilities based Operators (FBOs) and Service Based Operators (SBOs).

The Facility based operators (FBOs) can build telecommunications network for the carriage of telecommunications and broadcast traffic. The guidelines¹ state

“The range of telecommunication services to be provided over the licensees’ facilities can include backbone/wholesale bandwidth capacity and interconnection/access services to other licensed telecommunication operators, or other domestic and international services such as the following:

- Public Switched Telephone Services
- Public Switched Message Services
- Public Switched Integrated Services Digital Network (ISDN) Services
- Leased Circuit Services
- Public Switched Data Services
- Public Radio-communication Services
- Public Cellular Mobile Telephone Service (PCMTS)
- Public Radio Paging Services (PRPS)
- Public Trunked Radio Services (PTRS)
- Public Mobile Data Services (PMDS)
- Public Mobile Broadband Multimedia Services
- Public Fixed-Wireless Broadband Multimedia Services
- Terrestrial Telecommunication Network for Broadcasting Purposes
- Satellite Uplink/Downlink for Broadcasting Purposes”

¹ Available at http://www.ida.gov.sg
The entry fees and the license fees depend upon the service to be provided and is generally expressed as a percentage of Annual Gross Turnover (AGTO) subject to a minimum in some cases. Table below provides the details of entry fees, license fees and duration of license for each service.

Table: Entry fees, Annual fees and license duration in Singapore

<table>
<thead>
<tr>
<th>Licence</th>
<th>Licence Fee</th>
</tr>
</thead>
</table>
| FBO designated as PTL | Initial Fee: None  
Annual Fee: 1% AGTO, subject to a minimum of SSR50,000 per year  
Licence Duration: 20 years, renewable for a further period as IDA thinks fit |
| Terrestrial telecommunication networks for telecommunication purposes | Initial Fee: None  
Annual Fee: 1% AGTO, subject to minimum of SSR100,000 per year  
Licence Duration: 15 years, renewable for a further period as IDA thinks fit |
| Public cellular mobile telephone services  
Public mobile broadband multimedia services  
Public fixed-wireless broadband multimedia services | Due to limited frequency spectrum, the licence fees and licence duration will be specified together with the approach to award the respective spectrum rights and licences, via a comparative selection exercise and/or an auction exercise. |
| Public radio paging services  
Public mobile data services  
Public trunked radio services | Initial Fee: None  
Annual Fee: 1% AGTO, subject to minimum of SSR1,200 per year  
Licence Duration: 10 years, renewable for a further period as IDA thinks fit |
| Terrestrial telecommunication network for broadcasting purposes only  
Satellite Uplink/Downlink for broadcasting purposes | Initial Fee: None  
Annual Fee: SSR5,000  
Licence Duration: 10 years, renewable on a 5-yearly basis |

Source: [http://www.ida.gov.sg](http://www.ida.gov.sg), FBO guidelines

However, in addition to these there are other charges such as spectrum, Number Allocation Charges, etc.

8. **U.K.**

In U.K, OFCOM the new telecom and broadcasting regulator has been set up and a new Communication Act is in place. The new regime abolishes the requirement for licensing. It is consistent with the EU directive concept, which states that persons wishing to provide electronic networks and services should be free to do so without having to obtain prior permission, subject only to giving notification to the regulatory Authority and subject to compliance with applicable obligations.

******