

Consultation Paper No. 10/2007



Telecom Regulatory Authority of India

**Consultation Paper
on
Terms and Conditions for
Publication of an Integrated Telephone Directory for
Fixed Line Telephones
and
National Integrated Directory Enquiry Service (NIDQS) for
Fixed and Mobile Telephones**

24th December 2007

Telecom Regulatory Authority of India

Mahanagar Door Sanchar Bhawan,
J.L. Nehru Marg, (old Minto Road)
New Delhi – 110 002

PREFACE

Telephone Directory Service is an important service for the telecom subscribers. The private access service licensees have not printed telephone directory. The incumbent operators, Bharat Sanchar Nigam Limited (BSNL)/ Mahanagar Telephone Nigam Limited (MTNL) provide printed directory and directory enquiry service for their fixed line telephones. With the multiplicity of service providers, there is a need for an integrated directory service. With this objective and also considering the provisions in the fourth cellular license and the Unified Access Service License, which provide for a determination by TRAI with regard to publication of Telephone Directory, the Authority had undertaken a public consultation on the issues pertaining to publishing of telephone directory and directory enquiry services in the year 2004. The recommendations were sent to the Government on 5th May, 2005.

The major recommendations included publication of an integrated telephone directory for fixed line telephones at Long Distance Charging Area (LDCA) level by the incumbent operator and introduction of new license for an integrated directory enquiry service covering both fixed line telephones as well as mobile telephones. The Department of Telecommunications has considered these recommendations and has advised TRAI to formulate the terms and conditions, including guidelines, for publication of an integrated telephone directory for the fixed line telephones at Secondary Switching Area (SSA)-wise i.e. same as LDCA level and also for licensing National Integrated Directory Enquiry Service.

With a view to bringing out all the related aspects of the issue and to provide a suitable platform for discussion, this consultation paper

focuses on the approach, guidelines and terms and conditions in respect of publication of an integrated telephone directory for fixed line telephones at Secondary Switching Area (SSA) level, including introduction of new licence for publication of an integrated telephone directory. The Consultation Paper also focuses on issues pertaining to Directory Enquiry Service and introduction of a new licence for National Integrated Directory Enquiry Service. Any expression of opinion in the document is to be read in the context of analysis of the option/ data and is not a conclusion of the Authority.

All stakeholders are requested to send their written comments on the issues raised in this paper on or before 24th January, 2008. For any clarification on the matter, Shri M C Chaube, Advisor (Quality of Service) may be contacted on Telephone No. 011-23230404, Fax No. 011-23213036 and e-mail: chaubemc@traigov.in. Submission in electronic form would be appreciated.

New Delhi.

Dated 24th December, 2007.

(Nripendra Misra)

Chairman, TRAI

TABLE OF CONTENTS

Chapter No	Chapter Name	Page Number
I	Introduction	1
II	Publication of an Integrated Telephone Directory for Fixed Line Telephones- Terms & Conditions for Introduction of New License and Guidelines	9
III	Directory Enquiry Service - existing licence provisions, implementation and system requirements for National Integrated Directory Enquiry Service	23
IV	National Integrated Directory Enquiry Service - Terms & Conditions for Introduction of New License and Guidelines	29
V	International Practices	42
VI	Issues for Consultation	44
Annex-1	Summary of Recommendations dated 5 th May, 2005	48
Annex-2	Copy of DoT letter No. 7-3/2007-PHP, October 16, 2007	52
Annex-3	Some of the specifications given by the BSNL in its tender for printing of directory	54
Annex-4	International Practices	61

Last date for submission of written comments of stakeholders 24th January, 2008

CHAPTER-I

INTRODUCTION

1. Background:

- 1.1. Telephone directory service is an important service for the telecom customers. The Government had made provision in the various licenses for the printing of telephone directory and directory enquiry services. The directory enquiry service is unavailable today for the cellular mobile telephone service and basic / fixed line telephone service provided by private telecom service providers. The incumbent operator namely Bharat Sanchar Nigam Limited (BSNL) and Mahanagar Telephone Nigam Limited (MTNL) publish their telephone directory Secondary Switching Area (SSA) -wise and also provide the local directory enquiry service on 197 and national directory enquiry service on 1583 for fixed line customers across the country. Directory Enquiry Services are also available on their websites. Though the fourth cellular mobile and Unified Access Service licenses provided for a determination of TRAI with regard to publication of Telephone Directory, the Authority did not issue such a determination as it was felt that it would be appropriate to issue the determination after the 'calling party pay (CPP)' regime is introduced. In the multi-operator multi-service scenario, an individual operator based Directory Enquiry Service would have only limited utility. As such, a need was felt for an Integrated Directory Enquiry Service across different networks and different service areas both for Cellular Mobile Telephone Service and also for Fixed Line Telephone Service.
- 1.2. In the light of the above and also keeping in view the provisions in the fourth cellular license and the Unified Access Service license, **which provide for a determination of TRAI with regard to publication of Telephone Directory**, the Authority had undertaken a public consultation on the issues pertaining to

publishing of telephone directory and directory enquiry services with issue of consultation paper No. 14/2004 in August, 2004. The consultation paper, reviewed the license provisions and provisions in the Indian Telegraph Rules relating to publication of telephone directory and directory enquiry service, issues relating to publishing of telephone directory and provision of directory enquiry service and international practices.

1.3. After analyzing the various issues, concerns and comments of stakeholders relating to publication of telephone directory and directory enquiry services, international experiences, privacy issues and terms and conditions mentioned in various license agreements of service providers, the Authority formulated its views in the matter. The Authority had come to a conclusion that in the light of non-uniform provisions in the various licence agreements, it would not be appropriate to issue a determination on the issue. The Authority, therefore, decided to submit its recommendations to the Government. These recommendations on the issues pertaining to publishing of telephone directory and directory enquiry services were submitted to the government vide its letter No: 305-12/2004-QoS dated 5th May, 2005. The summary of the recommendations are given in **Annex - 1** and the salient recommendations are given below for ready reference:

- ◆ *All the license agreements for access services should have uniform provisions to provide for publication of telephone directory and provision of directory enquiry services either by the licensee or through another licensed operator and / or Directory Enquiry Service Provider.*
- ◆ *There should also be an enabling provision in all the licenses for issue of guidelines, determination and direction by the licensor or TRAI.*

- ◆ *The incumbent operators ie MTNL and BSNL should be mandated to publish, at the LDCA level, the Integrated Directory for fixed lines including the fixed line customers of all other Basic Service Operators (BSO)/ Unified Access Service providers (UASPs).*
- ◆ *The other Basic Service Operators and UASPs have to compensate the incumbent for their entries in the Integrated Directory, based on the number of entries and copies required. The BSOs and UASPs have to provide data to the incumbent for such publication in the format to be prescribed by the incumbent. The incumbent can retain the revenues arising out of the advertisements in the integrated directory for fixed lines.*
- ◆ *The printed directory for mobile customers should be printed at the circle level. Till directory enquiry service is fully established to provide a single integrated database for printing an integrated telephone directory the cellular mobile service providers shall publish their individual directory at the circle level.*
- ◆ *An “opt-out approach may be followed for fixed line customers for exclusion of their telephone numbers from the directory services and for cellular mobile customers an “opt-in” approach may be followed for inclusion of their telephone numbers in the directory services. The pre-paid customers may be excluded from printed directory but they should be included in the directory maintained on the web and in the directory enquiry service.*
- ◆ *In addition to printed telephone directory, all the service providers have to provide directory services through the web. In the case of cellular service, directory services through the web shall also contain pre-paid customers who have given their consent in writing or through e-mail or SMS.*
- ◆ *The cellular operators can, in lieu of maintaining the directory on the web, have the option of providing Directory Services through*

the handset. In such a case, the pre-paid customers, who have given their consent in writing or through e-mail or SMS, should also be included in the directory services provided through the handset.

- ◆ *The periodicity of publication of the printed directory should be annual, with the main Directory published in the first year followed by two Supplementary Directories.*
- ◆ *The Government may consider introducing a new licence for the provision of Integrated Directory Enquiry Services both at the circle level and at the national level. The Authority could separately recommend the terms and conditions of this new service and the modalities for sharing data in case the Government decides to introduce such a service.*
- ◆ *The provisions in Rules 452 to 459 of the Indian Telegraph Rules, 1951 relating to “Telephone Directories” may be reviewed and these Rules may be amended and modified so as to be in line with the present licensing and regulatory regime.*

1.4. The Department of Telecommunications (DoT), after examining the recommendations on publication of telephone directory and directory enquiry service has conveyed its decision on these recommendations vide letter No: 7-3/2007-PHP dated 16th Oct, 2007, which is placed at **Annex-2**. The DoT has communicated their views as under :

For fixed telephones:

- (i) There should be Secondary Switching Area (SSA)-wise integrated Printed Telephone Directory and **it should be appropriately priced.**
- (ii) The number of copies to be published in different languages will depend on the requirement of customers.

- (iii) The agency engaged in publishing of telephone directory may be the incumbent operator.
- (iv) Supply of telephone directory in the form of CD-ROM could be an alternative to the willing customers.
- (v) The operators may maintain their directories on the web.

For Mobile Telephones:

- (vi) There may not be printed telephone directory for mobile subscribers.

For Directory Enquiry Service:

- (vii) There should be National Integrated Directory Enquiry Service which would have directory information of fixed telephones as well as mobile telephones (both prepaid and post paid) customers of telecom operators.
- (viii) For fixed telephones opt-out approach and for the mobile telephones opt-in approach by the customers should be adopted.
- (ix) The National Integrated Directory Enquiry Service shall be managed by a separate agency.

1.5. DoT has requested TRAI to formulate the terms and conditions for:

- (i) Secondary Switching Area (SSA)-wise Integrated Printed Telephone Directory for fixed line telephones including detailed guidelines on the printing of directory, charges to be paid by operators, number of copies etc. for publishing of telephone directory ; and
- (ii) “National Integrated Directory Enquiry Service” for fixed and mobile telephones.

1.6. DoT has also stated that since the license agreement for UASL / fourth mobile operators provides for “Determination of TRAI with regard to publication of telephone service directory containing

information of subscribers of Telecom Service shall be applicable and binding”, TRAI may issue appropriate directions to all the operators, confirming to above approach.

- 1.7.** Regarding the recommendations on amending the provisions in the Indian Telegraph Rules, DoT has stated that they will be doing the needful for amendment in the Indian Telegraph Rules after receipt of the terms and conditions as requested by DoT, mentioned at para 1.5. above from TRAI.
- 1.8.** One of the important view of DoT on printed directory for fixed line telephones is that the directory should be appropriately priced. It indicates commercial viability as one of the considerations for printing of telephone directory.
- 1.9.** While DOT has expressed its view that there may not be printed directory for cellular mobile subscribers, it has not expressed any view on the following recommendations of TRAI relating to publication of telephone directory and directory enquiry service:
 - ◆ All the cellular operators shall publish cellular mobile directory on the web, containing both post-paid and pre-paid customers who have given their explicit consent for inclusion in the mobile directory. The cellular operators can, in lieu of maintaining the directory on the web, have the option of providing Directory Services through the handset. In such a case, the pre-paid customers, who have given their consent in writing or through e-mail or SMS, should also be included in the directory services provided through the handset.
 - ◆ All the license agreements for access service should have uniform provisions for publication of telephone directory and directory enquiry services either by the licensee or through another licensed operator and/or Directory Enquiry Service Provider.

- ◆ There should also be an enabling provision in all the licenses for issue of guidelines, determination and direction by the licensor or TRAI.

