TELECOM REGULATORY AUTHORITY OF INDIA

Recommendations of the TRAI on License Fee for Radio Paging Service Providers in Cities for the license period from fourth year onwards.

Dated 15th July 1999

Context for the recommendation

1. The Telecom Regulatory Authority of India (TRAI) received a reference from the Department of Telecommunications (DOT) *vide* its letter No. 16-45/ 97-LF, dated 6th July 1998, seeking TRAI's recommendations on the quantum and structure of license fee for Radio Paging Service Providers in Cities for the balance period from 4th year onwards. On a clarification from the TRAI, the DOT stated that the reference may be deemed to have been made under Section 11(1)(o) of the TRAI Act.

Recommendations

2. On the basis of a majority decision (6:1) and for reasons spelt out in detail in the attached Explanatory Note, which is in turn based on the viability study of the radio paging service providers in the cities, TRAI makes the following recommendations to the Government on the license fee structure for the radio paging service providers in cities from the 4th year upto the end of the license period of 10 years:

a. The license fee should not be more than 5 per cent of the network revenue;
b. The network revenue for the purpose of license fee shall be the gross revenue derived from the licensed activities, which will include revenue on account of value-added services and supplementary services. It will not include proceeds of any service tax collected by the service provider, and passed on to the Government. It will also not include revenue on account of sale of handsets. In case, however, the service provider subsidises the sale of handsets by giving rebate on the rental tariff, the revenue thus 'foregone' will be added to the gross revenue. Revenue 'foregone' will be the difference between the purchase price by the radio paging service provider and the sale price to the subscriber. Purchase prices will be inclusive of the sales tax, if any.

Explanatory Note

Recommendations on License Fee for Radio Paging Service Providers

Section -I

Introduction

1. Radio Paging Service (RPS) is one of the value-added services, which was opened for private investment in 1992. After the first commercial launch in March 1995, Radio Paging Service is now available in 27 cities and 12 states in the country. Except for Madurai and Coimbatore (which has two service providers each), all other cities where paging services are available have three or four operators. There are two regimes of the license fee for paging service operators - one for the Cities and the other for the Circles. For the cities, the license fee levied for the first three years was to be paid in three instalments with a provision for review and revision for the fourth year onwards. In contrast, for the Circles the license fee was fixed at the initial stage itself for the entire ten-year licence period.

2. Radio Paging Service was licensed on the basis of open tenders. For determining the quantum of license fee, the highest bid (H-1) was accepted, and all the other bidders were asked to match the H-1 bid for taking up the service license. This helped in introducing multiple paging service providers in each city, and also in maximising the revenue generation prospects for the Government from the license fee. Though the prospective paging service providers agreed to make payment of the license fee at that time, based on the H-1 bid, almost all the service providers found it difficult to pay the committed license fee even after three years of operations. Estimates about the size of the market at the time of the bidding have not materialised. This is a major reason for the current state of the industry.

Reference from the DOT seeking TRAI's recommendations

3. As per the license agreement for the Radio Paging Service Providers in Cities, the license fee, based on the bid amount, was spread over in the ratio of 1: 2: 3 for the first three years of operation. **Condition 18.2 Part III, Schedule C of the License Agreement envisages review and refixation of licence fee from the 4th year onwards, based on turnover.** A reference was received from the DOT seeking TRAI's recommendations on the revised license fee structure for these service providers. On a clarification from the TRAI, **the DOT stated that the reference be deemed to have been made under Section 11(1)(o) of the TRAI Act**.

Section - II

The New Telecom Policy 1999

4. The New Telecom Policy (NTP) 1999, enunciated by the Government in March 1999, envisages creating an environment for continued investment in the telecom sector for speedy augmentation of communication infrastructure. The key objectives of NTP '99 include:

- Access to telecommunications for achieving social and economic goals of the country;
- Availability of affordable and effective communications for the citizens;
- Encourage development of telecommunication facilities in remote, hilly and tribal and uncovered areas of the country and provision of high-level services capable of meeting the needs of the country's economy;
- Create a modern and efficient telecommunications infrastructure taking into account the convergence of IT, media, telecom and consumer electronics and thereby propel India into becoming an IT superpower;
- Transform in a time bound manner, the telecommunications sector to a greater competitive environment providing equal opportunities and level playing field for all players and enable Indian Telecom Companies to become global players.

5. **One of the important policy parameters of the NTP '99 for achieving the above objectives is the shift from the present up-front licence fee regime to that of revenue sharing. The new Policy has, however, not laid down any guideline for fixing the one-time entry fee or for license fee as a revenue share on annual basis.**

Policy Approach to the levy of License Fee

6. A license fee structure should normally be linked to the policy objectives that the licensing system intends to sub-serve. High license fee could be for augmentation of State's budgetary resources. But this does not appear to be among the objectives of the NTP. High license fee will reflect in increase in costs of providing the services to the consumer, having an adverse impact on the important affordability objective of the Policy. The other objectives of license fee could relate to mopping up of any rents likely to accrue (if there is a limited

competitive market), eliminating non-serious players through high entry costs, and / or recovering the cost incurred in issuing and administering a license. Levy of high license fee is useful if the policy objective is to regulate scarce resources.

7. **A survey of license fee for the paging industry in other countries reveals that most of the countries in the Asia-Pacific region have either no license fee or if there is one, it is a small percentage of the revenue.** In Thailand, the license fee for paging is at present around 3 per cent of the revenue but the same will be reduced to 1 per cent of the revenue by the year 2000. In Singapore, similar arrangement for the license fee has been made. South Korea does not have any license fee as such, but the operators have to pay a cess for the R & D at the rate of 6 per cent of the revenue. In China there is no license fee, but the operator has to pay one-time wireless charge, which is close to $ 12,000 per channel. In Taiwan, the operators have to pay some charges for the wireless and 1 per cent of the revenue towards license fee. Table summarising the license fee arrangement in some countries of Asia-Pacific region is at **Appendix – I.**

8. In most of the countries the idea behind low entry/ license fee is to recover the cost of administering a license and keep out fly-by-night operators. This is also in consonance with the world-wide economic environment of lowering the entry cost in telecom service. Article 11 in the Directive No. 97/13/EC of the European Community (EC) specifically deals with Fees and Charges for individual licenses under the common framework for general authorisations and individual licenses in the field of telecommunications services. It requires the Member States to ensure that any fee imposed on licensees as part of authorisation procedures seeks only to cover the administrative costs incurred in the issue, management, control and enforcement of the applicable individual license. Such fee should be proportionate to the work involved. The directive requires the Member States to review their existing systems of calculating and collecting license fee so as to make them compliant with this directive.

