Consultation Paper No. 3/2003

TELECOM REGULATORY AUTHORITY OF INDIA

Consultation Paper

on

Unified Licensing for Basic and Cellular Services

New Delhi

July 16, 2003
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Preface

Owing to technological developments, reduction in cost of wireless technologies, quicker roll out, and growth of wireless subscribers, the present arrangement of separate licensing and regulatory framework for Basic and Cellular Services needs a review. A Unified license for wireline and wireless services (including Cellular Mobile) would provide greater efficiency as a result of optimum sharing of infrastructure and resources. Such considerations of efficiency that would bring down the cost of providing services have arisen the need for consulting the stakeholders on creating a Unified Licensing framework. Internationally, several countries have moved/ are in the process of moving from a service specific license to a Unified License.

In India, Basic and Cellular Mobile Services have been licensed separately. While a significant amount of unification in terms of license conditions has already taken place i.e., in terms of annual license fees, providing mobility (though to different extent), access to Universal Service Obligation Fund etc., there still exist certain differences on issues such as varying amounts of entry fee paid, spectrum allocation etc that needs further discussion. This consultation paper aims to raise such existing issues that arise while considering the framework for migrating from a present service specific to a Unified license framework. It also raises certain policy and regulatory issues that would arise in the future as a result of a unified license.

One immediate need would be to examine the efficiencies as well as the extent of dominance that such a framework would create in the markets. Mergers and Acquisition have been quite common in the industry over the recent years. However, intra-circle Mergers, which are of a horizontal nature have not been permitted. Creation of a unified license would result in a large number of players offering the same basket of services, necessitating consideration of mergers and acquisitions. However, it is extremely important that under no circumstances such events should result in substantial lessening of competition. The paper analyses the issues that arise inter-alia and calls for the comments & suggestions of the stakeholders.
I am quite hopeful that this paper would provide the necessary platform for discussing this
important issue of Unified Licensing and would enable us in creating a common framework
for offering wireline and wireless services (including cellular mobile services). The consultation
paper has already been placed on TRAI’s website (www.trai.gov.in).

I request that written comments on this Consultation Paper may please be furnished to
Secretary, TRAI by 7th August 2003. For any further clarification on the matter, Secretary
TRAI or Adviser (MN) may be contacted at trai07@bol.net.in (Ph No. 26167448) and
jsengg@bol.net.in (Ph No. 26106118) respectively.

(Pradip Baijal)

Chairman, TRAI
Chapter 1

1.10 Introduction

1.1.1 The development of technologies, reduction in wireless technology costs and the growth of these services has led to blurring of difference between different conduit systems such as wireline and wireless and has eventually led to the concept of unified licensing for basic and cellular services. The operation of various services are able to use their infrastructure to deliver services reserved for other operators and thus ensure optimum use of infrastructure.

1.1.2 The concept of unified license for wireline and wireless services including cellular mobile services is prevalent in a number of countries including Australia, Singapore, Malaysia and some EU countries. With the implementation of the recent EU directive dated 7th March 2002, most of the European Union countries would be migrating to a unified license for wireline and wireless services including Cellular Mobile Services.

1.1.3 The Objective of this consultation paper is to examine the various licensing, regulatory and level playing field issues in enabling a Unified License for basic and cellular services.

This consultation paper consists of five chapters. Chapter 1 describes the objective of this consultation paper, brief background on licensing issues and the need for unified licensing of basic and cellular services. Chapter 2 discusses the terms and conditions of both basic and cellular service’s license agreements, which are to be addressed while deliberating the issue of unified licensing. These terms and conditions include inter alia entry fee, service area, level of interconnection with other networks, roll out obligations, spectrum charges, etc. Chapter 3 discusses the practices on unified licensing in some other countries. In case unified licensing for
basic and cellular services is considered acceptable then in view of larger number of licensees providing the same basket of services, there may be a need of considering merger and acquisition of the service providers in the same service area. This, however, does not imply that without unified licensing, merger within the same service area should not be permitted. This leads to the issues related to merger and acquisitions, which are discussed in Chapter 4. This consultation process raises various issues for consideration and they are listed in Chapter 5.

1.1.3 All the stakeholders are being requested to give their opinion on these issues through this consultation process.

1.2 Background

1.2.1 With the formulation of the National Telecom Policy in 1994, the Basic and Cellular Mobile Services were opened to the private sector participation. Licenses were awarded to private operators through a tendering process for operating in a duopoly for ten years.

1.2.2 2.1 First phase of licensing: Monopoly to Duopoly

In the case of Basic Services, one private operator was envisaged to be licensed in every Circle. However, owing to various reasons such as very high bid amount in some cases and certain legal issues, only six licenses could be granted in Basic Services i.e., for the Service Areas of Andhra Pradesh, Gujarat, Madhya Pradesh, Punjab, Rajasthan and Maharashtra. The annual license fee in these cases was decided through a bidding mechanism.

