Annexure A

Recommendations of the TRAI on licensing issues relating to Radio Paging Service Providers

I. Background

In India, Radio Paging Service was opened up in 1992 and the Service was commercially launched in the Year 1995. The licenses were awarded on Circle and City basis. In case of circle operations 14 out of a total of 31 licenses awarded, have been terminated. In case of City operations, 106 licenses were awarded for providing service in 27 cities. 15 licenses have been terminated since then. The growth in the initial years was encouraging but of late the industry has been facing fierce competition from other mobile telecommunications sector resulting in rather dismal performance with a current subscriber base of only about 6.6 lakhs. The subscriber base in both city as well as circles has been decreasing. The trend for City and circle Operations is tabulated below:

City Radio Paging Operators					
		Mar'98	Mar'99	Mar'00	Dec'00
Subscriber Base		635536	680880	660510	605231
Growth	(in %age)		7.1	-3	-8.4
Circle Paging Operators					
		Mar'98	Mar'99	Mar'00	Dec'00
Subscriber Base		52899	117025	73152	60889
Growth	(in %age)		121.2	-37.4	-16.7

From this Table it can be seen that after March '99, the subscriber base in both cities and Circles is decreasing.

New Telecom Policy (NTP) 1999 has evolved a new framework, which seeks to significantly redefine the competitive nature of the industry. The policy objectives, envisaged for Radio Paging Service Providers (RPSP), include

- Direct interconnectivity between licensed RPSPs and other type of service provider in their area of operation including sharing of infrastructure;
- Grant of separate license on a non-exclusive basis, for each service area of operation for an initial period of twenty years extendible by additional periods of ten years thereafter,
- Entry of more operators in a service area,
- a one-time entry fee and levy of license fee as a percentage of revenue.

While holding discussions with various stakeholders, TRAI noted that the industry was experiencing a difficult time. According to RPSPs, the single most important reason ascribable to this is the competition from Cellular Mobile Telephone Service. The change in the license terms of the cellular mobile operators and their migration from fixed licensed regime to revenue sharing is said to be the beginning of the RPSPs travails.

While opening the sector, the original plan was to have a license fee regime for both Cellular Mobile Service Providers (CMSPs) and RPSPs for ten years. In the case of RPSPs, the license fee for 10 years was made payable as under:

(A) For Circle RPSPs
annually in the ratio as 1:1:1:1:1:1.2:1.2:1.2:1.2:1.2.

(B) For City RPSPs
Payment of the first three years

1st Year: 1/6th of the three years paging levy,
2nd Year: 1/3rd of the three years paging levy,
3rd Year: ½ of the three years paging levy.

From 4th year onwards the license fee was fixed at 5% of the gross revenue after seeking the recommendations of TRAI.

Under NTP'99 the CMSPs were allowed to migrate to a revenue sharing regime in 1999, and as a result of that the CMSPs have been able to bring the tariffs for cellular service down to a level, not envisaged by the RPSPs while framing their initial business plans. The plea of the RPSPs is that the kind of relief provided to the Cellular industry in the migration package has not been echoed in the package offered to Radio Paging industry with the result that cellular services operators are in a position to charge far lower tariffs than they could have charged under their original licence agreement. The RPSPs, however, are unable to bring their tariffs down enough to have a clear price edge over Cellular Mobile Services. The lowering down of tariff by CMSPs will continue in future also because of mass market enjoyed by cellular mobile technology globally. This entails that CMSPs will continue to create pressure on the Radio paging service market. In order to survive the RPSPs will have to bring down their tariffs in line with the cellular mobile tariffs, find new markets and develop new applications. In today's scenario, with marginal difference between these two services in regard to tariff the RPSPs can hardly compete. Apart from this several other bottlenecks have come to the notice of TRAI. Unlike cellular mobile, there are unavailability of economies of scale and inability to upgrade technology because of sluggish growth in the paging market.

The Authority feels that while it is important to decide on the policy issues pertaining to license fees of new operators and the migration of the existing one, it would also be desirable to attend the issues that are driving the industry down towards unsustainability. The TRAI has tried to address at least some of these issues, while making these recommendations.

II. Context

The New Telecom Policy 1999 (NTP-99) envisages that the Radio Paging Service Providers (RPSP) shall be granted separate licence on non-exclusive basis for each service area of operation. Pursuant to the provisions of NTP 99, the Government of India has sought[1] TRAI's recommendations on the (a) appropriate level of entry fee, (b) percentage of revenue to be shared with the licensor for different service areas of operation,(c) definition of revenue for the purpose (d) the basis of selection of new operators and (e) any other issues considered relevant by TRAI keeping in view, the objectives of NTP'99.