9. Radio paging service market in India is fairly competitive given that in most of the cities there are 3 to 4 service providers. Obviously, therefore, there is little or no scope for rental gains. Ideally the license fee on the service should be confined to collecting the cost of issuing and administering these licenses. This would mean a nominal licence fee. This approach is already reflected in the paradigm shift witnessed firstly in the licensing for Internet Service and now in the New Telecom Policy, 1999. The policy for Internet Service Providers (announced in 1998) prescribed a nominal license fee of Re.1 for the Internet Service, which is capable of providing two-way data/ message communication. **Since the Radio Paging is capable of only one-way message communication, it deserves similar consideration for low license fee**.

10. In this respect, the TRAI has chosen a middle path keeping in view the major policy objective of the NTP ‘99 of developing a world class telecom infrastructure and provision of telecom services at affordable prices. **The TRAI has, on the basis of the viability study, chosen to recommend a level of revenue sharing, which will, on the one hand, provide incentive to the industry to invest and develop the sub-sector and, on the other, make the service affordable.**

Section -III

Viability Assessment Study by the TRAI

11. On the reference of the DOT, the Authority decided to undertake a detailed viability assessment to review the financial performance of the Radio Paging Service Providers during the first three years of operation. **Based on the viability study of the radio paging service providers in the cities, a Consultation Paper was issued by the TRAI on 21st December 1998 (enclosed as Annex -A), which was based on sample data of 10 paging service providers operating in the cities.** These service providers covered almost 85 to 90 percent of the total paging subscriber base in India. Salient findings of this study are summarised in **Appendix -II**. It would be appropriate to mention here that the TRAI had started the study to review actual performance of the radio paging service providers for the first three years of their operation in the context of the tariff re-balancing exercise, even before the reference from the DOT was received. This was prior to the

publication of the New Telecom Policy 1999. As mentioned earlier (Para 5), the New Telecom Policy 1999 has not laid down any guideline on how to determine quantum of the license fee. **The TRAI's recommendations on the quantum of license fee is based on the above Viability Assessment Study.**

12. Views of the representatives of the DOT, Service Providers, Consumer Organisations, Banks and the Financial Institutions on the Consultation Paper, refereed to above, are enclosed at **Annex - B**.

Framework for quantification of license fee

13. **Since paging service is a new service in India, no authentic benchmarks on performance parameters for the paging industry are available.** The ratio of 'operating-expenses' to 'network- revenue' is one of the profitability ratios, which is often used to measure operating efficiency of a company and so, can be adopted as an indicator for performance. Operating expenses include costs towards network operations, resource charges for PCM links, repairs and maintenance, salaries and wages, insurance, sales promotion and advertisement expenses, personnel and administrative overhead. The interest charges and return on equity would represent capital costs apart from depreciation.

14. During consultations, Banks and Financial Institutions suggested that the radio paging service providers are capable of achieving operating ratio of around 50% without interest, depreciation and license fee. With more efficient operations, sustainable operating ratio of 40% could also be achieved. IPSA was, however, of the view that the operating ratio should be around 60%. The break-up of operating ratio in terms of salaries / wages, administrative expenses, and dealers' commission etc. was roughly indicated as 40 %, 40% and 20%, respectively of the total operating expenses.

15. The Telecommunication Tariff Order, 1999 stipulated monthly rental ceilings of Rs. 300 and Rs. 175 for the Alphanumeric and Numeric service, respectively. Sensitivity analysis with different percentage share of revenue as license fee based on the new tariffs is contained in **Appendix –III**. **The analysis reveals that in case the license fee is pegged at @ 10% of the network revenue, eight out of the sample size of 10 operators would find themselves financially unviable at the normative operating ratio of 60%. If the license fee is levied @ 5% of network revenue, less than half of the operators of the sample size seem to be making profit during 1999-00 on the normative operating ratio of 60%.** The situation, however, improves, during the year 2000-01 onwards when majority of operators seem to be making profit at the license fee level of 5% of the network revenue, whereas at 10% of network revenue of license fee the situation does not seem to improve even at this normative operating ratio of 60%. But operating ratio of 60% does not seem to be possible for most of the operators in immediate future, as during 1997-98 some of the operators showed operating ratio as high as 163%. Thus, it will take some years for the service providers to achieve operating ratios close to the normative level. **In the circumstances that the operators are not able to achieve a reasonable operating ratio, high license fee would further impinge on the viability of the operators and would affect network expansion. There is, therefore, justification in keeping the license fee low, not exceeding 5%. This quantum of license fee should be for the balance period of the license for the radio paging service providers in the cities. This would ensure predictability and security of the license fee regime, and would foster investment in the sector. Since it is proposed to constantly monitor the financial / accounting results of the service providers, in case the service providers are seen to be making unreasonably high profits in the coming years, the tariff can be revisited and lowered, so as to pass the benefit to consumers.**

16. In the above context Mr. R.R.N. Prasad, Member, TRAI felt (**Dissent Note at Appendix -IV**) that since the license fee for the first three years was based on the business case analysis of the radio paging service

providers themselves and that there was adequate growth in the subscriber base to the extent of about 53% during this period, the licensor would be justified in expecting a higher license fee from the fourth year onwards, which, according to Mr. Prasad, should be fixed @ 10% of the network revenue. He also felt that the financial woes of paging service providers were mainly due to inefficient operation of their network i.e. under-utilisation of capacity and excessive overheads. In this context, he stated that the normative operating ratio of 40% was a reasonable operating ratio, and so could be adopted for quantifying the license fee as a share of revenue.

17. **Majority of the Members felt that the licensor's "expectation" for future license fee to be linked to the first three years' of license fee could not be made a basis for recommendation on the license fee, given the fact that license fee @10% of the revenue, as suggested by Mr. Prasad, would not improve the financial viability of the radio paging service providers in the cities.** Besides, in the absence of an efficiency audit, it is difficult to subscribe to a definitive conclusion that the present plight of the service providers is due to their inefficiency. **The study does, however, reveal that under-utilisation of capacity and excessive overheads (which are two sides of the same coin) was due to the fact that the actual subscriber uptake during the first three years was far below the projected levels.** More to the point is the fact that efficiency is a function of the degree of market competition and cannot be brought about solely by regulatory fiat or by imposing license fee of unsustainable level. FIs' viewpoint during consultations on this issue was that benchmarking the operation at 40% of operating ratio may be appropriate, but only when the service providers are able to achieve an optimum level of capacity utilisation. This will happen only over a period of time.