1.2.2.1 In Cellular Mobile Services, duopoly was introduced through a bidding process and forty-two licenses were awarded to private operators for operating Cellular Mobile Services. In some service areas like, Bihar, West-Bengal and Orissa only single CMSP license could be awarded. In case of CMSPs, four metros (Chennai, Delhi, Kolkata and Mumbai) were designated as separate service areas and were excluded from the Circles. The policy stipulated that the technology used for Cellular Mobile must be digital GSM standard.
1.2.3 Second Phase of licensing: Duopoly to open competition / Multi-operator

Due to various reasons a need for new telecom policy was felt, and a New Telecom Policy was announced in 1999. The second phase of licensing started with the formulation of the New Telecom Policy in 1999 (NTP '99). The existing Basic and Cellular Service providers were offered a migration package under NTP'99, allowing them to migrate from an annual fixed license fee to a revenue share arrangement. The amount of licence fees due till 31.7.99 were taken as entry fees. Further, it was decided to have more competition in these services, and one of the conditions of acceptance by the licensee of the terms and conditions contained in the offered migration package, was that the licensee had to forego the rights of operating in the regime of limited number of operators after 1.8.1999 and shall operate in a multipoly regime, that is to say that the licensor may issue additional licenses for the service without any limit in the service area. In the area of Cellular, it was also decided by the government to allow BSNL / MTNL to provide Cellular Services as the third operator. Based on recommendation of TRAI, Government decided to allow one more private operator as the 4th Cellular Mobile Service Provider in each Service Area. The number of cellular operators were restricted to four (including BSNL/MTNL) due to limitation availability of the spectrum. The 4th operator was given spectrum in 1800 MHz band. TRAI vide its letter dated February 20, 2003 had opined that it is in favour of open competition in the different segments of Indian Telecom market. Further, TRAI in the same letter stated that induction of additional mobile service providers in various service areas can be considered if there is adequate availability of spectrum for the existing service providers as well as for the new players, if permitted. The salient features of basic and cellular service license agreements are given in Table 1.
Table 1.1

The main features of the present guidelines/license agreements are tabulated as under:

<table>
<thead>
<tr>
<th></th>
<th>Basic Service Operators</th>
<th>Cellular Operators</th>
<th>Mobile Operators</th>
<th>Comments</th>
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<tbody>
<tr>
<td>**Entry fees * **</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>License before NTP'99</strong></td>
<td>Amount of license fees due till 31.7.99</td>
<td>Amount of license fees due till 31.7.99</td>
<td></td>
<td></td>
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<tr>
<td><strong>New License</strong></td>
<td>The amount specified in the license varies from Rs 2 Crore to Rs 115 Crores depending on Service Area (see Annexure I for details)</td>
<td>Decided on the basis of multi layered bidding process. Varies from Rs. 1 Crore to Rs. 206 Crore (see Annexure I for details)</td>
<td></td>
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<tr>
<td><strong>Annual license fees</strong></td>
<td>8% (Category C circle), 10% (Category B circle) and 12% (Category A circle) of Adjusted Gross revenue</td>
<td>8% (Category C circle), 10% (Category B circle) and 12% (Category A circle and Metro) of Adjusted Gross revenue</td>
<td>Initially after the implementation of NTP'99 License fee for CMSOs was 15% of Adjusted Gross revenue but was reduced to the amount mentioned in this table, when BSOs were permitted to provide limited mobility w.e.f. 25.01.01</td>
<td></td>
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<tr>
<td><strong>Number of players</strong></td>
<td>From duopoly to open competition</td>
<td>From duopoly to four players including BSNL/MTNL per Service Area on the basis of bidding for the 4th operator.</td>
<td></td>
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<tr>
<td><strong>Mobility</strong></td>
<td>Permitted to provide limited mobility within SDCA</td>
<td>Permitted to provide all types of mobile services.</td>
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**BSNL/MTNL have not paid any entry fee**

### 1.3 Need for unified license for basic and cellular mobile services

#### 1.3.1 Convergence of wireline and wireless technologies

Over the last few years owing to technological developments and a reduction in costs, wireless telephony has changed from being a product for the elite to that for a common man. In about 120 countries, the number of wireless phones have already exceeded that of wireline. The cost of establishing a wireless network has become significantly lower than the wireline line, encouraging even the incumbents to adopt roll out strategies based on wireless, as can be seen from the provision of WLL with limited mobility i.e. WLL(M) as well as GSM by both BSNL and MTNL.
Internationally, there is a general move towards convergence/unification of licenses and technology neutrality. In Australia, there is already a common service license for wireline and wireless services including Cellular Mobile Services. However, for acquiring spectrum, an operator has to undergo an auction process. In the EU countries, there is now an EC Directive that mandates abolishing of Service Licenses and envisages an authorization which would allow provision of any telecom services. Another example is Malaysia, where the existing Service Specific Licenses have been migrated to a new structure of layered licenses, wherein wireline and wireless services including Cellular Mobile services can be provided by the same license.

1.3.2 In India, prior to liberalization, fixed WLL technologies such as MARR had been deployed in the local loop by BSNL. These technologies did not have the flexibility of providing mobility. Over time, cellular technologies are also being used for local loop. This has happened owing to the economies of scale and rapid decline of cost per line. Most of the BSOs in India deployed IS-95 based WLL systems. Though these systems were capable of providing mobility, this was not allowed as hand held subscriber terminals for WLL were not allowed as a regulatory restriction.

1.3.3 In 2001, the government permitted the BSOs to provide limited mobility. The BSOs have now deployed CDMA 2000 1x technology, which is capable of providing high speed data access as well. Even prior to 2001, Wireless in Local Loop (WLL) was permitted and no specific technology was mentioned in the license conditions. Between the period March 1998 and 2001 four BSOs (M/s Tata Teleservices in Andhra Pradesh, M/s HFCL in Punjab, M/s Shyam in Rajasthan and M/s Bharti Telenet in Madhya Pradesh) had deployed WLL technologies in their network based on MSC architecture. Even on the Switching side, a number of hybrid switches have emerged which can carry out both the tasks i.e. wireline and wireless switching. Such technological convergence has challenged the basis for the two different regulatory frameworks. There is thus a situation based on technological developments where the country needs to prepare for the future and adopt regulatory regimes that are supportive and not obstructive of the change of technologies.
1.4 **Overlap of Competition:**
1.4.1 Basic (wireline and wireless) and cellular services are now competing with each other. With greater deployment of wireless technologies, competition between Basic and Cellular Mobile Service providers is becoming severe and this market overlap is increasing. Moreover, ongoing technological changes are making it possible for wireline technologies to provide value added services which were earlier not feasible. The availability of low price prepaid cards for both services will further expedite the overlap between these two services.