1.10. This consultation paper is issued by TRAI to have the benefit of the views of the stake-holders before it gives its recommendation to Government on terms and conditions for Secondary Switching Area (SSA)-wise Integrated Printed Telephone Directory for fixed line telephones including detailed guidelines on the printing of directory. This consultation paper also covers aspects pertaining to “National Integrated Directory Enquiry Service” for fixed & mobile telephones and also for issuing necessary direction to all the operators in the matter.

1.11. With a view to bringing out all the related aspects of the issue and to provide a suitable platform for discussion, this consultation paper focuses on the approach, guidelines and terms and conditions in respect of publication of an integrated telephone directory for fixed line telephones at Secondary Switching Area (SSA) level, including introduction of new licence for publication of an integrated telephone directory. The Consultation Paper also focuses on issues related to Directory Enquiry Service and introduction of a new licence for National Integrated Directory Enquiry Service by separate agency. Chapter – II of the consultation paper discusses the terms and conditions for licensing/ authorization to print Secondary Switching Area (SSA)-wise Integrated Telephone Directory for fixed line telephones, including detailed guidelines on the printing of directory.

1.12. Chapter – III of the consultation paper discusses the existing license provisions, prevailing directory enquiry system operated by BSNL/ MTNL and possible architecture / system requirement for “National Integrated Directory Enquiry Service” for fixed and mobile telephones. Licensing issues – Terms and Conditions for new license such as eligibility criteria, entry fee, net worth

requirement, revenue sharing , bank guarantee, data sharing and security and other Terms and Conditions for “National Integrated Directory Enquiry Service” for fixed and mobile telephones are discussed in Chapter – IV.

1.13. In many of the developed countries Integrated Telephone Directories for fixed line subscribers are published regularly. Also in these countries there is competition in providing integrated directory enquiry services. International practices in these regard are discussed in Chapter – V.

1.14. Chapter – VI covers the issues for consultation on the framework for publication of an integrated telephone directory for fixed line telephones, including introduction of new licence for publication of telephone directory and also introduction of new license for “National Directory Enquiry Service”.

CHAPTER – II

PUBLICATION OF AN INTEGRATED TELEPHONE DIRECTORY FOR FIXED LINE TELEPHONES - TERMS & CONDITIONS FOR INTRODUCTION OF NEW LICENSE and GUIDELINES

2. Need for printing of an Integrated Telephone Directory for Fixed Line Telephones Secondary Switching Area (SSA) -wise

- 2.1.** TRAI vide its recommendations to the Government dated 5th May, 2005 had recommended publication of an integrated telephone directory of fixed line subscribers at the LDCA level [same as Secondary Switching Area (SSA)] by the incumbent operator. The term ‘incumbent operator’ here refers to BSNL and MTNL. One of the main purposes of printing the integrated telephone directory for fixed lines is to make available the telephone numbers of all operators together so that customer can find any desired telephone number. The views of DoT in the matter of publication of an integrated telephone directory for fixed line telephones, as communicated vide letter No. 7-3/2007-PHP dated 16th Oct, 2007, are broadly in line with the recommendations of TRAI. DoT has also conveyed that it should be appropriately priced.
- 2.2.** Printing of directory involves very detailed procedures and technical specifications. The existing practices and technical specifications of BSNL / MTNL and the instructions of DoT for printing a telephone directory have evolved over a period of time and these practices and technical specifications may be relevant for printing of an integrated directory for fixed line telephones. TRAI propose to discuss only the macro issues to facilitate printing of an integrated telephone directory for fixed line telephones Secondary Switching Area (SSA) -wise.

2.3. Framework for licensing/authorisation to publish telephone directory:

2.3.1 TRAI in its recommendations on publication of telephone directory had recommended that the incumbent operators ie MTNL and BSNL should be mandated to publish the Integrated Directory for fixed lines at Long Distance Charging Area (LDCA) level, which is also known as Secondary Switching Area (SSA). The reasons behind this view of the Authority were that the incumbent operator has about 90% of the fixed line customers and they have been bringing out their Directory at SSA level.

2.3.2 As per the views of DoT, printing of an integrated telephone directory for fixed line telephones SSA-wise may be done by incumbent operator namely BSNL and MTNL in their respective service areas. The subscriber base data as on 30th November, 2007 shows that the market share of incumbent operators BSNL and MTNL are 81.03% and 9.19% respectively, which together constitutes more than 90% of subscriber base of fixed line telephones.

2.3.3 The analysis of the subscriber base of BSNL separately in its licensed service areas indicates that its subscriber base in most of the licensed service area is more than 90%. Similarly, in the case of Delhi and Mumbai service area, the subscriber base of MTNL is more than 70%. Therefore, one of the options is to entrust the incumbent operator, as suggested in our earlier recommendations, to print an integrated telephone directory for fixed line telephones. However, it is learnt that one of the hurdles is the fact that the incumbent has been legally challenged at many Secondary Switching Areas (SSAs) on account of which publication of directory has been pending. It would be appropriate to explore other alternatives also for publication of telephone directory. Following options singly or together in terms of printing are

analysed for printing of an integrated telephone directory Secondary Switching Areas (SSAs) wise for fixed line telephones:

- (a) Authorisation to incumbent operators namely BSNL/ MTNL in their respective service areas, in case they wish to undertake publication of an integrated telephone directory;
- (b) Authorization, on licensed service area basis, to National Integrated Directory Enquiry Service Provider.
- (c) Introduction of new license for publication of telephone directory on licensed service area basis.

Each of the above option is discussed briefly below:

Authorisation to incumbent operators namely BSNL/ MTNL in their respective service areas, in case they wish to undertake publication of an integrated telephone directory:

2.3.4 One of the preferred modes is if BSNL/MTNL wishes to undertake publication of an integrated telephone directory for fixed line telephones they could seek authorization from DoT to publish the integrated telephone directory SSA-wise for all the respective licensed service areas in the country or for one or more licensed service area(s). In the case of authorization to BSNL/MTNL for publication of an integrated telephone directory for fixed line telephones, they may be exempted from licensing procedure.

Authorization, on licensed service area basis, to National Integrated Directory Enquiry Service Provider:

2.3.5 As already mentioned earlier, DoT has opined in favour of managing the National Integrated Directory Enquiry Service by a separate agency. This calls for licensing of National Integrated Directory Enquiry Service. This has been separately discussed in Chapter-III and IV. Once a separate license is introduced for “National Integrated Directory Enquiry Service (NIDQS)” and such National Directory Enquiry Service is

established, it will also have full Secondary Switching Area (SSA)-wise database for fixed line telephones of every licensed service area. The licensee of National Integrated Directory Enquiry Service could also take initiatives for printing of integrated telephone directories Secondary Switching Area (SSA)-wise for fixed line telephones. Such a licensee can seek authorization from DoT, separately for all the 23 licensed service area in the country or for one or more licensed service area(s), for printing of an integrated telephone directory. In the case of authorization to National Integrated Directory Enquiry Service Provider (NIDQSP) for publication of an integrated telephone directory for fixed line telephones, its authorization will be akin to licence privileges. In a licensed service area both the incumbent operator (BSNL/MTNL) and NIDQSP may be granted authorization by DoT to publish the integrated telephone directory, if such request is received.

Introduction of new license for publication of telephone directory on licensed service area basis:

2.3.6 Publishing of integrated telephone directory SSA-wise for fixed line telephones with innovative information and pricing can be a good commercial proposition. Therefore, it may be possible to introduce limited competition in the area of publishing of telephone directory SSA-wise for fixed line telephones. To facilitate this, the licensor will have to issue new license class for directory printing on licensed service area basis. The award of licence will be licensed service area basis while printing of telephone directory shall be SSA-wise in that licensed service area. To introduce new licensee in each of the license service area for printing of an integrated telephone directory for fixed line telephones, it is proposed to outline possible terms and conditions for new license.

2.4 Terms & Condition for introduction of new license for publication of integrated telephone directory for fixed line telephones on licensed service area basis:

2.4.1 Market Structure:

Though publication of telephone directory could be a commercial proposition, in view of the cost and risk involved in sharing of data with a number of agencies/licensees it is perhaps desirable to restrict the number of licensees/ authorized agencies to publish integrated telephone directory. More than one telephone directory in a SSA may bring some value addition to make it a commercially viable proposition. It is expected that the licensee with innovation will create conditions for competition. One of the scenario could be that authorisation is taken by incumbent operator viz BSNL/MTNL and also by the NIDQSP and a new licence is issued to a third party, thus creating three agencies for publication of an integrated telephone directory for fixed line telephones. In case the incumbent or the NIDQSP do not seek authorisation then there could be a possibility to issue a new licence to more than one party in a licensed service area. Perhaps maximum number of three directory publishers could be fixed.

2.4.2 Scope of Licence:

The licensee for directory printing, including incumbent and National Integrated Directory Enquiry Service Provider who may be authorized on a service area basis to publish integrated telephone directories, shall have to publish integrated telephone directories for fixed line telephones SSA-wise, in print form as well as in CD-ROM, as per the license conditions and guidelines issued by the licensor/TRAI, from time to time. The integrated telephone directory shall be printed on a triennial basis, with the main Directory published in the first year followed by two Supplementary Directories at intervals of one year. The authorized

agency / licensee for publication of telephone directory shall obtain the necessary data for printing the directory from the access service providers. The printing of white page directory will be necessary and yellow pages could be optional.

2.4.3 Number of Licenses: As already mentioned above in the market structure [para 2.4.1], it is not advisable to issue unlimited licenses in a service area, keeping in view the obligation of data sharing, privacy of information and also the market demand. It will be appropriate that before determining number of new licences for one or more service area the incumbent, namely BSNL and MTNL is asked first for their interest in undertaking publication of integrated telephone directories for fixed line telephones in the respective service area. Similar offer should also be extended to NIDQSP. Depending on their response the licence numbers may be determined.

2.4.4 Eligibility: Licence may be issued to applicants who meet eligibility criteria in terms of financial parameters such as networth, limit of foreign equity etc. and technical capability. It will be necessary to prescribe norms in this regard. The applicant should be an Indian Company registered under the Indian Companies Act, 1956.

2.4.5 Selection Criteria: There are two basic types of selection processes for issue of licence for directory printing. One is competitive selection based on a quantitative criterion such as an auction where the highest bidder is awarded the licence. This bid price could be for entry fee. Another approach is comparative evaluation based on one or more quantitative or qualitative criteria. This approach is complicated, less transparent and time consuming. The more transparent and speedy route is to award the licence through competitive bidding process. In case more

than one licence is to be issued in a licensed service area, the second or the next highest bidder(s) can be asked to match the highest bid.

2.4.6 Entry Fee: The actual entry fee shall be determined in the process of selection, if the selection is made through the auction process. However, there could be a need to prescribe minimum reserve price if such auction route is followed. The minimum reserve price need to be sufficient for different category of licensed service area (Metro, Category A, B and C Circles) so as to discourage non-serious players.

2.4.7 Price for Telephone Directory: The authorised agency/licensee for directory publication may determine the price of the directory, based on market demand and commercial negotiations with fixed line service providers in respect of advertisements, information pages and special entries of customers and notify the same as per the TRAI's Orders/ Regulations/ Directions issued from time to time.

2.4.8 Data Sharing and Data Security

The fixed line customers will have the facility to opt out of the directory services i.e. excluding their names from the directory services, in case they wish to do so. This facility could be implemented as follows:

1. For existing customers: The fixed line service providers shall, through SMS, telephone bills and public notice including website notification or any other mode, inform the customers about the facility of opt-out for fixed line telephone customers for excluding their names from the directory services first time before publication of the Main Directory. This option will be given to the customers with minimum of one month notice i.e. to be completed on the basis of schedule given by the licensee/authorised agency.