18. The growth of subscribers in initial years in percentage terms may appear to be substantial, as the base figures are very small. The real business case gets depicted only if the service provider is able to acquire adequate number of subscribers to achieve optimum level of capacity utilisation. The study also reveals that the growth in the initial years even though significant was not enough to provide a sufficient basis for viable operations. It was substantially below the subscribers' base projected by the service providers. An analysis of the data on the projections made by three operators (Operator B, I and J) for the period 1995-98 and their actual subscribers' growth shows the following:

PAGING SERVICE PROVIDER	**1995-96**			**1996-97**			**1997-98**	
	Projected	Actual	Achieve-ment (%)	Projected	Actual	Achievement (%)	Projected	Actual
B	91000	-	**-**	140000	10177	**7.3**	180000	12877
I	146200	27179	**18.5**	229300	103541	**45.2**	322400	170000
J	61500	31000	**50.4**	86000	53000	**61.6**	110500	53000
Total	298700	58179		455300	166718		612900	235877

In other words, the available data for 3 operators (out of the sample size of 10 operators) above reveals that their achievement in terms of combined subscribers' base as on 31.03.98 was only 38.5% of the projected subscriber base. A similar trend exists in the growth rate of other 7 operators of the sample size.

19. **The network revenue for the purpose of license fee shall be the gross revenue derived from the licensed activities, which will include revenue on account of value-added services and supplementary services. It will not include proceeds of any service tax collected by the service provider, and passed on to the Government. It will also not include revenue on account of sale of handsets. In case, however, the service provider subsidises the sale of handsets by giving rebate on the rental tariff, the revenue thus 'foregone' will be added to the gross revenue. Revenue 'foregone' will be the difference between the purchase price by the radio paging service provider and the sale price to the subscriber. Purchase prices will be inclusive of the sales tax, if any.**

Appendix-I

COMPARISON OF PAGING SERVICE IN VARIOUS COUNTRIES

COUNTRY	**LICENSE FEES**	**SUBSCRIBER CATAGORIES (In percentage)**		**LICENSE FEE IN A METROPOLITAN CITY PER YEAR**
		NUMERIC	**ALPHA-NUMERIC**	
S. Korea	No License fees. On Criteria for selection, spend on R&D 5-10% Operators lobbying for reduction	99	1	No License Fee $ 650K Committed to R&D
Taiwan	NT $ 57,500 (1.8K) per channel (ch) islandwide NT $ 25,000 ($ 750) per ch North NT $ 14,000 ($ 430) per ch Central, NT $ 17,000 ($ 530) per ch, South Plus 1% of Revenue per year	98	2	$ 92 K
Thailand	3% of revenue plus B 1M ($ 25K) new entrant one time fee	1	99	$ 306 K
Singapore	3% of revenue to be reduced to 1% of revenue by year 2000	90	10	$ 265 K

Malaysia	RM 15,000 ($ 4K)/yr/yr/ch RM 250 ($ 67)/yr/base stn RM12 ($3.2)yr/subscriber	75	25	$ 325 K
China	City wide operator $ 12K/yr/ch	70	30	$ 12 K
Hong Kong	HK $ 100 ($ 12.9)/sub/ Year	5	95	$ 1.25 M
Philippines	500 P ($ 14.4) per transmitter/year	2	98	$ 216

Appendix-II

Salient Findings of the Viability Assessment Study for the Radio Paging Service Providers in the Cities

The study of the Viability Assessment Study for the Radio Paging Service Providers in the Cities revealed that

- the capacity utilisation of the existing network (based on the network capacity and the number of subscribers) of most of these paging operators has been low (between 6 to 30 percent). At the time of bidding, these operators had projected the capacity utilisation for the first three years of the operation in the range of 35 per cent to 80 per cent. Only one operator of the sample reported network capacity utilisation between 55 to 65 per cent during the years 1996-98.
- Most of the operators reported net loss during the first three years. The loss reported by the Operator with capacity utilisation of 55 to 65 per cent was also about Rs. 15 Crores in 1997-98.
- Average Capex per average number of subscriber during 1996-98 was around Rs. 3385.
- Average network revenue per subscriber per annum during 1996-98 has been around Rs. 2159.
- Average license fee as a percentage of the network revenue during 1996-98 was 47 per cent.
- Operating cost of these operators has been very high. Ratio of operating cost to the network revenue in 1997-98 had median of around 163 per cent; the situation in 1996-97 being worse.
- The largest component of the operating expenses, excluding the license fee, has been salary and wages, and the expenses on the personnel overheads, with a median between 64 to 65 per cent in 1997-98.
- Advertisement and publicity expenses accounted for roughly 15 per cent of the network revenue.
- Debt equity ratio of the ten operators as on 31.3.1997 had a wide variation. The license agreement stipulates debt-equity ratio of 2:1.
- Bad debts were reported in the range of 3 to 15 per cent of the network revenue during 1997-98.

Appendix - III

TABLE - 1

Estimated Profit/Loss on the basis of Normative Operating Cost
(=60% of the Network Revenue)

1998 - 1999								
Service Provider	**Network Revenue** (A)**	**Profit/ Loss***	**With LF = 3% of A**		**With LF = 5% of A**		**With LF = 10% of A**	
			L.F.	**P/L**	**L.F.**	**P/L**	**L.F.**	**P/L**
A	34.75	-12.16	1.04	-13.20	1.74	-13.90	3.48	-15.63
B	4.08	-0.75	0.12	-0.87	0.20	-0.95	0.41	-1.16
C	17.19	0.18	0.52	-0.33	0.86	-0.67	1.72	-1.53
D	30.15	0.28	0.90	-0.63	1.51	-1.23	3.02	-2.74
E	8.29	-0.27	0.25	-0.52	0.41	-0.69	0.83	-1.10
F	7.84	0.30	0.24	0.06	0.39	-0.10	0.78	-0.49
G	7.71	0.28	0.23	0.05	0.39	-0.10	0.77	-0.49
H	23.60	-1.96	0.71	-2.67	1.18	-3.14	2.36	-4.32
I	56.37	-22.88	1.69	-24.57	2.82	-25.70	5.64	-28.52
J	22.41	-4.31	0.67	-4.98	1.12	-5.43	2.24	-6.55
Total	**212.39**		**6.37**		**10.62**		**21.24**	