1.4.2 While this competition is increasing, the license and tariff structure is such that a regulatory limit, for reasons of affordability, has been prescribed for local calls and monthly rentals only for Basic Services. Thus a situation is emerging that while competition among services (technologies) is increasing, their applicable tariff regimes have different conditions.

1.5 **Consumer benefit**
A unified license for Basic and Mobile services could benefit the consumer in a number of ways, as he would be able to:

- subscribe to telecom services at a lower price because of reduction in costs due to economies of scale
- have a single window solution for various kinds of services, including common customer care number.
- receive a common bill,

1.6 **Optimum Sharing of infrastructure and generating efficiencies**

1.6.1 The experience from the other countries shows that overbuilding of capacities can have an adverse impact on profitability and sustainability of operations. It is extremely important for India to avoid duplication of efforts and build efficiencies through a synergy of the existing networks. The introduction of unified licensing would result in reduction of costs as the operators would be able to optimally utilize available resources. The reduction in cost would in turn lead to improved teledensity. The emerging trend of Mergers & Acquisitions to build such efficiencies can now be seen. A common license for both these services would further enhance these efficiencies.
1.6.2 However, it is important to ensure that such efficiencies do not result in market dominance, which in turn may result in substantial lessening of competition. Adequate safeguards would, therefore, have to be built through competition guidelines.

1.7 **Provisions of Limited Mobility Service by Basic Service Operators:**
Government has permitted the offering of limited mobility service by basic service operators within the local area i.e. Short Distance Charging Area (SDCA). Cellular Mobile Service Providers (CMSPs) had challenged Government’s decision of allowing limited Mobility to Basic Service Operators. CMSPs had already raised issues relating to level playing field between CMSPs and BSOs offering limited mobility services. This issue is under consideration of Hon’ble TDSAT.
Chapter 2

Key issues in implementing Unified Licensing

2.1 Currently, separate licence agreements have been signed by Basic Service Operators (BSOs) and Cellular Mobile Service Providers (CMSPs) for these services. Differences among these two licence agreements arise in terms of entry fee, rollout obligations, spectrum allocation & its charges, and terms and conditions of inter-connection. These differences are given in Annexure II.

2.2 For implementation of a unified licensing framework for basic and mobile services, the key issue would be the migration of existing licensees (presently with different terms and conditions) to a single license with common terms and conditions.

2.3 As per the present Basic and Cellular license Agreement, the licensor reserves the right to modify at any time the terms and conditions of the license, if in the opinion of the licensor it is necessary or expedient to do so in public interest or in the interest of security of the State or for the proper conduct of the Service/telegraphs. The decision of the Licensor shall be final in this regard. Additionally, it could be considered that choice of migration to the unified licensing regime is given to the service providers. The detailed terms & conditions of migration package will be required to be worked out. In making the changes it is important to ensure that the migration to the new regime does not lead to a situation that a licensee is treated less favourably as compared to another licensee.

The license conditions of different licenses have been modified from time to time in public interest and for proper conduct of the telecom services. Beginning 1.8.99, both BSOs as well as CMSPs were migrated to the new regime of licence fee. In 2001 the Basic Service Providers were permitted to use hand held subscriber set within the local areas (SDCA) as WLL-Limited Mobile. The amendment dated 25th September, 2001 to the old CMTS license agreement, permitted the CMSPs to provide “Fixed Phones” based on existing GSM cellular network infrastructure in their Licensed Service area. Under the unified licensing regime, the above mentioned CMTS license conditions need to be modified to the extent that the choice of the
technology is left to the service provider. The Cellular Mobile Service Providers were also permitted to use mobile PCOs. The annual revenue share license fees, which was higher for mobile services, was brought down to level of Basic Services i.e., at 8%, 10% and 12% for Category C, Category B and Category A Circles respectively. Also, the CMSPs were allowed to retain 5% of the long distance call charge.

2.4.1 In addition to Basic and Cellular services, licenses of other services have also been modified from time to time, in order to ensure effective competition so that the benefit of technological developments flows down to consumers. For example, in the case of Internet services, the Internet service providers were permitted to provide Internet telephony services. Similarly the access providers were permitted to handover the calls directly to the ILD service providers.

2.4.2 Regarding tariffs, tariffs are forborne for Cellular Mobiles and call charges are forborne for WLL(M). The Interconnection Usage Charges Regulation, dated 24th January 2003, has specified the same termination charges between calls terminating in WLL (M) and CMSPs, except for long distance calls. With the establishment of the USO Fund, both Basic as well as Cellular Mobile Service Providers has the possibility to carry out Universal Service and claim reimbursement from the USO Fund in respect of the obligations carried out.

2.5 Although there exists parity on most issues, there are a number of issues such as difference in entry fees paid by the two types of licensees, and differences in their license roll out obligations and entitlement of spectrum in access network that require to be addressed.