2. For new customers: Opt out option shall be obtained at the time of enrolment for the service.
3. Facility for changing the option for directory services: The customers may have the facility to change their option for directory services and this option may be exercised by them at any point of time. Any revised option shall be implemented by incorporating the necessary revision in the website directory and communicating such updation to the authorized agency/licensee for directory publication. However, it may be noted that the change in the publication of printed directory shall be effective from the next publication only.

The fixed line service providers shall be mandated to provide the updated data to the authorized agency / licensee for publication of telephone directory within three months of such notification for publication of telephone directory, as per the guidelines of licensor or TRAI. The data shall be used by the authorized agency /licensees for directory publication only as per the licence. The authorized agency /licensee for directory publication have to maintain secrecy and confidentiality of the data and data shall not be passed on to a third party. The measures shall be adopted by the authorized agency / licensee for directory publication that the data is not misused. In addition, the licensee shall have to adopt the practices in line with data protection measures specified in ISO standards or equivalent international standards.

2.4.9 Licence Fee: Since the directory service is a public utility service the licence fee may be a nominal amount. The annual licence fee could be one per cent of the actual entry fee specified/determined at the stage of award of the licence.

2.4.10 Duration of licence: The publication of Integrated Telephone Directories SSA-wise involves printing and marketing of printed

telephone directory and does not involve installation of costly equipments the cost of which could be recovered over a long period of time. Also such equipment is not used exclusively for printing of telephone directory. Hence, the duration of licence could be shorter, say 3 years or 6 years, with renewal for next 3 years with payment of 25% of entry fee, unless any adverse matter is found or contravention of any licence condition is observed.

2.4.11 Performance obligations: Since the publication of telephone directory involves mainly office establishment in a service area, marketing and printing, the authorized licensee for directory publication should publish the integrated telephone directory for fixed line telephones within a period of one year from the issue of licence in all the SSAs covered in the licensed service area.

2.4.12 Performance Bank Guarantee: Requirement of Performance Bank Guarantee is also an integral part of any licensing process. The purpose of Bank Guarantee is to ensure compliance of the terms and conditions of license either in terms of performance (timely publication of integrated telephone directories SSA-wise for fixed line telephones) or in terms of payments (license fee or other dues of the Government). Therefore, the entities interested in the licence may be required to furnish appropriate bank guarantees.

2.4.13 Other Conditions: The ordering for telephone directory and payment by the fixed line service providers to the authorised agency/licensee for the telephone directory shall be a matter between the authorised agency/licensee and fixed line service providers as mutually agreed between the parties and the authorised agency/licensee shall indemnify Licensor and TRAI against any dispute thereon on such commercial matters.

2.5 Draft Guidelines for printing of integrated telephone directory SSA-wise for fixed line telephones

2.5.1 The following guidelines, for printing of an integrated telephone directory SSA-wise for fixed line telephones are proposed for consultation:

- a. Directory for fixed line telephone service will be printed Secondary Switching Area (SSA) wise.
- b. The integrated directory may be printed on triennial basis, with the main Directory published in the first year followed by two Supplementary Directories at intervals of one year.
- c. Authorized agency /licensee for directory publication will notify to all fixed line telephone service providers (BSOs/ UASPs) Secondary Switching Area (SSA)-wise, five months in advance of printing of directory, for submitting the updated data, in the electronic format, to be printed in directory. Fixed line providers will send the updated data in the electronic format within three months of receipt of such notification.
- d. In the case of initial publication of the directory, the updated data shall be provided by fixed line providers within three months of such notification by the authorized licensee for directory publication, after seeking the 'opt-out' option from their subscribers for the first time for non-inclusion in the subscriber listing in white pages of the integrated telephone directory. Wide publicity shall be given about the facility of opting out of the directory service, including public notification through the press and through the web, by every fixed line service provider and also the fixed line service provider shall send the information to the subscribers through the telephone bill regarding printing of directory and last date to exercise the opt-out option along with the specified addresses to communicate the opt-out options. Minimum 30 days time shall

be given to the subscribers for exercising their options. Concerned fixed line service provider shall ensure the updation of all the opt-out customers numbers in their database and updated database after exclusion of telephone numbers of such opt-out customers shall be supplied to the authorized agency / licensee for directory publication. In subsequent cases the fixed line service providers shall provide the updated data to the authorized agency /licensee for directory publication, after incorporating the changes in option exercised by customers as well as data relating to new customers, within 3 months of such notification.

- e. Every subscriber, who has not exercised the 'opt-out' option, shall be entitled for one free entry in white pages of the directory in respect of each telephone in his name.
- f. Each fixed line telephone service provider will have the right to give one advertisement and space for company related information pages to be negotiated.
- g. Specification for printing of directory such as size, paper quality, style of printing, etc. will be decided by the authorized agency /licensee for directory publication. However, the licensor/TRAI may issue instructions in this regard, from time to time, and the authorised agency/licensee shall follow such instructions.
- h. The authorized agency/licensee for directory publication will provide the required number of directories to all such fixed line service providers as per their demand for supplying to their customers without any discrimination or he may also sell directly.
- i. The number of copies to be published in different languages will depend on the requirement of customers as desired by the fixed line service providers and also based on market demand.

- j. Each access service providers may place orders for the required number of copies, in advance, before or after notifications of the price of telephone directory by authorized agency/licensee for directory publication, as may be mutually agreed between the fixed line service providers and the authorised agency/licensee. The price of the directory may also depend on the number of copies demanded. The price determined for the telephone directory by the authorised agency/licensee at the time of publication of telephone directory shall be the ceiling price for supplying copy of the telephone directory to the customer. The Fixed line telephone service providers may, however, supply the telephone directory to their customers free of cost or at any price, but not exceeding the ceiling price.
- k. The authorized agency/licensee for directory publication can also undertake the marketing and distribution of telephone directory either directly or through commercial negotiations with fixed line access service providers.
- l. Format of directory: Entries in the directory shall be printed in alphabetical order (name/surname basis) in the dictionary format irrespective of fixed line service providers to whom the subscriber belongs. Name, address and telephone number of all subscribers of the fixed line service providers, other than those who opted out of directory services, will be entered in the white pages. Directory shall also contain the following:
- i. Special information pages: in addition to the content of special information pages of fixed line service providers, these pages shall also contain the following information:
- ◆ list of all fixed line telephone service providers and their website address.
 - ◆ Fixed line telephone service provider shall provide information on consumer centric issues to be

included in the information pages, which is not the subject of frequent changes.

- ◆ Important public utility numbers, emergency numbers etc.
- ◆ Any other information to protect the interest of consumers specified by TRAI from time to time.

ii. White pages along with bold and special entries.

iii. Yellow Pages (optional)

m. There are 321 Secondary Switching Areas (SSAs) and at present total working fixed line connections are 39.31 millions (as on 30th November, 2007). Some of the specifications on printing of telephone directory given by the BSNL in its tender (as available on various circle websites of BSNL) as sample are given in **Annex 3** for information of stakeholders.

2.6 PUBLISHING OF THE INTEGRATED TELEPHONE DIRECTORY FOR FIXED LINE TELEPHONES ON CD-ROM

In bigger cities volume of printed directory may be an issue of concern. In today's electronic age where more and more people have access to computers and Internet, they may prefer to have the integrated directory in electronic format. In this regard DoT is of the view that supply of telephone directory in the form of CD-ROM could be an alternative to the willing customers and also the operators may maintain their directories on the web. TRAI also supports this view. In bigger cities and towns where people have access to the Internet and the volume of directory in such cities/towns may be large, people may like to have the directory in electronic format. However, in small cities and towns where computer and Internet penetration is low or negligible, customers may still like to have printed copy of the Directory. Also in small cities and towns, the volume of printed directory may not be large. As such, there is a need for both printed directory and directory in

electronic format. The incumbent operator BSNL/MTNL, NIDQSP, wherever authorized to publish integrated telephone directory for fixed line telephones, and the authorised agency/licensee for directory publication may also bring out a priced integrated telephone directory on CD-ROM.

2.7 PUBLICATION OF TELEPHONE DIRECTORY ON WEBSITE BY THE FIXED LINE TELEPHONE SERVICE PROVIDERS:

Every fixed line telephone service provider shall have to publish on their Website in user friendly manner the telephone directory containing entries of all their subscribers, other than those opted out of directory services, and such directory services should be accessible through Internet. It may be such that by giving the telephone number one can get the address or by giving name or address one can get the telephone number. The directory should be updated at periodic intervals so that the latest information is available to customers. Such information may be updated at least once in three months or as per the determination of the licensor or TRAI, from time to time.

CHAPTER – III

DIRECTORY ENQUIRY SERVICE – EXISTING LICENCE PROVISIONS, IMPLEMENTATION AND SYSTEM REQUIREMENTS FOR NATIONAL INTEGRATED DIRECTORY ENQUIRY SERVICE

3.1 License provisions

3.1.1 The access services are currently being provided by service providers under the following licensing regimes:

- (i) Old Cellular Mobile Telephone Service (CMTS) (issued under first and second round of licence)
- (ii) Licenses issued to incumbent operators (BSNL and MTNL) for Basic Service and Cellular Mobile Telephone Service.
- (iii) Fourth Cellular Mobile Telephone Service licence.
- (iv) Unified Access Service Licence (UASL), including Basic and Cellular Mobile Telephone Licensees migrated to UASL.

3.1.2 *The old Basic Service Licence Agreement provides in clause 1.8.2 under Director Enquiry Services the following:*

“The Service covers providing and operating directory enquiry service by the Licensee for its subscribers. Recognising that it would be in the interest of subscribers of DoT and the Licensee to ensure that the directory enquiry service operated by either party will be in a position to convey to callers of its directory enquiry service, telephone numbers of subscribers of the other, appropriate technical arrangement for running an integrated data base or for coupling the directory enquiry data bases of DoT and the Licensee shall be established. Common costs associated with such integration or coupling shall be shared between DoT and the Licensee in an appropriate manner mutually agreed”.

The private service providers governed by these licenses have since migrated to UASL.

- 3.1.3 The new Basic Service Licence issued in 2001 provides in clause 33 under Directory Printing and Directory Enquiry the following:

“It shall be mandatory for the LICENSEE to provide a computerized Directory Enquiry/ Information/ Assistance service with integrated data base of its own subscribers in the same service area”.

The private service providers governed by these licenses have since migrated to UASL.

- 3.1.4 The old CMTS licence provides in clause 30 under Emergency and Public Utility Services the following:

“Licensee shall independently provide all emergency and public utility services to its subscribers, including directory information services with names and address of subscribers”.

- 3.1.5 The fourth cellular mobile licence in clause 30.1 provides the following:

“Licensee shall independently provide all emergency and public utility services to its subscribers, including directory information services with names and address of subscribers”.

- 3.1.6 The Unified Access Service Licence also in clause 29.1 provides the following:

“The licensee shall provide independently or through mutually agreed commercial arrangements with other Service Providers all public utility services including TOLL FREE services such as police, fire, ambulance, railways/ road/ air accident enquiry, police control, disaster management etc. While providing emergency services such as police, fire, ambulance etc. it shall be ensured that such calls

originated shall be delivered to the control room of the concerned authority for the area from where call is originated”.

3.1.7 In the old and fourth Cellular Mobile Licence Agreements, Directory Enquiry Service is specifically included as a public utility service. However, in the UASL public utility service are mandated and directory enquiry service is not explicitly mentioned there. Considering the fact that in the old and fourth cellular mobile licenses directory enquiry service is specified as part of the public utility service, it can be concluded that the public utility service under the UASL also covers directory enquiry services.