Further, DOT vide their letter no. 843-119/98 – BS III dated 20th Sept, 1999 has informed that

"pursuant to the announcement of New Telecom Policy 1999 and in view of the offer of migration to NTP-99 Regime given to City and Circle Radio Paging Service Licensees, the Government have now taken the following decisions

(i) Permit migration of existing licensees of Circle Radio Paging Service Licensees (for the Circles Andhra Pradesh, Gujarat, Maharashtra, Karnataka, Kerala, Tamilnadu, Himachal Pradesh, Punjab and Haryana) to NTP-99 regime as per an offer of migration. Under the Scheme of Migration, Govt. may issue additional licences in these circles in the vacant slots as also new licences as per the migration package in these Circles. The issue of more licences in a service area shall be based on the availability of spectrum and on the recommendations of TRAI who would review this as required and not later than every two years. For City Radio Paging Service, migration package is not being implemented as all licensees in none of the service area have accepted the package migration offer.

(ii) The bids for these vacant slots as also for new licences will be invited as per NTP-99 regime i.e. one time entry fee plus percentage share of revenue as licence fee. Decision on the percentage share of revenue will be taken on receipt of TRAI recommendations.

(iii) The cut off date for change over to NTP-99 regime for the existing circle paging service providers (in whose case the package is being implemented) will be 1.8.1999. Starting from this date, the percentage of gross revenue to be paid towards licence fee will be same as would apply in future to the new licensee(s) in the same service area. The licence fee dues payable upto 31.7.1999 would be treated as the Entry Fee for the existing operators. The new operators will bid for the Entry fee."

While conveying the decision of the government, the letter sought the following recommendations from TRAI:

- Licensing fee arrangement (revenue share) as also the definition of revenue for this purpose for the existing Circle Radio Paging Service Licensees (in whose case the migration package is to be implemented) to be made applicable to them on migration w.e.f. 1.8.1999 (the same percentage of revenue share will be made applicable to the new licensees of Circle Radio paging service).

In arriving at its recommendations, TRAI has, followed a public consultation process. A consultation paper titled 'Licensing Issues relating to radio paging Service providers" was released on December 6, 2000 and subsequently open house discussions were held at Mumbai, Kolkata, Delhi and Hyderabad. Discussions were also held with the stakeholders separately during the process. Main issues are discussed in the following sections, along with our recommendations on each.

III. RECOMMENDATIONS

The recommendations that follow have been made under two Heads:

A. Relating to the 9 Circles in which migration is being permitted to the (Circle) operators and in which new operators are to be permitted.

B. Recommendations on other relevant issues.

A. <u>Recommendations relating to 9 circles in which Migration is being permitted.</u>

A.1 Entry of new operators

A.1.1 Basis of Selection

TRAI is firmly of the view that competition is in the best interests of the consumer and TRAI would prefer to let the market forces determine the number of Radio Paging Service Providers in any service area subject to the limitations imposed by the quantum of frequency i.e., spectrum available for the service. The TRAI is also of the view that the market is self-limiting and will determine the number of players. During open house discussions and written comments, the existing operators expressed their reservation on the entry of new operators because of the poor financial viability of existing ones. Even then, with the proposed modifications in license terms & conditions, the Authority considers that limiting competition artificially would not be in the best interest of growth of this service in the long term.

A1.2. Entry Fee

In terms of the existing licence conditions, there is at present, no requirement of Entry Fee. Having made a provision in these recommendations for a Bank guarantee to eliminate non-serious players, TRAI is of the view that no separate Entry Fee need be stipulated for the new entrants. In this context TRAI has taken note of the fact that some circle operators who would be migrating to the revenue sharing regime have paid for the pre 31.7.99 period their license fees which is to be reckoned as entry fee. However, the fact in the opinion of TRAI, is not enough to stipulate a similar entry fee for all new entrants. After all, the concerned licensees have reaped the advantage of being early entrants into the market and obtaining a lead in the business over all those who follow.

A.1.3 Exclusion of non-serious players from the Market:

Although, in the interest of promoting competition, the TRAI would not like to prescribe any entry fee in this area, it strongly believes that steps are required to be taken to eliminate non-serious players. This can be done by stipulating suitable Roll Out Obligations for the service providers and ensuring that failure to meet these Obligations leads to penalties ending in the cancellation of the licence and withdrawal of permission to use frequency spectrum. Therefore, to eliminate non-serious players, the TRAI recommends that the licence should contain strict conditions obliging the service provider to cover the entire service area as per license agreement. The performance of the Roll Out Obligation will have to be backed by a Bank guarantee of Rs. 5 lakhs for each circle, which will be invoked in the event of the service provider failing to fulfill his obligations. Non-fulfilment of the Roll Out Obligation will initially result in a penalty of Rs. 1000 per week of delay or part thereof upto a maximum of Rs 25000/-. Non-fulfilment of Roll Out Obligation after 25 weeks of delay will lead to cancellation of the licence and forfeiture of the Bank guarantee.