2.5.1 Removing the concept of limited mobility:
With unified licensing basic service operators would also be permitted to offer cellular mobile services. The CMSPs would also be permitted to offer basic service without any technological restriction. However, it does not mean that a company holding license is permitted to directly interconnect across the service areas. This shall remain the exclusive right of the NLDO license in line with the prevailing licensing regime.
2.5.2 Entry Fee:

2.5.2.1 Annexure-II shows the entry fees paid by different service providers. Three different categories of entry fees may be considered. One, for the first six Basic Service Operators and the initial forty-two private CMSPs. The entry fees paid by them before migration to revenue sharing arrangement, w.e.f. 1.8.1999 has been separately indicated. Second, for other basic service providers, the entry fees paid as per DOT’s guidelines have been indicated. For other CMSPs (4th Cellular Operator), the entry fee as decided through a multi-layer bidding process has been indicated. In order to a level playing field introduce a unified licensing regime, we need to take account of the various differences in the terms and conditions among basic and cellular license agreements.

2.5.2.2 In this context, a relevant factor is that the licensing process for 4th Cellular Operator was completed after the limited mobility was allowed to Basic Service Operators. It is, therefore, pertinent to note here that 4th cellular operators participated in the bidding process knowing fully well that basic service operators have been allowed to offer limited mobility service. Also, while the entry fee paid by CMSPs is higher, the BSOs have more stringent roll out obligations. However, the extent to which these roll out obligations have been met is also a point of consideration. Another important aspect to be kept in mind is the large difference in the growth rate for cellular and basic services, which would play a role in spreading the cost of entry fee over the operations of these service providers over time.

2.5.2.3 Another view could be that, even if there is a disparity in the entry terms and conditions, the existing operators have been in operation for almost seven to eight years, which gives them a first mover advantage over new service providers. In general the license fee paid by the fourth cellular operator is much less than that paid by the earlier cellular operators. This may lead to the argument that the operators have already created a niche market for themselves and for that they had paid a premium by way of a higher license fee when compared to a newcomer.

2.5.2.4 Based on the above, the issue for consideration could be whether basic service operators under unified licensing regime should pay higher entry fee.
2.5.3 Service Areas:

The service areas for Basic and Cellular Mobile Service differs to some extent. In the case of Basic Services, three metros, i.e., Mumbai, Kolkata and Chennai are respectively part of Maharashtra, West Bengal and Tamil Nadu circles, but these Metros have been licensed as separate service areas for cellular mobile services for historical reasons. Cellular mobile services in Metros were the first areas to be opened for private service sector. Under the unified licensing framework, the differences in the definition of service areas of basic and cellular services would have to be removed. The following options could be considered:

a) The service areas of these three metros are merged with service areas of respective circles, like for basic services.

b) For basic services also the bifurcation is done as for cellular services, i.e., Mumbai, Chennai and Kolkata be made separate circles.

c) Maintain the status quo for service areas.

2.5.4 Network Layout:

The Network layout/hierarchy is different for cellular mobile and basic services. The concept of local call does not exist in cellular and the level of handover of calls to another networks is also different. This leads to different types of tariffs/charges being applicable to their intra-circle calls.

2.5.5 Roll out Obligations:

BSOs have different roll out Obligations when compared with CMSPs, both in terms of roll out as well as Performance Bank Guarantee. While a BSO in a Service Area is required to provide POPs in all SDCAs within 7 years and that too in an identified ratio of Urban, Semi-Urban and Rural SDCAs, the roll out obligation of CMSPs is to cover 10% of DHQs in the first year and 50% of Districts head quarters in first three years. CMSPs are allowed to cover any town in lieu of DHQ in that District. In the Unified-licensing regime, we will need to address how these obligations should be incorporated? Should the roll out obligation be also imposed on CMSPs? Should the existing roll out obligation be carried over to the new licensing regime.
2.5.6 **Performance Bank Guarantee:**

Performance bank guarantee for basic service operators is 4 times the entry fee paid by service providers and is linked to roll-out obligations spread over 7 years period. For basic service operators the minimum Performance Bank Guarantee (PBG) is Rs.4 crore for the A&N circle and goes up to Rs.460 crores in Maharashtra circle. For CMSPs the performance bank guarantee is Rs.20 crore, Rs.10 crore and Rs.2 crore for category ‘A’, ‘B’ and ‘C’ circles (Please see Annexure III for details). This issue of significantly high differential in PBG amount and its validity period needs to be addressed while framing the terms and conditions of unified license.

2.5.7 **Spectrum Policy:**

In CDMA, spectrum available is 1.25 MHz. Spectrum charges are 2% of AGR for upto 5+5 MHZ spectrum for WLL Services and upto 4.4 + 4.4 MHZ for cellular services. For cellular services additional 1% of AGR is charged for spectrum beyond 4.4 + 4.4 MHZ and upto 6.2 + 6.2 MHZ spectrum and 1% more is charged upto 10 + 10 MHZ. Under Unified licence regime the spectrum allocation and charging for spectrum will be another matter to address in the context of unified licensing.

2.5.7.1 **Issue of Spectrum Allocation**

Presently, BSOs and CMSPs have been allocated spectrum based on their requirements. These allocations vary from one operator to the other. While in case of CMSPs, policy has been specified for allocation upto 10 +10 MHz, in case of BSOs the license stipulates provisioning of spectrum only upto 5+5 MHz.