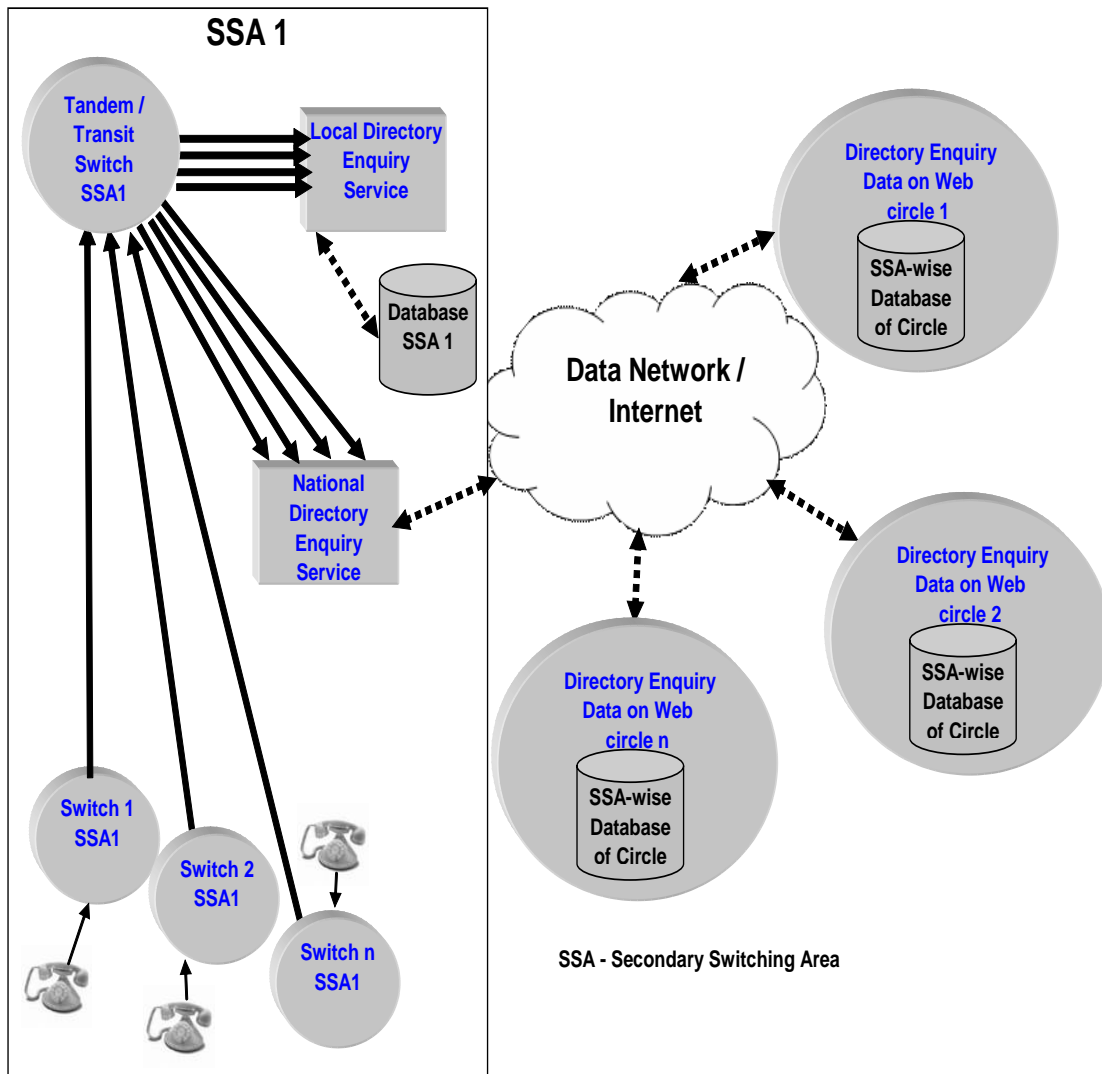
3.1.8 The directory enquiry service is largely unavailable today, especially in the cellular mobile service. Directory Enquiry is presently provided only by the incumbent operators BSNL/MTNL for its fixed line customers on telephone number 197 and at some of the places national Directory Enquiry Service is available on 1583. However, in the present multi-operator multi-service scenario, an individual operator based Directory Enquiry Service would not have much utility. As such TRAI had recommended integrated Directory Enquiry Services at circle level and at the national level. The Department of Telecommunications is also of the view that there should be National Integrated Directory Enquiry Service which would have directory information of fixed telephones as well as mobile telephones (both prepaid and post paid) customers of all telecom operators. For fixed telephones opt-out approach (those who do not want their names in directory will give request) and for mobile telephones opt-in approach (those who want their name in directory will give request) by the customers has been accepted. However, there is a need to revisit in this regard.

3.2 Directory Enquiry Service of BSNL/MTNL

3.2.1 A schematic illustration of the Directory Enquiry Service presently provided by BSNL/MTNL for its fixed line customers on telephone number 197 (local) / 1583 (national) is given below:

Diagram - 1

Diagram of existing directory enquiry service (197/ 1583) of BSNL / MTNL



3.2.2 BSNL/MTNL is also currently providing national directory enquiry service on 1583. BSNL/MTNL also provides directory information through its circle website. In the case of national directory enquiry, the data is accessed through the Internet/ data network and provided to the customer.

3.3 System requirement for National Integrated Directory Enquiry Service:

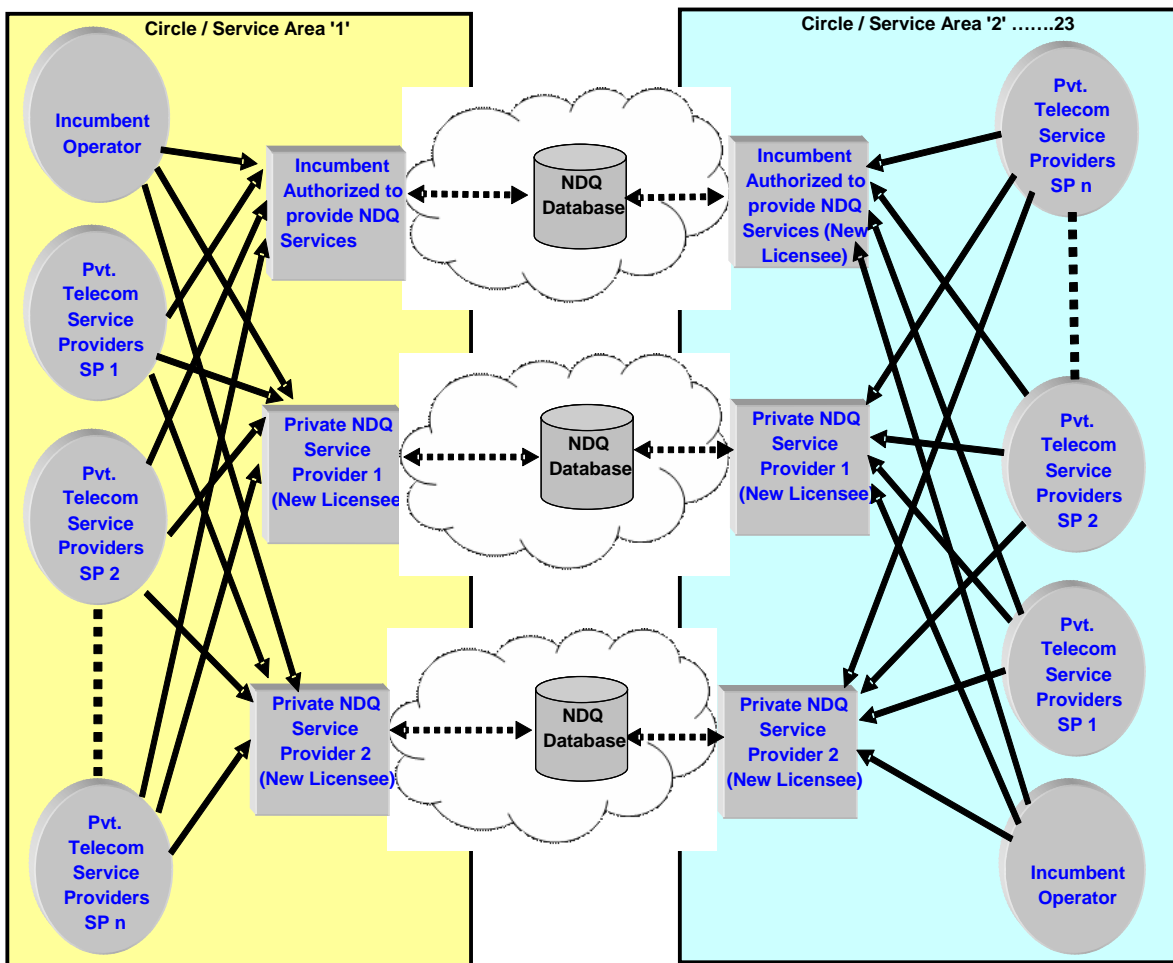
3.3.1 A national integrated directory enquiry system may have the following components in provisioning the service to consumers:

- (i) Computer systems with large storage and processing capacity – duplicated system with self recovery and provisions to switch over automatically to fully mirrored disaster recovery sites.
- (ii) Directory enquiry terminals with LAN networking
- (iii) Call agent positions for handling calls from different service areas and in different languages. Call Agent positions can be separate for different service areas or on zonal/ regional basis or centralized covering many licensed service areas or one for the whole country. Call agent positions can also have distributed architecture within the service area/ region etc.
- (iv) Connectivity for access to Point of Presence (POP) in each service area of National Integrated Directory Service Provider (NIDQSP). It is envisaged that to provide quality directory enquiry service, the access service provider need to route the calls and provide the telecom service connectivity on E1 basis as per the traffic requirements to the POP of each NIDQSP. The responsibility of NIDQSP shall constitute provisioning of sufficient number of ports for E1 termination as per the traffic requirements to each access service provider in the respective licensed service area, nation-wide connectivity for connecting POPs in each licensed service area to the respective directory enquiry service positions / database or central database as per the architecture of NIDQSP and manning the call agent positions.

3.3.2 A schematic illustration of the connectivity is given below:

Diagram – 2

Network Topology for National Integrated Directory Enquiry (NDQ) Service



SP- Service Provider

NDQ- National Directory Enquiry

CHAPTER-IV

NATIONAL INTEGRATED DIRECTORY ENQUIRY SERVICE (NIDQS) -TERMS & CONDITIONS FOR INTRODUCTION OF NEW LICENSE AND GUIDELINES

4.0 It is proposed to outline possible terms and conditions for new licence for National Integrated Directory Enquiry Service (NIDQS).

4.1 Market Structure:

4.1.1 The Department of Telecommunications has opined that the National Integrated Directory Enquiry Service shall be managed by a separate agency. BSNL/MTNL is already providing Directory Enquiry Services across all the Secondary Switching Areas (SSAs) and they have the necessary infrastructure in this regard for their own fixed line customers. It may be mentioned that during public consultation on the issue of publishing of telephone directory and directory enquiry services, BSNL, MTNL and COAI supported Integrated Directory Enquiry Services at circle level. BSNL and MTNL favored entrusting this job to them. COAI also supported Integrated Directory Enquiry Services for fixed lines operated by incumbent operator. Since BSNL is providing directory enquiry services across the country, except in Delhi and Mumbai, it would perhaps be appropriate to authorize BSNL to provide National Integrated Directory Enquiry Service. In the case of authorization to BSNL for National Integrated Directory Enquiry Service, they may be exempted from any entry fee or licensing procedures. In addition to the National Integrated Directory Enquiry Service, in case any access service provider wants to provide directory enquiry service for its own customers they may provide or continue to provide such service without any authorization as per the existing license provisions.