A.1.4. Rollout obligation and release of Bank Guarantee:

The Bank guarantee for fulfillment of the Roll Out Obligation provided by a RPSP will be released on successful completion of the Roll Out in accordance with the terms of the licence. The radio coverage within the service area should be such that pagers get a signal of sufficient strength to ensure a good quality service. As stated earlier, for delays in commissioning of service, penalty is to be prescribed. Non-fulfillment of Roll Out Obligation even after the maximum margin of delay permissible i.e. 25 weeks, will lead to forfeiture of the entire bank guarantee and may result in cancellation of the licence.

A.2 Licence Fee

In July 1999, TRAI had recommended to the government a license fee as 5% of revenue share for City Paging Operators. In arriving at these recommendations TRAI had carried out detailed viability analysis in respect of ten operators. It was revealed by that analysis that for a radio paging service to be economically viable its operating ratio (Operating Expense / Network revenue) should be in the region of 60%. So far, operations of neither city operators nor the circle operators have proved to be profitable as none of them has been able to achieve an operating ratio of 60%. Most of them are far above this level and the position of circle operators is worse than that of the city operators. The customer base that they have been able to develop has remained limited and in some cases the number of customers and network revenues have begun to fall. A sample study of six circles revealed that none of the operators has been able to earn profit and also none of them could achieve operating ratio any better than 100%.

Keeping in view the existing status of the Radio paging Industry, the Authority is of the view that the license fee for the new entrants as well as the existing operators should be not more than 5% of the gross revenue from the service. This amount will go towards Universal Access Levy (UAL) with the additional provision that it may be left unchanged for the next five years even if within this period the UAL is revised upwards.

A.3. Definition of Revenue

The definition of revenue will be the same as already given in TRAI's recommendations in respect of other service providers viz. N.L.D operators, fixed service providers, CMSPs, PMRTS Operators and VSAT service providers. TRAI considers that to be a common definition for all service providers unless it states otherwise in any specific case.

A.4. Recommendations in respect of existing circle service providers in the nine circles for which migration package is to be made effective.

A.4.1. License fee and definition of revenue

The license fee payable by the existing circle service operators will be the same as the new operator i.e., 5% of the gross revenue. The definition of revenue shall be the same for all operators.

A.4.2. Pre migration license fees.

The existing Radio Paging Service Providers, in circles, have had the advantage of an early start, have established a brand name and a customer base. However, the performance in these years has not been encouraging and both their subscriber base and the revenue have been falling. This has resulted already in termination / surrender of quite a few licenses. Under these circumstances charging a small share of their revenue as license fee is likely to help them in restructuring and reviving their business. In so far as their license fee obligations for the pre 31.7.99 period is concerned, while the Authority does not recommend any waiver or reduction therein, it is of the view that considering the delay in the pickup of their business which has resulted in their missing targets in respect of revenue generation and profitability substantially, they may be permitted to clear their dues over an extended period, say 3 to 5 years depending upon the amount due and the likely revenue generation in the coming years. However, they may be required to pay an interest on the outstanding amount. A suitable rate of interest as determined by the licensor may be levied. An easy license fee regime along with some support in clearance of past dues can provide most of the RPSPs opportunity for revival. A review can be undertaken after five years.

B. Recommendations on other relevant issues

B.1. Revenue Sharing with Access providers

Some of the stakeholders have desired that the PSTN operator should share his revenues with RPSPs as the duration of the calls made are much below the 180 seconds for which the PSTN operator charges the customer and also as most of the paged messages result in a return call. The PSTN operators are apprehensive about such sharing arrangement and they contend that the local call tariffs do not have any margin built in which can be shared. PSTN operators also felt that low duration paging call may not significantly affect the call charges. However, they were agreeable to consider a revenue share in case the incoming paging calls are charged more than a local call charge i.e., local call plus a surcharge for terminating the call in the paging network. While this arrangement which is similar to Calling Party Pays arrangements, may generate higher revenue per call it could as well lead to further decrease in number of calls as the customer may find other options like cellular more price competitive.

In the TRAI Consultation paper on Telecom Pricing dated September 9 1998, the issue of such revenue sharing was raised and discussed in the public consultation process. At that time DOT (now BSNL) had objected to the arrangement as according to them metering of paging calls could not be separated from that of other local calls in the system, which made implementation of a revenue sharing regime as proposed in the TRAI consultation paper non feasible. However, now the paging calls are prefixed with digits ‘96’ and it may, therefore, be technically feasible to introduce a separate metering scheme for paging calls in the Local exchanges of Basic Service Operators (BSOs) / Mobile Service Operators (MSOs). TRAI also considers that there is considerable merit and economic justification behind the RPSPs request, that in view of the substantially lower average duration of paging calls and incidences of return calls generated, they should be allowed to share at least a small portion of the call charge. While not recommending any particular share, TRAI recommends that Paging operators and other Basic & Mobile service operators may work out a revenue sharing arrangement through mutual negotiations.