One important issue is whether to allow the existing operators to carry their spectrum to the new regime and what would be the new terms and conditions? In Malaysia and Singapore, at the time of migration, the existing operators were permitted to retain their allocated spectrum. If the unified licensing regime were made technology neutral, then how would the future spectrum allocations be carried out? Some of the spectrum that is used for CDMA today may also be used for GSM Services in the extended GSM band. In a converged scenario, should the operators be permitted to use the technology of their choice. What should be the basis for allocation of new spectrum? Should it be
through an open competitive mechanism such as auction or on a first cum first serve basis. In the European Union, the present policy for allocating spectrum e.g. 3G, is through an auction. In Australia as well as Singapore, auction has been used even for 2G spectrums. In Malaysia, however, a beauty contest is used for the purpose. In the event that the spectrum originally allocated for one type of technology users (such as CDMA) is allocated to the other then we need to address the issue of spectrum allocation for those operators who at the time of migration would not have got the maximum permissible amount of spectrum reserved for that license.

2.5.8 Level of competition:

Basic Services have open competition while there is a restriction on the number of cellular operators due to availability of Spectrum. Under Unified Licensing regime both the service providers may offer wireline as well as wireless services, and the issue to be considered would be whether the opening of this service sector for further competition is necessary or the number of existing service providers (fixed and cellular both combined together) is sufficient to achieve the required level of competition. It is expected that after introduction of unified licensing regime, consolidation among service providers may take place. The viability of existing service providers, growth of telecom services, conditions of merger and acquisitions, benefits of competition to the consumers are some of the factors which may be considered while deciding this issue. The subject of merger and acquisition has been dealt in more detail in Chapter –4.

2.5.9 Interconnection with other service providers:

Basic and Cellular operators have different network configurations and the level of inter-connection between basic and cellular, and basic and fixed service providers is also different. The termination charges as prescribed in IUC Regulation, 2003 are also different for different type of services. In the Unified Licensing regime this differential in interconnect terms & conditions will have to be addressed because such distinctions may not be sustainable or desirable under unified licensing. Due to the difference in level of interconnection for an intra circle call from fixed to cellular subscriber, an issue of traffic bypass has been raised by BSOs. This too would need
addressing while prescribing interconnection terms and conditions among various service providers under Unified Licensing Regime. There would also be a need to clarify, which service operator is the interconnection provider and which is the interconnection seeker.

2.5.10 **Selection of NLD operator by the Subscriber:**

Another important differential is that for basic service intra circle calls, wherein the subscriber may select another BSO as NLD operator. The same flexibility has not been defined in the existing CMSPs licence agreement. This issue needs to be addressed under the Unified Licence Regime.

2.5.11 **Validity of Licence period:**

Both basic and cellular service license agreements have validity period of 20 years, extendable by 10 years. In a unified licensing regime, we would need to consider the validity period of the unified license agreement and its starting point.

2.5.12 **Numbering Plan:**

If for all services, “Calling Party Pays” regime is applicable and there is a single licence for all services, then is it necessary to retain the existing numbering plan that distinguishes different type of subscribers or should we remove this distinction of number scheme among different type of subscribers, viz. Fixed, cellular and WLL (M). Numbering plan for basic is SDCA based and for CMTS is circle based. This distinction may have to go under a unified license notwithstanding that Government of India has recently issued the revised numbering plan.

2.5.13 **Different Mobile technologies:**

The existing basic service providers are using CDMA technology for offering WLL including limited mobility services. Though CMSPs are allowed to use any digital technology, they are using GSM technology. Under the Unified License various types
of technologies would be used for offering cellular mobile services. Compatibility of these technologies may be an additional issue to consider.
Chapter 3

International Practises on Unified licenses for wireline and wireless services including Cellular Mobile Services

3.1 A number of countries are migrating towards the concept of unified / converged licensing for wireline and wireless services. This has been encouraged due to technological developments, consumer demands, 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.

3.2 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 details of which are as follows:

3.2.1 Network Facilities Providers (NFP) - are the owners of facilities such as satellite earth stations, broadband fibre optic cables, telecommunications lines and exchanges, radiocommunications transmission equipment, mobile communications
base stations, and broadcasting transmission towers and equipment. They are the fundamental building block of the convergence model upon which network, applications and content services are provided.

3.2.2 **Network Services Providers (NSP)** - provide the basic connectivity and bandwidth to support a variety of applications. Network services enable connectivity or transport between different networks. A network service provider is typically also the owner of the network facilities. However, a connectivity service may be provided by a person using network facilities owned by another.

3.2.3 **Applications Service Providers (ASP)** - provide particular functions such as voice services, data services, content-based services, electronic commerce and other transmission services. Applications services are essentially the functions or capabilities, which are delivered to end-users.

3.2.4 **Content Applications Service Providers (CASP)** - are special subset of applications service providers including traditional broadcast services and newer services such as online publishing and information services.

Further, there are Individual, Class and Exempt categories depending upon the type of activity / importance of the individual activity. Malaysia does not have any distinction between mobile or fixed, as the licensing regime is technology neutral. In order to provide these services, there is a need to obtain three licenses (NFP, NSP and ASP). However there are providers such as MVNOs (Mobile Virtual Network Operators) who can have ASP license and can provide mobile services by using the network and services of existing NSP/ NFP licensees.

3.2.5 **License Fee**:

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.

3.3 **Australia**

Upto 1997, three operators (Telstra, Optus and Vodafone) were offering mobile services on GSM networks. The Telecommunications Act 1997 opened the Australian market to further competition, placing no limits on the number of general carrier licences. In 1998, the 800MHz and 1800MHz spectrums were auctioned. General competition laws in Australia prevent a company from using the position in a market in which it has a substantial degree of power to gain an advantage in a more competitive market. 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 telecoms licenses. There is no distinction between fixed and mobile services. The incumbent operator is not required to provide separate accounting for fixed and mobile services. 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 $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.
3.4 **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 guidelines\(^1\) 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”

The entry fees and the license fees depends upon the service to be provided and is generally expressed as a percentage of Annual Gross Turnover (AGTO) subject to a (Footnotes)

\(^1\) Available at http://www.ida.gov.sg
minimum in some cases. Table 3.1 provides the details of entry fees, license fees and duration of license for each service.