1999 - 2000								
Service Provider	**Network Revenue** (A)**	**Profit/ Loss***	**With LF = 3% of A**		**With LF = 5% of A**		**With LF = 10% of A**	
			L.F.	**P/L**	**L.F.**	**P/L**	**L.F.**	**P/L**
A	54.06	-4.22	1.62	-5.84	2.70	-6.92	5.41	-9.63
B	5.15	-1.69	0.15	-1.85	0.26	-1.95	0.51	-2.21
C	24.51	3.01	0.74	2.28	1.23	1.79	2.45	0.56
D	46.02	12.92	1.38	11.54	2.30	10.62	4.60	8.32
E	10.67	0.39	0.32	0.07	0.53	-0.15	1.07	-0.68
F	10.08	0.81	0.30	0.51	0.50	0.31	1.01	-0.19
G	9.66	0.80	0.29	0.51	0.48	0.32	0.97	-0.16
H	24.76	-2.40	0.74	-3.14	1.24	-3.63	2.48	-4.87
I	76.96	-7.44	2.31	-9.75	3.85	-11.29	7.70	-15.14
J	31.86	-0.27	0.96	-1.23	1.59	-1.87	3.19	-3.46
Total	**293.73**		**8.81**		**14.69**		**29.37**	

2000-2001								
Service Provider	**Network Revenue** (A)**	**Profit/ Loss***	**With LF = 3% of A**		**With LF = 5% of A**		**With LF = 10% of A**	
			L.F.	**P/L**	**L.F.**	**P/L**	**L.F.**	**P/L**
A	72.68	5.92	2.18	3.74	3.63	2.29	7.27	-1.35
B	6.05	-1.74	0.18	-1.92	0.30	-2.04	0.61	-2.34
C	32.24	8.54	0.97	7.57	1.61	6.92	3.22	5.31
D	58.43	22.31	1.75	20.56	2.92	19.39	5.84	16.47
E	13.23	1.09	0.40	0.70	0.66	0.43	1.32	-0.23
F	12.51	1.00	0.38	0.62	0.63	0.37	1.25	-0.26
G	11.82	1.39	0.35	1.04	0.59	0.80	1.18	0.21
H	28.67	-1.13	0.86	-1.99	1.43	-2.56	2.87	-4.00
I	95.98	3.25	2.88	0.37	4.80	-1.55	9.60	-6.35
J	42.58	3.59	1.28	2.31	2.13	1.46	4.26	-0.67
Total	**374.20**		**11.23**		**18.71**		**37.42**	

* Profit/ Loss does not include Licence Fee. Operating Expenses have been calculated as 60% of the Network Revenue.

** Network Revenue as per New Tariff (Monthly Rental: Alphanumeric: Rs. 300 & Numeric : Rs. 175).

TABLE - 2
Estimated Profit/Loss on the basis of Normative Operating Cost (=40% of the Network Revenue)

1998 - 1999								
Service Provider	**Network Revenue** (A)**	**Profit/ Loss***	**With LF = 3% of A**		**With LF = 5% of A**		**With LF = 10% of A**	
			L.F.	**P/L**	**L.F.**	**P/L**	**L.F.**	**P/L**
A	34.75	-5.21	1.04	-6.25	1.74	-6.95	3.48	-8.68
B	4.08	0.07	0.12	-0.05	0.20	-0.13	0.41	-0.34
C	17.19	3.62	0.52	3.11	0.86	2.76	1.72	1.90
D	30.15	4.51	0.90	3.60	1.51	3.00	3.02	1.49
E	8.29	1.38	0.25	1.13	0.41	0.97	0.83	0.55
F	7.84	1.86	0.24	1.63	0.39	1.47	0.78	1.08
G	7.71	1.83	0.23	1.60	0.39	1.44	0.77	1.06
H	23.60	2.76	0.71	2.05	1.18	1.58	2.36	0.40
I	56.37	-21.08	1.69	-22.77	2.82	-23.90	5.64	-26.72
J	22.41	0.18	0.67	-0.50	1.12	-0.95	2.24	-2.07
Total	**212.39**		**6.37**		**10.62**		**21.24**	

1999 - 2000								
Service Provider	**Network Revenue** (A)**	**Profit/ Loss***	**With LF = 3% of A**		**With LF = 5% of A**		**With LF = 10% of A**	
			L.F.	**P/L**	**L.F.**	**P/L**	**L.F.**	**P/L**
A	54.06	2.77	1.62	1.15	2.70	0.07	5.41	-2.63
B	5.15	-0.66	0.15	-0.82	0.26	-0.92	0.51	-1.18
C	24.51	7.24	0.74	6.50	1.23	6.01	2.45	4.79
D	46.02	12.92	1.38	11.54	2.30	10.62	4.60	8.32
E	10.67	2.52	0.32	2.20	0.53	1.99	1.07	1.45
F	10.08	2.83	0.30	2.53	0.50	2.33	1.01	1.82
G	9.66	2.74	0.29	2.45	0.48	2.25	0.97	1.77
H	24.76	2.56	0.74	1.81	1.24	1.32	2.48	0.08
I	76.96	-7.44	2.31	-9.75	3.85	-11.29	7.70	-15.14
J	31.86	6.10	0.96	5.14	1.59	4.51	3.19	2.91
Total	**293.73**		**8.81**		**14.69**		**29.37**	

2000 - 2001								
Service Provider	**Network Revenue** (A)**	**Profit/ Loss***	**With LF = 3% of A**		**With LF = 5% of A**		**With LF = 10% of A**	
			L.F.	**P/L**	**L.F.**	**P/L**	**L.F.**	**P/L**
A	72.68	11.03	2.18	8.85	3.63	7.39	7.27	3.76
B	6.05	-0.53	0.18	-0.71	0.30	-0.83	0.61	-1.13
C	32.24	11.17	0.97	10.20	1.61	9.56	3.22	7.95
D	58.43	22.31	1.75	20.56	2.92	19.39	5.84	16.47
E	13.23	3.74	0.40	3.34	0.66	3.08	1.32	2.42
F	12.51	3.50	0.38	3.12	0.63	2.87	1.25	2.25
G	11.82	3.75	0.35	3.40	0.59	3.16	1.18	2.57
H	28.67	4.60	0.86	3.74	1.43	3.17	2.87	1.74
I	95.98	3.25	2.88	0.37	4.80	-1.55	9.60	-6.35
J	42.58	12.11	1.28	10.83	2.13	9.98	4.26	7.85
Total	**374.20**		**11.23**		**18.71**		**37.42**	

* Profit/ Loss does not include Licence Fee. Operating Expenses have been calculated as 40% of the Network Revenue.
** Network Revenue as per New Tariff (Monthly Rental: Alphanumeric: Rs. 300 & Numeric : Rs. 175).