4.1.2 The Authority in its recommendations to the Government on publication of telephone directory and directory enquiry services had noted that since the proposed directory enquiry service would be a new and independent service, for making this service viable, calls to this service would have to be charged. The Directory Enquiry Service Provider could also earn revenues through advertisement, Yellow pages information etc. The Authority has noted that about 50% of the consumers who have responded to the Consultation Paper in year 2004 had supported charging for this service. The National Integrated Directory Enquiry Service would be a chargeable service and the service could be made more attractive by giving Yellow pages information. To address the issue of quality of service and charges one of the option is to create conditions for competition. Therefore, it would be appropriate to have sufficient competition in this service by introducing new licensees.

4.2 Scope of Licence:

4.2.1 The licensee shall have to provide national integrated directory enquiry service both for basic and cellular mobile telephone service. The customers can access the National Integrated Directory Enquiry Service through their access service providers. The directory enquiry service provisioning scheme envisages that there would be separate access code for local directory enquiry service (within the service area) and national directory enquiry/yellow pages and accordingly be charged separately. The licensor will have to designate a new access three digit code for the service. For example, in U.K. a three digit number 118 is used for directory enquiry service. In our scenario we can have any three digit number like 1AB and thereafter one digit for identification of local or national/yellow pages and thereafter one digit for the National Integrated Directory Enquiry Service Provider (NIDQSP).

For example, in case there are three NIDQSPs, the dialing procedure for accessing the enquiry service is illustrated below:

- (a) Local enquiry: The enquiry service will be accessed by dialing 5 digits, which could be 1AB0X, 1AB0Y and 1AB0Z, where 0 is for local and X, Y, Z for operator code for NIDQSP).
- (b) National/Yellow Pages enquiry: The enquiry service will be accessed by dialing 5 digits, which could be 1AB1X, 1AB1Y and 1AB1Z, where 1 is for national/yellow pages and X, Y, Z for operator code for NIDQSP).

4.2.2 Provision of integrated telephone directory enquiry services through SMS:

Given the increased usage of cellular mobile phones and SMS, an integrated directory may be made accessible through SMS also. Similar facility is already provided by MTNL.

4.2.3 Provision of integrated telephone directory enquiry services through web:

In the present scenario with penetration of broadband and Internet, the consumer may find it much easy to make web based directory enquiry. National Integrated Directory Enquiry Service Provider can make a good commercial venture through advertisement of his web site and can provide the information on the web through Internet for directory enquiry services.

4.2.4 Since the NIDQSP has the database of fixed and mobile telephone numbers, he could also bring out an integrated telephone directory for fixed line telephones SSA-wise. He could be authorized for publication of the integrated telephone directory for fixed line

telephones, on licensed service area basis, in case he seeks such authorization.

The stakeholders' comments are required if any other methodology/ routing could be adopted to access the directory enquiry service.

4.3 Number of Licenses: Directory Enquiry Service is basically a public utility service and therefore a common consumer needs to remember the access code and total number of digits to be dialed for availing the service. In the market research done by Ofcom, UK on directory enquiry service it was concluded that “Most DQ users only use one provider and therefore feel that having a choice is not important. Over two third of consumers say that the level of choice is confusing.” In spite of such observation, in U.K. more than one Directory Enquiry Service Provider exists with competition. In our scenario also there is need to create conditions for competition in provisioning of directory enquiry service. However, the limiting factor is that each access service provider shall have to connect its network with the point of presence (PoP) of “National Integrated Directory Enquiry Service Providers (NIDQSP)” so that consumers of such access service provider are able to contact with the particular NIDQSP of his choice to avail the service. Since such connectivity involves cost and telecom circuit resources at the part of access service provider, a balance needs to be struck between burden on access service providers, consumer choice and creation of conditions for competition for National Directory Enquiry Service.

4.4 Eligibility: Licence may be issued to applicants who meet eligibility criteria in terms of financial parameters such as networth, limit of foreign equity etc. and technical capability. It will be necessary to prescribe norms in this regard. The applicant

should be an Indian Company registered under the Indian Companies Act, 1956.

4.5 Selection Criteria: There are two basic types of selection processes. One is competitive selection based on a quantitative criterion such as an auction where the highest bidder is awarded the licence. Another approach is comparative evaluation based on one or more quantitative or qualitative criteria. This approach is complicated and time consuming. The major criticism for comparative evaluation process is lack of transparency and speed. The more transparent and speedy route is to award the licence through competitive bidding process. In case more than one licence is to be issued, the second or the next highest bidder(s) can be asked to match the highest bid. Some of the advantages and disadvantages of auction process of selection from among qualified bidders based on financial bid are given below:

Advantages:

- Maximum transparency
- Market efficiency – license awarded to the bidder which values it most
- High bidder will have strong incentive to roll out service quickly to recover its bid
- Suited to licensing in competitive markets

Disadvantages:

- Payment of fee can divert financial resources from service provision to auction fees (government revenue)
- Encourage applicants to minimize resources devoted to other important priorities

4.6 Entry Fee: The actual entry fee shall be determined in the process of selection, if the selection is made through the auction process. However, there could be a concept of base price. The base price needs to be sufficient so as to discourage non-serious player. The

highest bid received in the auction process will become the actual entry fee. In case auction process is not followed, the base price will be the entry fee.

4.7 Interconnection: It should be mandatory for all the access service providers to terminate sufficient number of circuits as per the traffic requirement at the Points of Presence of each NIDQSP at their own cost in the respective licensed service area. Sufficient number of ports for termination at Point of Presence of NIDQSP in a service area shall be provided by NIDQSP. The national networking from Point of Presence in each service area shall be the responsibility of the NIDQSP. There should only be a single point of interconnection with sufficient redundancy between access service provider and NIDQSP. The access service provider shall monitor his outgoing traffic one-way and should ensure that sufficient numbers of circuits are provided from each access exchange, through tandem/TAXs in his network, to the Point of Presence of NIDQSP. For interconnection no charges shall be payable by either of the party.

4.8 Tariff: The NIDQSP would notify the tariff for the service as per the TRAI's Orders/ Regulations/ Directions issued from time to time. The tariff determination shall include the charges for local enquiry and also for national/yellow pages enquiry. The local enquiry implies that the consumer of a particular service area is seeking the information on telephone number of same service area. The national enquiry means the enquiry made for the telephone number of other service area/circle. The yellow pages information includes business information provided in a classified manner having value addition. Similarly, the determination of charges can be made for SMS based directory enquiry. The NIDQSP shall also fulfill all the requirements (including publication of tariff notification and provision of information) as may be directed by

TRAI through its Orders/ Regulation/ Directions issued from time to time under the TRAI Act, 1997. Section 11 (2) of the TRAI Act, 1997 empowers TRAI to fix the rates at which the telecommunication services shall be provided and accordingly, may notify the rates for local, national/yellow pages directory enquiry or may notify ceiling on the rates. Presently the local directory enquiry service by incumbent operator is provided within the SSA. However, after establishing the National Integrated Directory Enquiry Service, the charges for local enquiry (within licensed service area) can be determined considering the same as local call per minute / per three minutes basis. For national and yellow pages enquiry, a premium rate charge can be considered. Views of the stakeholders on charges for such different type of enquiry shall be important in case there is need for TRAI intervention for tariff determination.

4.9 Revenue share: Any revenue sharing among access service provider and NIDQSP shall take place out of the proceeds of the amount payable by the subscriber to the access service provider for accessing the service which involves the usage of the network of both access service provider and NIDQSP. The access service providers shall charge and collect from its customers for the directory enquiry service as per the rates notified / determined by the NIDQSP or TRAI, as the case may be. The revenue share can be as mutually agreed between NIDQSP and the access service provider on non-discriminatory basis. TRAI may also determine the revenue share between National Integrated Directory Enquiry Service Provider and access service provider from time to time.

4.10 Data Sharing and Data Security

4.10.1 Options to customers for listing in directory services: There could be two approaches for the customers for listing in directory services namely opt-out approach i.e. those who do not want

listing in directory services need to give their request for such exclusion from directory services and opt-in approach i.e. those who want listing in directory services will give their request for inclusion in the directory services. TRAI in its recommendations to DoT on 5th May, 2005 had indicated opt out option for fixed line customers and opt in option for cellular mobile customers. Opt in option for cellular mobile service was recommended on account of the fact that, considering the privacy issues, only those who really require their name published in the printed directory or directory enquiry service will opt for inclusion of their name in the directory services and that the directory services were intended to be provided free of charge. **However, on account of the following reasons the initial thought process has undergone a change and there is a need to revisit the option considerations made earlier for cellular mobile telephone customers for directory services:**

- (a) regulation is already in place to tackle unsolicited commercial calls;**
- (b) there will not be printed directory for cellular mobile service;**
- (c) the directory services are now being thought of as a chargeable service;**
- (d) cellular mobile service is now being used as a substitutable service to fixed line telephones; and**
- (e) the large number of self employed people such as carpenters, electricians, plumbers etc. and small time vendors are able to afford the mobile phone service and also rural population is increasingly adopting to mobile phones and that they would like to have their listings for directory services.**

4.10.2 Normally in the initial stage of establishment of directory services the preferred approach could be opt-out where subscriber gives his explicit consent that he does not want his name and telephone or mobile phone number in directory services. Under the Indian Telegraph Rules opt out option is provided to subscribers. In the case of opt in approach the subscribers may not take efforts to include their name for directory services. Also the access service providers may have to take more efforts to compile database of opt in customers and they may not have much motivation or incentive to do so. As such, the database following opt in approach may have only limited utility. An “opt out” option could ensure that the quantity and quality of the database is utilized to the maximum possible and this is desirable since directory services are chargeable services. Also those subscribers who have serious privacy issues could opt out of directory service. Therefore, opt out approach, for subscribers/customers, is desirable.

4.10.3 The facility of “opt out” could be implemented as follows:

1. **For existing customers:** The access service providers shall, for the first time after the request is received from NIDQSP, inform the fixed line and cellular mobile customers through SMS, telephone bills and public notice, including website notification or any other mode, the facility of opt-out for excluding their names from the directory enquiry services. All those consumers who have not specifically given their option of “**opt out**” i.e. exclusion from directory enquiry service, will be listed for directory enquiry service by default for both fixed lines telephones and cellular mobile telephones.
2. **For new customers:** “Opt out” option for fixed line customers and cellular mobile telephone customers shall be obtained at the time of enrolment for the service.

3. Facility for changing the option for directory enquiry service: The customers may have the facility to change their option for directory services and this option may be exercised by them at any point of time. The concerned service provider may incorporate the change in option in his database and also inform such change at least once in a month to the concerned licensed NIDQSP. Similarly, the service providers may incorporate corrections in name and address sought by the subscribers and convey such updation to the concerned NIDQSP. All the access providers, through their authorized representatives/nodal officers designated for the purpose, have to provide updated data at periodic intervals as per the determination of TRAI in the format prescribed by the NIDQSP. Normally such form should contain name of the subscriber, telephone number, address containing house/flat number, building name/plot number, street/road, village/town/city, District, State, Pin Code. Since the access service provider is proposed to get revenue share, the data has to be shared by the access service provider free of charge. Further, in this regard the provisions in the license agreements will also apply.

4.10.4 The access service providers shall be mandated to provide the data to the NIDQSP, as per the guidelines of licensor or TRAI. The data shall be used by the NIDQSP only for providing the service as per the licence. NIDQSP have to maintain secrecy and confidentiality of the data and data shall not be passed on to a third party. The NIDQSP shall provide only individual information. The measures shall be adopted by the NIDQSP that National Integrated Directory Enquiry Service is not misused particularly by preventing the activities such as bulk copying of directory listings, restriction of number of records generated from single search etc. In addition, the licensee shall have to adopt the practices in line

with data protection measures specified in ISO standards or equivalent international standards.