Table 3.1: Entry fees, Annual fees and license duration in Singapore

<table>
<thead>
<tr>
<th>Licence</th>
<th>Licence Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>* FBO designated as PTL</td>
<td>Initial Fee: None, Annual Fee: 1% AGTO, subject to a minimum of S$250,000 per year, Licence Duration: 20 years, renewable for a further period as IDA thinks fit</td>
</tr>
<tr>
<td>* Terrestrial telecommunication networks for telecommunication purposes</td>
<td>Initial Fee: None, Annual Fee: 1% AGTO, subject to minimum of S$100,000 per year, Licence Duration: 15 years, renewable for a further period as IDA thinks fit</td>
</tr>
<tr>
<td>* Public cellular mobile telephone services</td>
<td>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.</td>
</tr>
<tr>
<td>* Public mobile broadband multimedia services</td>
<td>Initial Fee: None, Annual Fee: 1% AGTO, subject to minimum of S$1,200 per year, Licence Duration: 10 years, renewable for a further period as IDA thinks fit</td>
</tr>
<tr>
<td>* Public radio paging services</td>
<td>Initial Fee: None, Annual Fee: S$5,000, Licence Duration: 10 years, renewable on a 5-yearly basis</td>
</tr>
</tbody>
</table>

Source: http://www.ida.gov.sg, FBO guidelines

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

3.5 **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
3.5.1 The Authorization directive 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.”

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.”

3.5.2 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
3.5.3 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. 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. Details for selected European countries are given below.

3.6 Finland

3.6.1 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.

3.6.2 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.

3.6.3 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.

3.7 Germany

Germany has been slow to liberalise its telecoms 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 price wars have 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.
3.8 **U.K.**

In U.K, OFCOM the new telecom and broadcasting regulator has been set up and the communication bill is likely to be passed by British Parliament by the end of this year. The draft communication bill abolishes the requirement for licensing the new framework in the draft bill 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.

3.9 **Summary**

A growing International trend is either to abolish the requirement for licensing or to consider the possibility of convergence. In fact, countries like Denmark have already abolished the licensing regime. Ultimately, a situation will come where the concept of service wise license will not be relevant. For example, Directive 2002/21/EC of the European Parliament and of the Council of March 7, 2002, the convergence of the Telecommunications, Media and Information Technology sectors means that all transmission networks and services would be covered by a single regulatory framework.
Chapter 4

Consolidation in the Indian Telecom Services Sector

4.1 The Indian Telecom Sector has seen substantial some consolidation through Mergers & Acquisitions, especially in the Indian Cellular Industry. The License also mentions that TRAI should be consulted in matters of M&A by the licensor

4.2 The present licensing framework defines separate market for basic and cellular services and at a broad level, the policy permits acquisitions subject to competitive safeguards mentioned in the Basic and Cellular Licenses, such as:

4.2.1 No single company/legal person, either directly or through its associates, shall have substantial equity holding in more than one Licensee Company in the same service area for the same service. ‘Substantial equity’ herein will mean ‘an equity of 10% or more’. A promoter company cannot have stakes in more than one licensee company for the same service area

4.2.2 Management control of the licensee company shall remain in Indian Hands transfer of equity inter-se between existing Indian promoters may be permitted, provided the majority Indian promoter continues to hold at least the present shareholding for a period of five years from the EFFECTIVE DATE of LICENCE AGREEMENT.

4.2.3 The merger of Indian companies may be permitted as long as competition is not compromised

4.3 Further, De-merger has been permitted by a recent amendment dated 2/6/2003 of the Clause ‘Transfer of License’ in the respective licenses, which allows a company operating in a number of circles, to separate out their operation in one of the single circle, and then this separate company can be acquired without affecting the other circles where the pre-acquired (parent) company had its operations.
4.4 Under the unified licensing regime, with the emergence of a single entity for basic and mobile service providers, the definition of the market will get widened to include both these services. Also, in the unified licensing regime based on present Licensees, there could be up to 7 eight services providers offering both Basic and Mobile Services in any service area; the number could be higher given that basic service has open competition without any restriction on the number of operators. The detailed guidelines for Merger and Acquisition would have to be prepared for examining the Merger and Acquisition proposals under unified licensing regime.

4.5 Under these circumstances, there might be market requirements for Mergers & Acquisitions amongst the licensees in the same Service Area providing the same service so as to increase the efficiency of Service Providers and improve their financial viability. Internationally, the number of mobile operators are around 3 to 4 in a service area barring a few exceptions such as Hong Kong (6 operators). International practices in this regard are given in Annexure IV The numbers of licensees in the Indian scenario are mentioned in Annexure V.

4.6 Drawing from international practices, one would comment that consolidation amongst the existing operators through horizontal mergers would be likely in a unified license context. Such Horizontal Mergers in the same service area, which are not permitted till date may perhaps be required for the sustainability of the telecom sector. However, a closer look and much tighter controls will need to be observed so as to ensure that competition is not adversely affected.

4.7 Merger can yield significant benefits such as economies of scale or scope and would also provide easy exit policy to inefficient players. There could also be cases that two inefficient competitors may become one effective competitor.