B.2. Upgradation of the existing paging network to state of the art digital technology

The Authority has noted that most of the operators have POCSAG technology deployed in their network. As this is an analogue technology & has a limited range of supplementary services and poor spectral efficiency, the operators should try to induct state of the art digital technologies like Flex, ERMES etc. These technologies apart from being spectrally efficient would bring down network costs accruing from economies of scale internationally. In addition, it would enable operators to introduce a host of supplementary services such as two way paging, higher channel capacity etc. This in turn would help in marketing their services better and improve their financial performance. During the discussions with the stakeholders, they expressed their inability to fund such up gradation to digital technology in light of their diminishing market share because of migration of their subscriber to Mobile Service Operators & ongoing financial losses. The Authority, however, feels that the operators should be able to make some further investments to protect their current investments. With the recommended relief and by concerted efforts to develop fresh markets for this service the operators would be able to induct state of art digital technologies.

B. 3 Connectivity between licensed RPSPs and any other Service Providers in their area of operation

In the existing arrangement, RPSPs are interconnected with BSNL and MTNL networks either through leased line or through Direct Exchange Lines. Since the Basic Service Sector has been opened to private FSPs, who are permitted to have direct interconnectivity with all service providers in the service area, there is likely to be sufficient competition in various areas of operation that will enable more favourable interconnection terms and conditions to the RPSPs including revenue share or a mutually agreed upon pager termination charge. Further, RPSPs can have direct interconnectivity with CMSPs. Connectivity with ISPs with mutual agreement may also facilitate growth of more innovative services. Such connectivity with ISPs can enable the paging service provider to offer services like forwarding e-mails on pager, through the Internet.

B.4 Roaming between Radio Paging Service Providers in different service areas

Pager instruments are factory designed for a specific operator depending upon its frequency of operation. In some countries synthesized Pagers were inducted which could be tuned in the field for different frequencies. However, these could not capture a significant market. The market at present is mainly dominated by Pagers, which are frequency specific. Because of frequency specific pagers, it has been difficult to provide seamless roaming of paging subscribers from one service area to another. There is no doubt that offering of roaming facility will add considerable value to the existing paging services. Therefore, **the Authority recommends that while allocating frequency spectrum to new paging service providers the objective of providing roaming between different service areas may be kept in view**. Also, among the existing service providers (both city and circle operators) wherever feasible, the operators may be encouraged to come to technical / commercial arrangements for roaming. In addition to dial up circuits through the PSTN, the paging networks in different service areas may be interconnected through the Internet, to provide seamless roaming across widely dispersed geographical areas.

Annexure C

CONSULTATION PROCESS

TRAI adopted a consultative approach in formulating its recommendations on the Licensing of Radio Paging Services. Intensive discussions were held with stakeholders, and the issues as well as the options that emerged served as useful inputs to the TRAI. To have an insight into the state of the industry, a detailed analysis of the financial viability of the radio paging operators was conducted internally based on the data received from the Radio Paging Service Providers. The analysis inert-alia focused on the effect of subscriber base on operating expenditure, impact of license fee on financial viability and capacity utilization of the industry.

A Consultation Paper was released for public discussion in December, 2000, which noted the existing problems faced by the Radio Paging industry, conducted a viability analysis under different scenarios, and also addressed issues relating to revenue share and other license conditions. The paper raised 19 specific questions on issues like level of competition, selection criteria & entry fee, viability of radio paging services, license fee structure etc and invited public opinion on them. Based on the paper, Open House Discussions were held at Delhi, Mumbai, Calcutta and Hyderabad in the month of January-February 2001. These open houses served as a forum for in-depth discussions on the areas of concern. Written comments were also received on various issues from the stakeholders.

The major issues that elicited maximum discussion were the poor financial viability of the Radio paging operators and their existing license fee obligations. Concerns were expressed regarding the dwindling subscriber base of Radio Paging, especially in the context of the recent developments in cellular technology and substantial reduction in the cost of cellular mobile service. The existing operators demanded that they be provided terms and conditions similar to the new entrants i.e., they should either get a refund of their license fee or there should be an entry fee for the new operators. The Open House discussions also focused on whether growth of the Radio Paging industry could be enhanced through technological upgradations, value addition to the service and marketing innovations. There is a general inhibition amongst the service providers to carry out upgradations at the present time when the industry is in a bad shape. The Radio Paging Service providers also demanded revenue share from the PSTN charges, which the BSOs agreed to share if allowed to charge a premium above the existing rates.

The response received by TRAI from the consultation process was overwhelming and the feedback in this process has been one of the most important inputs in finalizing the recommendations.