TABLE - 3
Estimated Profit/Loss based on Operating Cost projected by Service Providers

								1998 - 1999
Service Provider	**Network Revenue** (A)**	**Profit/ Loss***	**With LF = 3% of A**		**With LF = 5% of A**		**With LF = 10% of A**	
			L.F.	**P/L**	**L.F.**	**P/L**	**L.F.**	**P/L**
A	34.75	-15.90	1.04	-16.94	1.74	-17.64	3.48	-19.37
B	4.08	-1.83	0.12	-1.95	0.20	-2.03	0.41	-2.24
C	17.19	-2.75	0.52	-3.27	0.86	-3.61	1.72	-4.47
D	30.15	0.28	0.90	-0.63	1.51	-1.23	3.02	-2.74
E	8.29	-4.53	0.25	-4.78	0.41	-4.95	0.83	-5.36
F	7.84	-3.41	0.24	-3.65	0.39	-3.80	0.78	-4.20
G	7.71	-3.66	0.23	-3.89	0.39	-4.04	0.77	-4.43
H	23.60	-4.80	0.71	-5.51	1.18	-5.98	2.36	-7.16
I	56.37	-22.88	1.69	-24.57	2.82	-25.70	5.64	-28.52
J	22.41	-9.98	0.67	-10.65	1.12	-11.10	2.24	-12.22
Total	**212.39**		**6.37**		**10.62**		**21.24**	

								1999 - 2000
Service Provider	**Network Revenue** (A)**	**Profit/ Loss***	**With LF = 3% of A**		**With LF = 5% of A**		**With LF = 10% of A**	
			L.F.	**P/L**	**L.F.**	**P/L**	**L.F.**	**P/L**
A	54.06	-4.22	1.62	-5.84	2.70	-6.92	5.41	-9.63
B	5.15	-2.89	0.15	-3.05	0.26	-3.15	0.51	-3.41
C	24.51	3.01	0.74	2.28	1.23	1.79	2.45	0.56
D	46.02	12.92	1.38	11.54	2.30	10.62	4.60	8.32
E	10.67	-2.91	0.32	-3.23	0.53	-3.45	1.07	-3.98
F	10.08	-2.13	0.30	-2.43	0.50	-2.63	1.01	-3.13
G	9.66	-2.51	0.29	-2.80	0.48	-2.99	0.97	-3.47
H	24.76	-6.24	0.74	-6.98	1.24	-7.48	2.48	-8.72

I	76.96	-7.44	2.31	-9.75	3.85	-11.29	7.70	-15.14
J	31.86	-4.04	0.96	-4.99	1.59	-5.63	3.19	-7.22
Total	**293.73**		**8.81**		**14.69**		**29.37**	

2000 - 2001

Service Provider	Network Revenue** (A)	Profit/ Loss*	With LF = 3% of A		With LF = 5% of A		With LF = 10% of A	
			L.F.	P/L	L.F.	P/L	L.F.	P/L
A	72.68	5.92	2.18	3.74	3.63	2.29	7.27	-1.35
B	6.05	-2.88	0.18	-3.06	0.30	-3.18	0.61	-3.48
C	32.24	8.54	0.97	7.57	1.61	6.92	3.22	5.31
D	58.43	22.31	1.75	20.56	2.92	19.39	5.84	16.47
E	13.23	-1.67	0.40	-2.07	0.66	-2.33	1.32	-2.99
F	12.51	-1.43	0.38	-1.80	0.63	-2.05	1.25	-2.68
G	11.82	-1.59	0.35	-1.94	0.59	-2.18	1.18	-2.77
H	28.67	-3.53	0.86	-4.39	1.43	-4.96	2.87	-6.39
I	95.98	3.25	2.88	0.37	4.80	-1.55	9.60	-6.35
J	42.58	1.95	1.28	0.67	2.13	-0.18	4.26	-2.31
Total	**374.20**		**11.23**		**18.71**		**37.42**	

* Profit/ Loss does not include Licence Fee.

** Network Revenue as per New Tariff (Monthly Rental: Alphanumeric: Rs. 300 & Numeric : Rs. 175).

Appendix-IV

Dated: 22nd June, 1999

Dear Justice Sodhi,

Kindly recall the discussion we have had on the draft recommendations on the quantum and structure of licence fee for Radio Paging Service Providers in cities in the meeting of the Authority yesterday. The majority view was that the quantum of licence fee for Radio Paging service for the fourth year should be fixed at a nominal percentage of 3 to 5%. I am not in agreement with the majority view because of the following reasons.

i. The Radio Paging operators had quoted the licence fee for the first three years based on their business case analysis in an open bidding process. The amount was to be paid in the ratio of 1:2:3 i.e., 2x, & x (x being the fist year payment). Considering the growth in customer base which is 53% p.a. as indicated in the draft memo for the tem operators whose financial statement were analysed, the licensor will be quite justified in expecting a licence fee of 4x. It is seen from the consultation paper 98/6, that the operators have paid Rs. 53.19 crores in the third year. On this basis, the fourth year licence fee i.e., 4x works out of 70 crores.

ii. Assuming an operating ratio of 40% which has been endorsed by the financial institutions, a licence fee of 10% of the network revenue would yield a licence fee of about 30 crores in the fourth year i.e. about 40 crores less than the expectation of the licensor. However, in view of their accumulating losses we could recommend this relief of them.

iii. Considering the fact that the circle operators are also paying this level of licence fee i.e. 10% of their revenue, although their business case is much inferior, in my view we should not recommend a percentage lower than 10% for city operators whose financial viability is much better. As indicated in the last column of Appendix V, with 10% licence fee majority of the operators break even in the 4^{th} year. A break even of 4/5 years is considered quite normal for telecom projects. Their financial woes are mainly due to inefficient operation of their network i.e., underutilisation of capacity & excessive overheads.