4.8 Guidelines

4.8.1 Many regulators / Competition Authorities have come up with a set of guidelines for permitting Mergers. The various steps taken by the Competition Authorities in the USA while considering Mergers are as under:-
4.8.1.1 Defining the market

4.8.1.2 Identifying market participants

4.8.1.3 Determining market concentration
   - Herfindahl-Hirschman Index (HHI), which provides a yardstick of market concentration

4.8.1.4 Determining the likelihood of coordination
   - (Cartel formation, ability to deter growth of other entities)

4.8.1.5 Conducting a market entry analysis

4.8.1.6 Analyzing internal efficiencies

4.8.2 A need for similar regime / conditions would be relevant also for India. One benchmark for analysing the necessity of Mergers is that the efficiencies resulting from the merger should not be available through just interconnection.

4.9 It is very important in this context to clarify that the TRAI shall continue to take the necessary steps that would ensure level playing field amongst licensees and across licenses.

4.10 Availability of Spectrum:

4.10.1 Individually, most of the cellular operators are facing the constraints of available spectrum. The international practice on the amount of spectrum generally available with the Cellular operators is mentioned in Annexure VI. The cost of rolling out the network and meeting the QOS Standards is a function of available Spectrum also. Efficient utilization of Spectrum is a must for growth of telecom services.

4.10.2 With the merger of service providers in the same service area, the spectrum available with merged entity may accommodate larger number of subscribers as more efficient planning could be carried out.

4.10.3 An important issue for consideration is whether the Spectrum available with individual entities would also be merged, or should the government examine the frequency requirements at the time of takeover.
4.11 International Practices on mergers and acquisitions:

4.11.1 Internationally, the Regulators and Competition Authorities evaluate consolidation in the industry with a viewpoint that it should not result in ‘Substantial lessening of competition’. Practices from some of the countries are mentioned below:

4.11.2 South Korea:
Following the economic crisis in 1997 the Korean mobile industry underwent a period of consolidation with five mobile operators merging into three within a three-year period.

“In December 1999, the largest market operator, SK Telecom, initiated a merger with Shinsegi Telecom by acquiring a controlling share of stakes in Shinsegi Telecom. This proposal was approved in April 2000 by the KFTC, subject to the condition that the total market share of the merger entity be reduced to below 50 per cent by June 2001 and the volume of mobile handsets SK Telecom would be allowed to procure from its subsidiary was limited to 1.2 million sets over a period of five years (2000-2005). At the end of June 2001, SK Telecom (Shinsegi Telecom included) satisfied the KFTC’s conditions by reducing its share of subscribers—partly accomplishing this by not engaging in active marketing in what is a fast-growing market—to 49.7 per cent at the end of June 2001, enabling its merger and acquisition (M&A) with Shinsegi Telecom. On 14 January 2002, the Ministry of Information and Communication gave its final approval of the merger with 13 attached conditions including the opening of the company’s wireless Internet network to competitors, and equal network access rights to content providers and ISPs (Internet service providers).

4.11.3 United States of America

4.11.3.1 In USA, Mergers are generally overlooked by three entities, Department of Justice (DoJ), Federal Communications Commission (FCC) and Federal Trade Commission (FTC). In USA, while examining Mergers, FCC also examines the balance
of other potential benefits or harms. In a unilateral effects context, marginal cost reductions may reduce the merged firm’s incentive to elevate price. Efficiencies also may result in benefits in the form of new or improved products, and efficiencies may result in benefits even when price is not immediately and directly affected.

The merging firms must substantiate efficiency claims so that the Agency can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each would enhance the merged firm’s ability and incentive to compete, and why each would be merger-specific. The Agency considers whether cognizable efficiencies likely would be sufficient to reverse the merger’s potential to harm consumers in the relevant market, e.g., by preventing price increases in that market. Only mergers that would be likely to have the effect of substantially harming or reducing competition should be prohibited. The steps that are taken by FCC and Competition Authorities are already mentioned earlier. A yardstick for measurement of market concentration used in FCC is Herfindahl-Hirschman Index (HHI).

Test for market concentration: **The HHI: A Gauge of Market Concentration**

"The Herfindahl-Hirschman Index (HHI) for any market is the sum of the squares of all the companies’ market shares. If the HHI of a market is less than 1,000, the market is considered "unconcentrated." If the HHI is between 1,000 and 1,800, the market is held to be "moderately" concentrated. Any HHI above 1,800 is thought to denote a highly concentrated market.

- **Market HHIs below 1,000.** If the proposed merger would result in an HHI below 1,000, the Department would perceive the market as still unconcentrated and likely would *not analyze the merger further*.

- **Market HHIs between 1,000 and 1,800.** Where the post-merger HHI would be between 1,000 and 1,800, *any merger that increased concentration by less than 100 HHI points would still be considered as having minimal impact and would not be analyzed further.*

- **Market HHIs above 1,800.** Similarly, in highly concentrated markets (those above 1,800 HHI) any merger that would *increase the already high HHI by 50 points or more would lead to further merger review.*

- **Source:** Competition Policy in Telecommunications, ITU
4.11.3.2 As per the US guidelines, a merger is not likely to create or enhance market power if the following circumstances are met:

a) the allegedly failing firm would be unable to meet its financial obligations in the near future;
b) it would not be able to reorganize successfully under Chapter 11 of the Bankruptcy Act;
c) it has made unsuccessful good-faith efforts to elicit reasonable alternative offers of acquisition of the assets of the failing firm that would both keep its tangible and intangible assets in the relevant market and pose a less severe danger to competition than does the proposed merger; and
d) absent the acquisition, the assets of the failing firm would exit the relevant market.