4.11 Licence Fee: In order to maintain level playing field, the annual licence fee could be a certain per cent of the proportion of revenue share received from the access service providers as part of provisioning of directory enquiry service and perhaps such licence fee could be in the range of 6%-10% of the above revenue share. The other option could be similar to the concept of licence fee as percentage of Adjusted Gross Revenue.

4.12 Duration of licence: For provisioning of National Integrated Directory Enquiry Service the incumbent/new licensee will have to upgrade/ install telecom equipment in each service area at the POPs which also involves data networking and computers. Therefore, keeping in view the technological development and reasonable rate of return, reasonable duration of licence, say 10 to 15 years with renewable option, could be considered.

4.13 Customer Services and Quality of Service: Each access service provider shall have to connect its network with the Point of Presence (POP) of the “National Integrated Directory Enquiry Service Provider(s) (NIDQSP)” so that consumers of such access service provider are able to contact the NIDQSP(s) of their choice to avail the service. The NIDQSP shall have to ensure the continuity of service and have to provide sufficient ports at Point of Presence (POP) in each licensed service area to the access service providers to terminate their circuits so as to ensure Quality of Service. Also the access service providers will have to provide sufficient number of circuits as per the traffic at the Points of Presence of each NIDQSP in the respective service areas to ensure Quality of Service. The Quality of Service as specified or directed by the licensor or TRAI shall have to be ensured. The Quality of Service standards could also include time to respond by call agent in directory enquiry service, call holding time and call completion

rate. The NIDQSP(s) shall also be responsible for the quality of information provided to the customer. From the consumer perspective one of the important focus areas is providing accurate information, in addition to easy accessibility of directory enquiry service. In respect of the white pages information, the access provider shall need to continuously update the customer information in respect of addition, deletion, change of name, change of address, change of telephone numbers etc. and provide the updated information to each NIDQSP at periodic interval. In respect of bulk changes in telephone numbers due to any technical reasons, such changes, with the date of implementation of such changes are required to be notified in advance to the concerned consumers. Such bulk changes need to be reflected in National Integrated Directory Enquiry Service on immediate basis.

4.14 Performance obligations: There are 23 licensed service areas. To provide the directory enquiry service the licensee shall have to establish a Point of Presence (POP) in each of the service area and create a national network along with directory enquiry system. The performance obligation to be incorporated in the licence basically recognizes the urgency of establishing directory enquiry service and its expansion. Performance obligation shall have to be specified so that within a specified period all the licensed service areas are covered for both basic and cellular mobile telephone service for provisioning of National Integrated Directory Enquiry Service. The roll out could be completed in the first year itself or in a phased manner with specified number of service areas to be covered with establishment of POPs and directory enquiry system on an yearly basis during the specified roll out period. For example, in the first year the roll out obligation could be to establish directory enquiry system for all the 23 licensed service areas or it could be in phased manner, say 12 service areas in first year and in the second year all the remaining 11 service areas.

However, roll out in all the service areas in the first year itself would be desirable, keeping in view the interest of consumers who pay for such services.

4.15 Performance Bank Guarantee: Requirement of Performance Bank Guarantee is also an integral part of any licensing process. The purpose of Bank Guarantee is to ensure compliance of the terms and conditions of license either in terms of performance (timely roll out and adequate coverage) or in terms of payments (license fee or other dues). Therefore, the entities interested in the licence may be required to furnish appropriate bank guarantees.

CHAPTER-V

INTERNATIONAL PRACTICES

- 5.1** In the earlier consultation paper on issues relating to publishing of telephone directory and directory enquiry services, the provisions relating to Directory and Directory Enquiry Services in EU Member States, international practices relating to data sharing and cost sharing was provided. This information is recapitulated in **Annex - 4**.
- 5.2** In most of the EU countries the incumbent sets up the database. In some countries the operators set up the database jointly. Also in most of the EU countries, the prices for the provision of subscriber's data are cost oriented. In some countries like U.K., there is competition in the provision of Directory Enquiry Services. The Communications Provider may charge End-Users a reasonable fee for making available a Directory Enquiry Facility, local Directory and any additional Directories, and may charge its Subscribers a reasonable fee for inclusion of Directory Information in a Directory or as part of a Directory Enquiry Facility. It is the responsibility of the communication provider to ensure that any End-User can access (a) operator assistance services; and (b) a Directory Enquiry Facility containing Directory Information on all Subscribers in the United Kingdom who have been assigned Telephone Numbers by any Communications Provider, except those Subscribers who have exercised their right to have their Directory Information removed, except where such services or facilities have been rendered inaccessible to a particular End-User by the Communications Provider at the End-User's request or for the purposes of debt management. In UK, also legislation exists for data protection which envisages that personal data shall be processed fairly and lawfully.

5.3 In USA, the Pierz Group's 2005 forecast indicates American consumers are avid users of Directory Assistance (DA)/Directory Enquiry (DQ), with 55 billion U.S. look-ups expected by 2010, generating revenues of \$11.4 billion. Global directory assistance/enquiry (DA/DQ) revenues will reach \$26.2 billion in 2010 -- a 60 percent increase over 2005 revenues -- DA/DQ Global Market Forecast. The U.S. share of this market will reach \$11.4 billion in 2010, an increase of 42 percent over 2005 revenues. According to The Pierz Group forecast, Americans looked for phone numbers over 43 billion times in 2004. Six and a half billion of those phone number look-ups in the U.S. were calls to directory assistance. In the United States, consumers call directory assistance an average of 35 times per year from a home, business or mobile phone, second only to the residents of Reykjavik, Iceland who call directory assistance an average of 36 times per year. When adding other sources of telephone number look-ups (such as print directories, Internet Yellow Pages and search engines like Google and Yahoo!), no other country looks up more phone numbers than the United States. "The ability to quickly and easily obtain a phone number is very important to anyone, but apparently even more so to Americans." Finding the right phone number connects buyers and sellers, friends and families, and routinely solves problems for consumers. Today there is a growing number of enhanced services available through directory assistance in the United States. Wireless carriers routinely provide directions, movie start times and locations, search by Yellow Pages category or by location, and weather reports for any city in the country.

CHAPTER-VI

ISSUES FOR CONSULTATION

I. Issues related to Printing of an Integrated Telephone Directory for Fixed Line Telephones, including new licence for directory publication:

- 6.1 (a)** What are your views on the alternative proposal to authorize BSNL/MTNL and the National Integrated Directory Enquiry Service Provider to publish the integrated telephone directory SSA-wise for fixed line telephones in case they wish to undertake publication of Integrated Telephone Directory and the proposal to give preference to BSNL for such authorisation in case it is necessary to restrict authorisation to one party? Please give your views with reasons.
- (b)** What are your views on the proposal to introduce new licence for publication of integrated telephone directory for fixed line telephones on licensed service area basis? Please give your views with reasons.
- 6.2** What should be the optimum number of licensees (including authorizations) for publication of telephone directory for fixed line telephones, keeping in view the size, market demand and competition for printed telephone directory, data sharing requirements and competition? Please comment with reasons.
- 6.3** What eligibility criteria, including technical capability/ experience net-worth and maximum limit of total foreign equity to be maintained at any time, should be specified for the new licensee for publication of telephone directory for fixed line telephones?
- 6.4** What selection criteria should be adopted for selection of licensee for directory printing? Please give your suggestions with reasons.
- 6.5** What should be the entry fee /the base price and licence fee applicable for the new licensee for publication of telephone directory for fixed line telephones? Please substantiate your response with reasons.

- 6.6** What are your views on the proposal for Data Sharing and Data Security as given in paras 2.4.8? Any other suggestions / additional points, if any, with reasons thereof.
- 6.7** What should be the duration of license? Please give reasons.
- 6.8** What are your views on pricing of telephone directory?
- 6.9** Should there be a performance bank guarantee for the new licensee for publication of an integrated telephone directory for fixed line telephones? If yes, suggest the amount and modalities.
- 6.10** Do you agree that the draft guidelines proposed at para 2.5 relating to publication of an integrated telephone directory for fixed line telephones are adequate for publication of an integrated telephone directory for fixed line telephones? In case considered inadequate, suggest any other additional items to be included, along with reasons?
- 6.11** Any other suggestions for publication of telephone directory with reasons thereof?

II. Issues relating to new licence for National Integrated Directory Enquiry Service (NIDQS):

- 6.12 (a)** Whether licence system to be used for NIDQS and the incumbent operator namely BSNL may be authorized to provide National Integrated Directory Enquiry Service? Please give reasons for each option with justification thereof?
- (b)** What should be the optimum number of authorised agencies/licensees for National Integrated Directory Enquiry Service keeping in view the interconnection requirement and competition? Please comment with reasons.
- 6.13** Do you agree that the suggested scope of licence is adequate to meet the requirement for implementing National Integrated Directory Enquiry Service? If not please give your suggestions and additional points with reasons.

- 6.14** What eligibility criteria, including net-worth, maximum limit of total foreign equity to be maintained at any time, should be specified for National Integrated Directory Enquiry Service Provider?
- 6.15** What selection criteria should be adopted for selection of National Integrated Directory Enquiry Service Provider? Please give your suggestions with reasons.
- 6.16** What should be the entry fee/ the base price applicable for National Integrated Directory Enquiry Service Provider? Please substantiate your answer with reasons.
- 6.17** Do you agree with the interconnection proposals mentioned in para 4.7? If not please give your suggestions / additional points with reasons.
- 6.18 (a)** What are your views on the proposal for tariff as given in para 4.8?
- (b)** Should the Authority fix the tariff at which consumer can avail local, national / yellow pages directory information? If yes, what should be the basis of that? If not, why?
- (c)** Any other suggestions / additional points on tariff, if any, with reasons thereof.
- 6.19** Do you agree with the revenue share proposals mentioned in para 4.9? If not, please give reasons thereof and any other suggestions / additional points with reasons.
- 6.20** What are your views on the proposal for Data Sharing and Data Security, including seeking option from consumers, as given in para 4.10? Any other suggestions / additional points, if any, with reasons thereof.
- 6.21 (a)** Should there be any licence fees? If so, enumerate the factors that should be taken into account for determining the license fee. What should be the level of license fee?
- (b)** Should minimum amount of license fee be specified?
- 6.22** What should be the duration of license? Please give reasons.

- 6.23** Should there be any performance obligations for National Integrated Directory Enquiry Service Provider(s)? If yes, justify with reasons and suggest appropriate criteria.
- 6.24** Should there be a performance bank guarantee for the National Integrated Directory Enquiry Service Provider(s)? If yes, suggest the amount and modalities.
- 6.25** What are the various Quality of Service parameters to be taken into account for quality directory information service to be provided to customers through National Integrated Directory Enquiry Service Provider(s) and their benchmarks? Please substantiate your view with reasons.
- 6.26** What should be the other terms and conditions for National Integrated Directory Enquiry Service Provider(s)? Please list and comment with reasons.