My view as stated above may be recorded in the Minutes of the meeting. You may also consider forwarding them to the DoT as minority view.

With kind regards,

Yours Sincerely

(R.R.N.PRASAD)

Justice S.S.Sodhi.

Chairman, TRAI,

New Delhi.

Annex - B

COMMENTS ON CONSULTATION PAPER ON " VIABILITY ASSESSMENT FOR LICENCE FEE DETERMINATION FOR RADIO PAGING SERVICE PROVIDERS IN CITIES"

ISSUES	DOT	IPSA	MTNL
a) Is it necessary that any future arrangement on license fee payment must ensure the levels of license fee quantum comparable to the levy during the first three years?	It is necessary that any future arrangement on license fee quantum comparable to the levy during the first three years. The normal expectation being that with the growth of service the license fee level should at least be maintained if not increased. While viability of the projects is an important consideration, what also cannot be ignored is that the license was awarded based on the H1 quote in a given city. Project viability may have to be seen over the period of license and inefficient operation should not be made a factor affecting license fee component.	The future arrangement on license payment does not have to be at the levels of license fee quantum comparable to the levy during first 3 years of operation. In the case of city paging licenses the tender conditions clearly stipulated that the license fee would be fixed for only first 3 years of operation and from 4^{th} to 10^{th} year, it would be refixed on the basis of review of first 3 years of operation. It was also clearly stipulated that it would preferably be lined to the revenue of the operators. The first 3 year license fee should be treated as an entry fee for these cities and future license fee, if any has to be refixed and no weightage should be given to the license fee fixed on the basis of tendering earlier. A review of first 3 years of operation has already proved that the license fee was worked out between 45% and over 100% of the revenue earned by the operations which is totally irrational for any future consideration.	No comments
b) Is it rational to levy licence fee on the paging service industry? If so, what should be the quantum and structure of the license fee ?	Section-4 Part-II of the Indian Telegraph Act, 1885 gives to the Central Government the exclusive privilege of operating Telecom services provided that it may grant " a license on such conditions and in consideration of such payments as it thinks fit, to any person to establish, maintain or work a Telegraph within any part of India". It is, therefore, rational to levy license fee on the paging service industry. The License agreement provides for fixing License Fee from fourth year onwards based on 'Turnover'. DOT has already submitted to TRAI its proposal for license fee from fourth year onwards.	There is no rationale to levy any license fee on Paging in India as it is one-way data communication only and there is no voice transmission possible on this network. Hence, like Internet, which is two-way data communication, there should be no license fee on Paging Service Providers. In most of the other countries in Asia Pacific Region, either there is no license fee or if it is there, it is a small percentage of revenue, ranging between 1-3%. To that extent, WPC charges equal to about 3% of revenue are already applicable on Paging Services and WPC charges should be considered as a part of revenue for the Government from Paging licensees. There should be no license fee on Paging and if any license fee has to be levied, it should be kept at a level below 3% of revenue in future years inclusive of WPC Charges or it should be linked to only revenue from subscription.	Proposing the license fee as p the internationa norms and prac given in the Consultation Pa seems to be the logical course o action proposec TRAI.

c) call from PSTN to paging network is an interconnection issue, is it not justified to have a revenue sharing arrangement for the same, which may also include the provision for payment of license fee ?	Call from PSTN to paging network is an inter-connection issue between the two operators viz. The PSTN operator i.e. the DOT or private Basic Telephone Service Operator and the Paging Operator, whereas, the license fee is an issue between the licensor and the licensee viz. The Government and the Radio Paging Operator. Therefore, it is not appropriate to mix up the licensing and the interconnecting issues by linking license fee with the paging call revenue sharing.	Call for PSTN to Paging network is certainly an interconnection issue, which is evident from condition 4 of Licence Agreement. Paging Lines are typically one-way communications lines to only receive the calls. The maximum duration of these calls is below 40 seconds per call, which is about 1/5th of the normal duration of a call and hence out of the local call charge of Rs. 1.30 from PSTN to Pager, the revenue share of the call charge should be Rs. 0.60 to PSTN and Rs. 0.70 to Pager per incoming paging call. This is the only alternative for improving Paging Operators " viability through improved cash flows as any further increase in paging tariff to Rs.300 p.m. for Alphanumeric and Rs.175 p.m. for Numeric may provide to be counter productive for growth of Paging in India.	No comments.
d) Do alternatives based on revenue sharing arrangement offer better options for improving the operators viability through improved cash flows, which in turn would also facilitate license fee payment on a regular basis ?	Revenue sharing on paging call is not applicable in view of above, but there will be definite improvement in the operators' viability through improved cash flow due to the hike in paging tariff which in turn may facilitate license fee payment on a regular basis. However, not being an elitist service, the said hike in paging tariff shall adversely affect the consumer's interest.	TRAI is already aware that most of the paging operators have not been able to pay any license fee dues to DOT for over one year now due to very poor financial situation and cash flows of the Industry. Once DOT starts sharing revenue with the paging operators, these can be used to repay the old dues of DOT which otherwise is not possible by any other method due to total denial of any facilities to the industry by any bank or financial institution.	The proposal ba on revenue sha basis may not b acceptable to P operators as the network resour of the PSTN operators are b utilised 100% to the calls throug and call duratio also may not be seconds as 85% the pagers are alphanumeric ty (as per statistics given in para 2, Chapter II of the consultation pa and utilise oper assisted paging service increasi the duration of Further TRAI m like to refer prevalent practi the internationa market with reg to revenue shar arrangements between Paging PSTN operators