4.11.4 Australia

4.11.4.1 In Australia, Mergers & Acquisitions are covered under Trade Practices Act 1974. While it is not compulsory for the companies to inform ACCC before Mergers, Mergers if carried out without seeking opinion of ACCC once found to be in contravention of the Trade Practices Act 1974 is subject to penalty. The role of ACCC is to advise the companies on their compliance with the Section 50 and 50 (1) of the Act, and in event of non-compliance stop the Merger, by asking the parties failing which by approaching the court. The following are recognized as the possible anti-competitive effects of Mergers:

a) Horizontal acquisitions may reduce competitive zeal between rivals, e.g. BSO to BSO;
b) Acquisitions in one market by parties, which are rivals in another market, may facilitate coordinated conduct in second or third market;
c) Vertical acquisitions may result in foreclosure of rival suppliers;
d) Horizontal and vertical acquisitions may provide access to commercially sensitive information in relation to competitors; (e.g. holdings in vendors)
e) Horizontal and vertical acquisitions may block potentially pro-competitive mergers and acquisitions
4.11.4.2 Competition concerns are unlikely to arise, where

a) Unless the parties compete in the same market or vertically related markets, competition concerns are unlikely to arise;

b) If combined market share of the companies is small or if there is strong import competition or low entry barriers,

4.11.4.3 ACCC also assesses

a) What is the relevant market?

b) Is the market substantial;

c) Will the acquisition be likely to substantially lessen competition?

4.11.4.4 The following merger factors are analysed by the ACCC in Australia:

(a) Actual and potential level of import competition in the market;

(b) Heights of Barrier to entry;

(c) Level of concentration in the market;

(d) Degree of countervailing power in the market;

(e) Likelihood that the acquisition would result in the acquirer being able to significantly and substantially increase prices or profit margins;

(f) Extent to which substitutes are available or likely to be available;

(g) Dynamic characteristics of the market including growth, innovation and product differentiation;

(h) Likelihood that the acquisition would result in removal from the market of a vigorous and effective competitor;

(i) Nature and extent of vertical integration in the market
Chapter 4

Issues For Consideration

5.1 Should there be a unified license for basic and cellular mobile service in India?

5.2 If a unified license is to be implemented, what changes in the license terms and conditions should be made to bring about such a license, both in terms of entry conditions as well as other conditions during the term of the License?

5.3 How should consistency be achieved within a regime of unified License for basic and cellular mobile regarding the differences in:
   
   a) definition of service areas;
   b) roll out obligations;
   c) performance bank guarantees;
   d) spectrum availability and charges;
   e) interconnection between services,
   f) call carriage/charging;
   g) termination charge regime applicable to different types of calls;
   h) definition of interconnection seeker/provider;
   i) numbering;
   j) mobile technologies used
   j) any other.

5.4 What is the implication of a unified licensing regime for sustainability of the market?

5.5 Unified License may imply a need to facilitate mergers and acquisitions. What conditions should apply for this purpose in respect of:
   
   a) spectrum available with the merged entities
   b) definition of “market” in order to determine whether a merged entity has significant market presence;
   c) conditions that should be specified to ensure that competition is not compromised.

5.6 Should the regulator evolve some specific principles with respect to the number of operators that are desirable to be present in the market;
5.7 What should be the validity period and the effective date of the unified License.
Addendum

1. Revised data has been received from the Licensor correcting the figures of the entry fee paid by Basic Service Operators before migrating to NTP’99 regime. Accordingly, the Table in Annex II of consultation paper is being revised. The Column for BSOs with the heading "Entry fee from Licensees migrated (Amt. in Crores), i.e. Column "G" in the Table should have the following figures in place of those provided at present (for clarity, the corresponding entry in Column (A) and Column (F) which shows the circle and operator to which the data corresponds, is also provided below).

<table>
<thead>
<tr>
<th>Circle (A)</th>
<th>Name of the operator (F)</th>
<th>BSO's Entry fee from Licensees migrated (Amt. in Crores) (G)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP</td>
<td>Tata Teleservices Ltd</td>
<td>161.47</td>
</tr>
<tr>
<td>Gujarat</td>
<td>Reliance Telecom Ltd.</td>
<td>179.09</td>
</tr>
<tr>
<td>MP</td>
<td>Bharti Telenet Ltd</td>
<td>35.33</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>Hughes Telecom Ltd.</td>
<td>532.55</td>
</tr>
<tr>
<td>Punjab</td>
<td>HFCL Infotel Ltd.</td>
<td>177.59</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>Shyam Telelink</td>
<td>29.29</td>
</tr>
</tbody>
</table>

In addition the entry fee payments for a new operator Reliance Infocomm Ltd. in two circles A & N and Rajasthan for the BSO license (not included in our Annexure II of our consultation paper) are as follows:

<table>
<thead>
<tr>
<th>Circle</th>
<th>Name of the operator</th>
<th>Entry Fee Paid (Amt. in Crores.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rajasthan</td>
<td>Reliance Telecom Ltd</td>
<td>20.00</td>
</tr>
<tr>
<td>A &amp; N</td>
<td>Reliance Telecom Ltd</td>
<td>1.00</td>
</tr>
</tbody>
</table>

2. The Authority has also received comments that the scope of the Unified License should be extended to include services such as National Long Distance (NLD), International Long Distance (ILD), and Internet Services. The Authority has already clarified that it is willing to consider all suggestions made in the process of consultations, and would welcome viable proposals for any such issue.