ANNEX-1

Summary of recommendations on Publication of Telephone Directory and Directory Enquiry Service made to the Government on 5th May, 2005:

- All the license agreements for access service should have uniform provisions for publication of telephone directory and directory enquiry services either by the licensee or through another licensed operator and/or Directory Enquiry Service Provider.
- There should also be an enabling provision in all the licenses for issue of guidelines, determination and direction by the licensor or TRAI.
- The printed Directory for fixed line customers should be published at the LDCA level and for mobile customers at the circle level.
- The incumbent operators i.e. BSNL and MTNL shall publish a printed integrated telecom directory of fixed line customers at LDCA level, including the fixed line customers of all other Basic Service Operators (BSOs)/Unified Access Service Providers (UASPs).
- If a fixed line subscriber does not wish to be listed in the directory, his name shall be excluded from the directory after taking consent of the subscriber in writing.
- For mobile service also, an integrated directory of all mobile customers at circle level is ideal. The Authority appreciates that for such a directory to materialise, considering that there is no single operator with this responsibility, and till the Directory Enquiry Service is fully established to provide a single integrated data base, it may not be possible to print such a directory. Therefore, in the meantime each cellular operator shall individually publish printed telephone directory of their customers at circle level. The cellular mobile directory should contain entries of only those customers

- who have explicitly given their consent. Pre-paid customers shall be excluded from the printed directory.
- Issues relating to privacy and unwanted telemarketing calls could be addressed through the provision of exclusion of the numbers of those customers who do not want their telephone numbers listed in the directory services and through appropriate legislative and other measures.
 - No charge will be levied on both fixed and mobile subscriber for not including their name in the directory.
 - In addition to printed telephone directory, all the service providers have to provide directory services through the web. In the case of cellular service, directory services through the web shall also contain pre-paid customers who have given their consent in writing or through e-mail or SMS.
 - The cellular operators can, in lieu of maintaining the directory on the web, have the option of providing Directory Services through the handset. In such a case, the pre-paid customers, who have given their consent in writing or through e-mail or SMS, should also be included in the directory services provided through the handset.
 - BSOs and UASPs shall provide data of their subscribers to the incumbent for the publication of Integrated Directory for fixed lines in the format and time limit to be prescribed by BSNL and MTNL in this regard.
 - BSOs and UASPs shall compensate the incumbent towards the cost of publication of the Integrated Directory for fixed line numbers, based on the number of entries of their customers in the Integrated Directory and the number of copies required by them.
 - The incumbent can retain the revenues arising out of the advertisements in the integrated directory for fixed lines.
 - The periodicity of publication of the printed directory should be annual, with the main Directory published in the first year followed

- by two Supplementary Directories. The Directory may be divided into business and residential, in bigger LDCAs.
- The provisions in Rules 452 to 459 of the Indian Telegraph Rules, 1951 relating to “Telephone Directories” may be reviewed and these Rules may be amended and modified so as to be in line with the present licensing and regulatory regime.
 - Proposed Rule 452:

452. Supply of telephone directories – A copy of the telephone directory shall be supplied free of charge for each telephone, extension or party line, rented by the subscriber from any exchange system or private branch exchange or a private exchange. A copy shall also be supplied free of charge for each extension (including extension) from an extension working from a public call office.
 - Proposed Rule 453:

453. Entries in telephone directories – For each direct telephone line rented (i.e., for main connections, direct extensions and PBX junction lines) ordinarily only one entry not exceeding one line will be allowed free of charge in the telephone directory to every subscriber. Such entry shall contain the telephone number, the initials, the surname and the address of the subscriber or user. No word which can intelligible be abbreviated shall be allowed to be printed in full.
 - Delete Rule 455 or amend Rule 455 as follows:
 - 455. Extra line charges – Extra line in ‘Free of charge’ entries or extra entry will be charged for at such rate as may be prescribed by the service provider publishing the telephone directory, from time to time.
 - Proposed Rule 456:
 - 456. Charges for central headings in larger type – When five or more telephone lines are rented by an institution, trade or

department, a central heading in larger type not exceeding one line may be given free of charge to enable the individual entries to be in small type subject to the total number of lines of entries being limited to the number of free line entries admissible.

- Proposed Rule 458:
- 458. Publishing of telephone directory – Except with the permission of the Telegraph Authority no person, other than licensed service provider, shall publish any telephone directory.
- Delete Rule 459.

**Government of India
Ministry of Communications & Information Technology
Department of Telecommunications
Sanchar Bhavan, New Delhi – 110 001**

**D S Mathur
Secretary**

D.O. No. 7-3/2007-PHP
October 16, 2007

Dear Shri Mishra,

The Telecom Regulatory Authority of India (TRAI) vide letter No. 305-12/2004-QOS dated 5th May 2005 have given its recommendations on Publication of telephone Directory & Directory Enquiry Services. The recommendations have been examined in DoT. We are of the view that:

1. For fixed telephones:

- (i) There should be SECONDARY SWITCHING AREA(SSA) – wise Integrated Printed Telephone Directory and it should be appropriately priced.
- (ii) The number of copies to be publishing in different languages will depend on the requirement of customers.
- (iii) The agency engaged in publishing of telephone directory may be the incumbent operator.
- (iv) Supply of telephone directory in the form of CD-ROM could be an alternative to the willing customers.
- (v) The operators may maintain their directories on the web.

2. For Mobile Telephones:

- (i) There may not be printed telephone directory for mobile subscribers.

3. For Directory Enquiry Service:

- (i) There should be National Integrated Directory Enquiry Service which would have directory information of fixed telephones as well as mobile telephones (both prepaid and post paid) customers of telecom operators.
- (ii) For fixed telephones opt-out approach and the mobile telephones opt-in approach by the customers should be adopted.
- (iii) The National Integrated Directory Enquiry Service shall be managed by a separate agency.

You are requested to formulate the terms and conditions for:

- (i) SECONDARY SWITCHING AREA(SSA)-wise Integrated Printed Telephone Directory for fixed line telephones including detailed guidelines on the printing of directory, charges to be paid by operators, number of copies etc. for publishing of telephone directory ; and
- (ii) “National Integrated Directory Enquiry Service” for fixed and mobile telephones.

Further, since the license agreement for UASL / fourth mobile operators provides for “ Determination of TRAI with regard to publication of telephone service directory containing information of subscribers of Telecom Service shall be applicable and binding”, you may issue appropriate directions to all the operators, confirming to the above approach.

We shall be doing the needful for amendment in the Indian Telegraph Rules after receipt of the said terms and conditions from TRAI.

With regards,

Yours sincerely,

(D. S. Mathur)

Shri Nirpendra Misra
Chairman
Telecom Regulatory Authority of India
New Delhi

ANNEX – 3

**Some of the specifications given by the BSNL in its tender
for printing of directory (source: Internet, BSNL circle
websites)**

S.N	Particulars	Directory one main & two supplementary subsequent issues.		
1.	Description of work and format	This will consist of the following main parts and format. 1. Information pages. 2. Alphabetical List. 3. Govt. Lists of H.P (Central & state) 4. Smaller Exchanges.		
2.	Periodicity	Annual		
3.	Language	English		
4.	Approximate volume	The approximate number of telephone directories and of working number of DELs (Direct Exchange Lines) for which the telephone directory is to be printed year wise is as follows:		
		Year of Issues	No. of telephone Directories	No. of DELs (Direct Exchange Lines)
	Supplementary	2007	30000	1000
	Supplementary	2008	31000	1000
	Main	2009	32000	31000
5.	(i) Directory Size	(a) Un-trimmed size of directory 210 mmx300mm (b) Trimmed size of directory 200mmx280mm (c) Printing size of directory 180mmx260mm		
	(ii) Lines per column	No. of maximum lines to be printed per column shall be 120 lines.		
	(c) Telephone numbers	6 point bold face		
	(d) Main-Headings	Bold face of 6 point		
	(e) Sub headings	Bold face of 6 point		
	(f) Residential Lines	6 point bold face		
	(g) Line Entries in Specified	Same as ordinary and bold type entries groups		
	(h) Page identification	10 point bold		
	(i) Commercial information	8 point bold		

7.	Style of printing	<p>(i) Columns per page =Three(3)</p> <p>(ii) No space shall be left in between the lines having bold entries.</p> <p>(a) There shall be no punctuation in the name portion of an entry including initials and prefixes but an equivalent space shall be left instead.</p> <p>(b) A Semi colon (;) shall be used after the name to separate it from address.</p> <p>(c) In all other cases, there shall be space of one digit after first four digits between the component digits of a number from the right.</p> <p>(d) Telephone numbers shall be printed in bold type and there shall be no hyphen in between the digits.</p> <p>(e) In bold type entries the name shall be bold type. The address shall in an ordinary type.</p> <p>(f) Leaders (Dotted lines) shall be printed between the end of an entry and the telephone number leaving one or two letter space from the telephone number. Leader should be omitted to avoid printing of second line wherever feasible.</p> <p>(g) Where there is more than one entry for a number. A bracket shall be provided before the telephone numbers. Similarly where more than one number appears against the same entry, bracket shall be provided against the entry.</p> <p>(h) The address portion shall be printed without space or punctuation between component figures or words except a short hyphen (-) before postal zone number. The difference in components words in the address are certified by first letter being in capital i.e. 51/27 were Karol bagh-5 Nirmal House. V Norman Rd.1</p> <p>(i) In case of ambiguity in the above, one space equivalent to a letter shall be introduced between the house number of name and road or the street name to distinguish clearly the two parts of the address e.g.</p> <table data-bbox="626 1751 1468 1864"> <tr> <td>Incorrect</td> <td>Correct</td> </tr> <tr> <td>36 CRA Kidwai RD- 19</td> <td>36C RA Kidwai RD-19</td> </tr> <tr> <td>46th RD-54</td> <td>46 5th RD-54</td> </tr> </table> <p>(j) Where an entry spreads over two lines, the name portion shall be in the first line and the address</p>	Incorrect	Correct	36 CRA Kidwai RD- 19	36C RA Kidwai RD-19	46th RD-54	46 5th RD-54
Incorrect	Correct							
36 CRA Kidwai RD- 19	36C RA Kidwai RD-19							
46th RD-54	46 5th RD-54							

	<p>portion in the second line. In such cases the second line shall be started from the right leaving two letters space between the address & the telephone numbers.</p> <p>In exceptional cases where address cannot be accommodated in the second line and a third line would otherwise become necessary, the space available in the first line shall also be used for part of the address.</p> <p>(k) In case of subscribers with two or more lines. Such as PBX subscribers, the entries are grouped under heading with name in bold type & if necessary, the address in ordinary type. In listing the entries following principles shall be flowed</p>
8.	<p>(k) (a) All such entries bellow a heading is offset by two letters space from the left.</p> <p>(b) Sub headings are offset by two letters space to the right hand from the normal entry.</p> <p>(c) All entries below a sub heading are further offset by two letters space to the right from sub heading.</p> <p>(d) No extra space is left above or below from the sub headings.</p> <p>(l) Where a group entry is required to be continued on the next page.</p> <p>(a) The word continued in the italics within brackets is introduced below the last line of the third column of the page.</p> <p>(b) The name portion of the main entry (non sub heading) in bold type followed by word (continued) at top of first column on the next page.</p> <p>(m) Bold Types are compulsory in the followings cases:</p> <p>(a) Heading for grouped entries is only name portion is in bold; and address in ordinary type.</p> <p>(b) All sub headings (in upper and lower characters)</p> <p>(n) Page identification includes.</p> <p>(a) The first word of the first and last entry on page with a (-) in between.</p> <p>(b) Second word in addition to the first word where the first word in the first and the last entry is same.</p> <p>(c) Name of exchange.</p> <p>(d) Alphabetic Headings A,B,C,D,-----Z.</p> <p>(o) Bold types shall be used for page identification page numbers and words in italic in 10 point and the rest in 10 point.</p> <p>(p) Fax number can be included under the usual heading. To differentiate a suffix 'F' can be added at the end. For example No. 616453-F will appear for</p>

		a fax connection.
9.	General Layout	As per specification sheet attached.
10.	Paper to be used by printer.	<p>Paper shall be arranged by the printer in the size of by printer</p> <p>(a) White printing paper 48 GSM. Substance-A-4 size of IS-1848-1981 for:</p> <p>(i) Information pages.</p> <p>(ii) Alphabetic Lists</p> <p>(iii) Govt. Lists</p> <p>(iv) Specified Groups, if any</p> <p>(v) Addenda, if any</p> <p>(b) Light Green colour of 48 GSM</p> <p>(i) Govt. Portions (Central & State Govt.)</p> <p>(c) Light Pink colour of 48 GSM</p> <p>i) Smaller Exchange</p> <p>Cover Paper: Thin Carton Board or Box Borad of 130 GSM substance glazed on one side.</p> <p>Note:</p> <p>(i) Test report for the acceptability of the quality of the printing paper to be used by the printer shall be obtained from the Testing Agencies if so desired by the TDM Kullu or his authorized representative. The TDM Kullu will have discretion to do so and his decision shall be final to accept or reject the quality and size of the paper other than specified and approved make and quality.</p> <p>(ii) All kinds of paper of be used shall be acquired from reputed manufactures only. Manufacture's name shall be mentioned on the sample papers to be submitted along with the tender quotation.</p>
11.	Printing Binding	Printing shall be done on good quality offset printing machines. Binding shall be perfect binding (i.e. fully gummed binding) on good quality state of art binding machines.
12.	Column Instructions	<p>(a) There shall not any lines dividing the Columns as well as at the top and bottom of the printed matter on a page (the Specimen page enclosed).</p> <p>(b) In any entry, no gap will be allowed after full stops and comas and only single spacing in between the running matter will be permissible. The second line of the entry should be started only when the first line is full utilized leaving only 1/2cms space between the words, and telephone numbers. After the wording in an entry are over leaders should be utilized in the remaining space.</p>
13.	Proof	(a) Xerox copies of the pages to be printed shall be furnished by the contractor, if so required by TDM Kullu or his representative, at the cost of printer.