e) Are there any network constraints in implementing the revenue sharing arrangement between the PSTN and the PCT network on the incoming calls from the PSTN?	DOT do not recommend paging call revenue sharing as proposed, as the same is not possible due to the technical limitation of the network. In addition to the technical constraint, an additional aspect is the accounting for calls falling within the Free Call limit in respect of individual subscribers.	There would be no network constraints in implementing revenue sharing arrangement between the PSTN and PCT Network as indicated in (c) above.	No comments.
f) What percentage of network revenue would be a reasonable proposition for levy of license fee ?	DOT has already submitted its proposal for charging license fee.	As already stated under points (a & b) above, there should be no license fee on the Radio Raging Service Providers and if it becomes absolutely essential and unavoidable a maximum of upto 3% of revenue may be charged as license fee.	No comments.
g) Which tariff combination in terms of monthly rentals and revenue sharing arrangement offers an optimum option in this situation?	DOT recommended paging monthly rentals as proposed on the TRAI Consultation Paper No. 98/3 viz Rs. 175/- and Rs. 300/- per month for numeric and alpha numeric pager respectively. We should not over tax the paging as well as the telephone subscriber making paging calls as the per capita income in India is much less than the other countries.	The combination mentioned in (c) to (e) above is the optimum option for Paging.	The proposal N given in Chapte at page 15 of Consultation Pa regarding raisin the monthly ren for the pagers a per the rates prevalent in the international ma is justified and agreeable.
h) Would the proposed increase in the PSTN call charge have any adverse impact on the number of calls from the PSTN to the paging subscriber ?	The proposed increase in the PSTN call charge will have adverse impact not only on the number of calls from the PSTN to the paging but also on the paging service subscriber base.	In the case of Paging, most of the messages result in a return call on land line network and moreover Paging is typically meant for common people from the lower middle income to lower income groups and hence any increase in PSTN call charge can have an adverse impact on not only the number of calls from the PSTN to the Paging subscribers, which in our opinion is a secondary issue, but can also have an adverse psychological impact on the growth of Paging subscriber base itself. However, any marginal increase may have only short term impact but any big increase can hamper the growth of Paging itself, which will be against the basic objective of the exercise.	No comments.

i) In its initial response to the Consultation paper on the Telecom Pricing, IPSA had suggested that the paging calls from PSTN be charged at the uniform rate of Rs. 1.30 for every minute instead of cap of Rs. 1.50 for three minutes pulse, as proposed in the Consultation Paper) and the revenue be equally shared between the PSTN operator and the paging operator. Subsequently, IPSA proposed charging at two pulse for every paging call with revenue sharing in the ratio of 1 : 1 with the PSTN operators. To what extent these propositions of IPSA are reasonable ?	The proposition of IPSA are not reasonable in view of (h) above.	Even in initial response to the Consultation Paper on Telecom Pricing, IPSA had suggested that the incoming paging call should be a normal call even if it is of one minute duration as all the paging calls are below 40 seconds, in any case, IPSA never wanted to convey a feeling that an incoming paging call is a premium call. Our subsequent proposal was only the fall-back alternative in case nothing else was possible though we do believe that in case incoming paging calls are made equal to 2 pulse for every call, it shall definitely adversely affect growth of Paging and the future of Paging Operators, even if not very substantially.	No comments.
j) Additional comments.	TRAI study is based exclusively on the financial data supplied by the Radio Paging Operators. It is presumed that independent verification of this data has been done. From the Table No. 6 of Annexure –III (p.24), it is clear that operating ratio of the radio paging operators are very high. It is not possible to make	There should be zero licence fee for paging services as it is only one-way data communication	TRAI should strongly urge u the paging operators to re their operating to a practical le as suggested i consultation pa

	radio paging service financially viable without reducing the same. Therefore, operators have to reduce their operating expenses and improve operational efficiency. Majority of the paging traffic in India is passing through operator assisted paging (OAP), which necessitates manning by operators and the same leads to more operating expenses. Paging operators should, therefore, give more publicity for auto paging to reduce their operating expenses. It has been noticed that there is heavy subsidy on the pager equipment given by the operators to the subscribers leading to excessive expenses. Removal/reduction of such subsidies will further improve the operating ratio.		

Annex-B

Record Note of the discussion held with the representatives of Banks, Financial Institutions and IPSA on May 31, 1999 in the TRAI office.

The list of the participants is attached.

2. The following issues were discussed in the meeting :

a. Lenders' assessment on viability of radio paging service industry ;
b. FIs'/Banks' perception on future profitability of these projects and corrective actions needed for achieving sustained viability ;
c. Expectations on normative 'Operating Ratio' for such projects with justifications for the same ;
d. Possibility of achieving debt-equity ratio of 2:1 for such projects including comments on implications of distorted debt equity ratio;
e. Reasonable levels of license fee for paging service industry; and
f. Optimal revenue sharing arrangement for the purposes of payment of license fee.

3. A summary of the views expressed by the representatives of Banks/Financial Institutions and IPSA on the above issues is given below in seriatim :-

a. The Banks/FIs are having a limited financial exposure to the Radio Paging Service Operators. During the last three years, the Radio Paging Industry has

incurred losses far in excess of their projections. Major part of the loans to the Service Providers has gone into funding of cash losses. The cash loss can in general be stated at 60% more than the projections made by the Paging Operators as per the FIs estimate. IPSA also expressed grave concern on the deteriorating financial condition of the Radio Paging Service Providers, which is threatening their survival.

b. Banks/FIs were of the view that there is a need to expand the subscriber base of the industry. It was the opinion of the representative of a credit rating agency (CRISIL) that four operators are probably too many for the market to sustain. Mergers etc. have not been possible. as the licence conditions also do not help change the scenario. Higher losses have also been due to low subscriber uptake during the initial three years. A strategy should be developed to expand the market by bulk-selling to Institutions/Business Houses, introducing facility of multi-lingual paging messages, encouraging advertisement on pagers, and improving the quality of service. The IPSA expressed that on account of lower rentals of Cellular Mobile Phones, the Radio Paging Industry had been facing stiff competition from Cellular Industry. IPSA, therefore, felt that with a view to enable the Industry to recover from the present deteriorating financial condition, there is an immediate need to make it free from the license fee from 4th year onwards.

c. Taking into account the present financial condition of the Paging service Providers the Banks/FIs were of the view that the operating ratio should be around 50% without interest, depreciation and license fee; with efficient operations, sustainable operating ratio of 40% could also be achieved. IPSA was of the view that it should be around 60%. The breakup of Operating Ratio in terms of salaries/wages, administrative expenses, and Dealers Commission etc. was indicated as 40%, 40% and 20%, respectively of the total operating expenses.

d. As per Banks/FIs, the debt - equity ratio for such projects should be around 1:1. Lender’s assessment on viability would include minimum DSCR of 1.5 and IRR of 19-20% for such projects. Unless some drastic changes take place in the market conditions, funding of such projects with debt equity ratio of 2:1 may not be feasible. The promoters contribution for such projects must be atleast 30%. The IPSA was, however, of the view that the debt equity should be 2:1.