		<p>The correctness of the material contained in the pages in accordance with the input materials supplied by the Department is the sole responsibility of the contractor. Last minutes changes as indicated by the TDM Kullu are to be incorporated by the supplier free of cost.</p> <p>(b) Minimum three proofs are required each in duplicate and each proof will be returned after carrying out corrections where necessary within maximum period of one week. The printer shall incorporate all the amendments indicated by the department.</p>
14.	Time Schedule	<p>(a) Galley proof sufficient to cover 20 pages in three columns should be returned daily commencing from the fifth day after the delivery of manuscript to the supplier. Three copies of the galley should be supplied to the department. The floppy disks and/or manuscript of the alphabetic list of subscribers of SSA with updated information will be made over to the printer by the TDM Kullu. After completion of all office formalities relating in the tender contract.</p> <p>(b) 2nd Galley proof in triplicate to the deptt. within 2 days from the receipt of corrected first galley.</p> <p>(c) Proofs of advertisements to be supplies to department within five days of receipt of copy layout of matter from the advertisers.</p> <p>(d) First page proof within two days of receipt of corrected 2nd galley proof. Three copies of the proofs should be supplied to the department.</p> <p>(e) Second page proof within three days of receipt of the corrected first page proof.</p> <p>(f) Print order will be given on the first page proof or on the second page proof if required.</p>
15.	Delivery period of printed Directories.	Within 90 days of receipt of last batch of input material to the supplier.
16.	Packing	The printed copies of telephone directory are to be delivered in convenient bundles of equal size normally 10-15 numbers per bundle. All bundles will be properly wrapped for protective covering at all the edges & tied strongly with plastic strings to avoid damages.
17.	Manuscript of Main directory	Twenty registers of size 35cm X 60 cm duly binded with hard card board on both sides with leather. Bindings as per instructions from the office. Equal number of such register will be supplied by the supplier for the issue of main telephone directory for preparation of data for next issue.

18.	Special Instructions	<p>(i) The printer shall incorporate all amendments indicated by the Department in the proofs and check their accuracy before putting.</p> <p>(ii) Galley and page proofs should be clearly read in the press to avoid any typographical punctuation or other printing errors at their entire responsibilities.</p> <p>(iii) Certain pages of Govt. Portion will be printed on colored paper, preferably in light green & pink colours as specified under "Description of Work" under item.1.</p> <p>(iv) Specimens sheet (six copies printed on the machine proposed to be used for execution of this job may also please be sent with the tender.</p> <p>(v) Suitable office facilities should be provided to the representatives of TDM Kullu in the workshop of the Printing Press to watch the progress so that the job may proceed in smooth and efficient manner without any hindrance.</p> <p>(vi) The listing will be re-classified.</p> <p>(vii) There will be no spacing in between the lines and the press will be responsible for making the best use of space in one line in conformity with approved style of printing.</p>
19.	Directory Format	<p>Brief particulars of the various other items are given below:</p> <p>(a) Front Cover: The upper one third portion of the front cover shall be reserved for the title of the Directory, Month of issue, Police, Fire, Ambulance and emergency services telephone numbers. The <u>lower two third will be reserved for BSNL publicity full</u> inside front cover may be available for Multicolor advertisement. Two pages after the front fly leafs shall be reserved for public utility services.</p> <p>(b) The Information pages: The information pages shall printed immediately after public utility services as per manuscript/input material supplied by the department. Advertisement shall not be permitted in the information pages.</p> <p>(c) Alphabetical List: This shall be main portion of Main Telephone Directory listing telephone Subscribers of Central, State Govt. Smaller exchanges served by the Telephone System in areas covered by the SSA. Three (3) column format shall be adopted for the alphabetical lists. Central, State Govt. & Smaller exchanges.</p> <p>(d) Addendum and Corrigendum: The addenda and corrigendum, if any, containing telephone numbers opened, closed or changes and shifted including</p>

		<p>name and address after the printing of the alphabetical lists and corrigendum for the alphabetical lists of main telephone directory.</p> <p>(e) Back Cover/Inside Cover: The outside and inside back cover may be available for coloured advertisements by the contractor.</p> <p>(f) Spine: Upper one third shall be reserved for title of the directory and the lower two thirds may be available for coloured advertisement.</p> <p>(g) Page Numbers: There shall be separate pages numbering for information pages, Alphabetical lists.</p> <p>(h) Contents/Index page: The contents/index page shall be compiled and printed immediately after the pages "Telephone Number frequently called" in the beginning. This shall cover all pages of the Telephone Directory issue 2007 & subsequent annual issues.</p>
20.	Supplementary Directory	<p>(i) The supplementary directory will contain all business numbers in addition to the new and changed number with Yellow pages. All the technical specification will be as per main directory issue as mentioned above.</p> <p>(ii) Information pages in the supplementary directories will be limited to 20 pages.</p>

International Experience

Provisions relating to Directory and Directory Enquiry Services in European Union (EU) Member States:

The provision of directories

Member States' obligations concerning directories in relation to universal service are contained in Articles 5 and 25 of Directive 2002/22/EC of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) (USD).

Article 5 of the USD states that:

"**1.** Member States shall ensure that:

(a) at least one comprehensive directory is available to end-users in a form approved by the relevant authority, whether printed or electronic, or both, and is updated on a regular basis, and at least once a year;

(b) at least one comprehensive telephone directory enquiry service is available to all end-users, including users of public pay telephones.

2. The directories in paragraph 1 shall comprise, subject to the provisions of Article 11 of Directive 97/66/EC, all subscribers of publicly available telephone services.

3. Member States shall ensure that the undertaking(s) providing the services referred to in paragraph 1 apply the principle of non-discrimination to the treatment of information that has been provided to them by other undertakings."

Article 25 of the USD states, amongst other things, that:

"1. Member States shall ensure that subscribers to publicly available telephone services have the right to have an entry in the publicly available directory referred to in Article 5(1)(a).

2. Member States shall ensure that all undertakings which assign telephone numbers to subscribers meet all reasonable requests to make available, for the purposes of the provision of publicly available directory enquiry services and directories, the relevant information in an agreed format on terms which are fair, objective, cost oriented and non-discriminatory.

3. Member States shall ensure that all end-users provided with a connection to the public telephone network can access operator assistance services and directory enquiry services in accordance with Article 5(1)(b).

4. Member States shall not maintain any regulatory restrictions which prevent end-users in one Member State from accessing directly the directory enquiry service in another Member State.

5. Paragraphs 1, 2, 3 and 4 apply subject to the requirements of Community legislation on the protection of personal data and privacy and, in particular, Article 11 of Directive 97/66/EC".

Competition in the market of Directory services

Member State	How are the relevant subscribers' data provided to all organizations willing to provide directory services/ directory enquiry services? (Please, specify)			How are prices for the provision of subscribers' data fixed?
	Database set up by NRA or independent body (Please, specify)	Database set up by the incumbent	Other. Please, specify.	
Belgium	No	Yes. The Incumbent set	Operators have to put up their data	Fixed between the operators

		up the data base used by the universal directory enquiry service and the universal directory service. Operators have to put their data at the USO provider's disposal on a cost-oriented price	at the directory services providers' disposal on a cost oriented price	under IBTP's control
Denmark	No	Yes. The incumbent's directory enquiry service	Providers of telecommunications networks or services who reassign subscriber numbers to endusers shall deliver number information data to any parties who wish so.	The payment for delivering number information data shall not exceed the costs of delivering it (the marginal costs).
Germany	No	Yes		The price for the provision of subscribers' data, if any, must be cost oriented ⁵⁵ . The Federal Competition Authority has noted that this is not a tariff of a telecommunications service.
Greece	No. Competition		The procedure of collecting	The provision of

	<p>in directory services/directory enquiry services does not exist yet. However relevant provisions have been included in EETT Decision 255/83 14.06.02 on U.S.O content</p>		<p>subscribers' data is described in EETT Decision 255/83 14.06.02 on U.S.O content.</p>	<p>subscribers' data to the U.S.O. provider must be cost oriented.</p>
Spain	<p>By the NRA. Although it has been foreseen that telephone service providers must provide CMT with their subscribers' data and CMT must provide the entitled entities with them, no provision have been included as regards how to do it. (Art. 14 RSU) The CMT, by resolution of 27 June 2002, has set up a manual mechanism for the provision of</p>			For free

	subscribers' data to the directory services providers which will be applied transitorily until an automatic mechanism is set up by CMT.			
France	No	Yes and commercialised		Up to now, the tariff was agreed after commercial negotiation. The Ordonnance and Decret on universal service foresee that these tariffs are cost-oriented.
Ireland		Yes		Must be fair, cost-oriented and non discriminatory.
Italy	No	No	Database set up jointly by all operators (included the incumbent) under a specific agreement, which specifies how subscriber data shall be provided to all organizations operating in directory/ directory enquiry services.	For the database set up jointly by operators, prices are defined on a fair and non discriminatory basis.

Luxembourg	Direct provision from operators to directory service providers.	No		By comparison
Netherlands	No	Incumbent has database for own directory services	Other publishers must get information from incumbent and new entrants separately.	The incumbent buys data from new entrants at cost oriented tariffs. Tariffs are unknown. New entrants do not contribute to publications costs. Other publishers deal with operators at same terms, as provision of data is legal matter.
Austria	No	Yes.	Request of data can be made to all operators	By contract between the parties
Portugal	No	Yes		Price is fixed by the incumbent according to the principles of transparency and equality. This price is under analysis by the Directorate General for Fair Trade and Commerce (DGCC).
Finland	No	No, database is	All operators	Prices shall be

		set up jointly by all operators	shall submit information in a format appropriate for publication.	reasonably proportional to the costs.
Sweden			All notified operators are liable to provide available relevant subscribers' data to any party who requests it for the purpose of providing enquiry services.	The Electronic Communications Act, which entered into force 25th of July 2003, prescribes cost-oriented pricing.
UK	N/A	Yes	N/A	The overall framework is one of cost-orientation and non discrimination . The actual detail of the charges is worked out in cross-industry negotiations. Should a formal dispute arise, Oftel would seek to investigate further but does not determine charges at this stage.

Source: Telecommunications Regulatory Package - 9th Implementation Report (EU)