e. While the Banks/FIs were reluctant to suggest any reasonable level of license fee for Paging Service Industry, they were of the opinion that it should be restricted to some reasonable percentage of the gross revenue excluding the revenues on sale of pagers. They stated that there should be no license fee for the fourth year, and thereafter, from the fifth year to seventh year it should be levied in the step increase of 5% every year. The unpaid licence fee for the first three years could be recovered through a backended repayment schedule allowing a moratorium for one year and then through ballooning payments from the fifth year onwards. This arrangement, the FIs stated, would give the Paging Operators some breather to tide over their financial crisis. IPSA was of the opinion that there should no license fee for the paging industry, which is a one way data communication. The DOT has already waived the licence fee for the Internet, which is a two-way data communication.

f. The Banks/FIs stated that there should be revenue sharing arrangement at a reasonable level for the purpose of license fee. The IPSA was of the opinion that revenue sharing arrangement for the purposes of payment of licensee fee, if at all absolutely required, should be between 3 to 5 % of the gross revenue.

Other points

i. Banks/FIs were of the view that inordinate delay at the DOT's end in permitting assignability of licenses under tripartite agreement between the Licensor, Licensee and the FIs has also affected the financial closure of many telecom projects.
ii. There is a need to have a detailed market study on the Paging Industry to ascertain its long-term viability.

LIST OF PARTICIPANTS

TRAI

1. Shri N.S. Ramachandran, Member (in the Chair)
2. Shri U.P. Singh, Member
3. Shri Arun Sinha, Member
4. Shri R.R.N. Prasad, Member
5. Shri N. Sharma, Secretary
6. Shri Rakesh Kapur, Joint Secretary (C)
7. Smt. Anita Soni, Joint Secretary (F&A)
8. Shri Rajat Kathuria, Director (Eco)
9. Shri Sanjay Kumar,Deputy Secretary (C)
10. Shri Hari Pal, Under Secretary (C)

BANKS/FINANCIAL INSTITUTIONS

1. Shri Mohit Batra, Sr. Vice President, ICICI
2. Ms. Arpita Agarwal, Dy. Manager, ICICI
3. Shri R.K. Narang, General Manager, IFCI
4. Shri S. Majumdar, Dy. General Manager, IFCI
5. Dr. Arya Kumar, General Manager, IIBI
6. Shri. K. Venkateshan, Manager, IIBI
7. Shri S.K. Sharma, Asstt. G.M, Oriental Bank of Commerce
8. Shri K. Mohan Rao, Manager, Union Bank of India
9. Shri S.K. Verma, Regional Manager, Union Bank of India
10. Ms H.J. Italia, Asstt. General Manager,Union Bank of India
11. Ms Sujatha Srikumar, Director, CRISIL
12. Shri. M.Kalyanaraman, Sr. Manager, IL&FS
13. Shri Tarun Bali, Sr. Manager, HSBC.

IPSA / PAGING INDUSTRY

1. Shri Y.K. Modi, President, IPSA
2. Shri P.N. Uppal, Secretary General, IPSA
3. Shri G. Hariharan, Vice-President, IPSA
4. Shri Vinod Jethra, President, RPG Paging
5. Shri V.K. Bedi, Vice-President., Modi Korea Telecom.
6. Shri O.P. Suri, Director, DSS Mobile

7. Shri D. Malhotra, Chairman, Pagelink

Annex-C

Other Issues considered by the Authority

License fee for Circle Paging Operators

1. The reference to the TRAI from the DOT was only in respect of license fee for the paging service providers in the cities. However, the NTP ’99 envisages similar approach of revenue sharing arrangement for license fee for the paging operators in Circles as well. Different license fee arrangement would bring anomalous situation for the two segments of the same service, which needs to be addressed. Most of the service providers in Circles are struggling to effect financial closure. It is possible that many service providers in the Circles would find a similar situation as in Cities due to high license fee burden and their inability to generate enough revenues to sustain themselves. Detailed viability analysis in respect of radio paging service in circles has not been undertaken. The present level of license fee is reportedly around 10% of the revenue for these service providers. Though it is difficult to draw any conclusion to compare license fee as a percentage of network revenue for the city and circle operators without a detailed viability study, inferences emerging in regard to levy of low license fee for paging operators in cities may also be applicable to Circles.

Subscribers’ base

2. It was widely felt that there is an urgent need to make the paging service broad-based and encourage value additions to this service. Suggestions have come during the public consultations that a strategy should be developed to expand the paging market by bulk-selling to Institutions/ Business Houses, introducing facility of multi-lingual paging messages, encouraging advertisement on pagers, and improving the quality of service. Educating the customers should also form part of this strategy. Migration of customers from one operator to another should be institutionalised, which hither to had resulted into returning the handset pager to the respective operator, as a particular pager was tuned to one particular frequency of the operator’s service. It may be appropriate to mention here that Radio Paging Service is not likely to be in competition with the Cellular Mobile Telephone Service, as the Paging service offers one way message communication as against two way mobile voice and data communication on CMTS network.

Interconnection Issues

3. Since the incoming call from PSTN to paging network is an interconnection issue, the TRAI also explored the feasibility of introducing the system of revenue sharing arrangement between the PSTN and the paging network in respect of such calls. This was expected to improve the financial viability of the Paging Service Providers. The views expressed during the consultations revealed that the basic service providers including the DOT were not in favour of sharing any component of their revenues with the paging service providers in respect of such incoming calls to PCT network. Indian Paging Service Association (IPSA) had divergent views in regard to the quantum of share in revenue as well as on the issue of premium call charge on such incoming calls. The TRAI feels that it might be technically feasible to introduce such an arrangement. However, the Authority has decided to defer the introduction of this arrangement keeping the option open for its re-consideration at a future date. The New Telecom Policy, 1999 also requires this issue to be examined by the TRAI, which the TRAI will do in due course.

Debt –Equity Ratio

4. Financial conditions as per the bid document *inter alia* stipulated that the debt equity ratio should not

exceed 2:1. The actual debt equity ratios of the 10 sample service providers had wide variations. The Banks/ FIs expressed reservations in going beyond the debt equity ratio of 1:1 in the financing of such telecom projects unless some drastic changes take place in market conditions that tend to improve their viability. From the lenders' perspective, such projects should be capable of achieving Debt Service Coverage Ratio (DSCR) of around 1.5, and the Internal Rate of Return (IRR) of around 19-20%.

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