

TELECOM REGULATORY AUTHORITY OF INDIA  
Mahanagar Doorsanchar Bhawan  
Jawaharlal Nehru Marg (Old Minto Road)  
New Delhi -110002

INVITATION FOR EXPRESSION OF INTEREST

Telecom Regulatory Authority of India (TRAI) invites Expression of Interest for **“Development of MIS Application Software for online data collection and report generation”** from experienced firms/agencies in this field.

The work involves study and development of suitable platform for implementation of MIS application software for online data collection from Telecom, Broadcasting and Cable service providers and centralized report generation.

Detailed scope of work along with terms & conditions are available on TRAI website [www.trai.gov.in](http://www.trai.gov.in). The last date for submitting EOI is 15.02.2010.

Advisor (CN&IT)

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**Subject: Development of MIS application Software for online data collection and report generation**

- 1 Telecom Regulatory Authority of India (TRAI) invites Expression of Interest for “Development of MIS Application Software for online data collection and report generation” from experienced firms/agencies in this field. The work involves study and development of suitable platform for implementation of MIS application software for online data collection from Telecom, Broadcasting and Cable Service providers and centralized report generation.

**2 Overview of TRAI**

- 2.1 The Telecom Regulatory Authority of India (TRAI) was established under the Act of parliament in 1997 as a statutory body. Its mission is to nurture conditions for growth of telecommunications, broadcasting and cable services in a manner and at a pace which will enable India to play a leading role in the emerging global information society while ensuring that interests of consumers are protected.

**3 Description of current environment**

- 3.1 TRAI collects information in prescribed formats from telecom, broadcasting and cable service providers at prescribed frequency. The Service providers generally provide information in hard copies.
- 3.2 The data collected from service providers is analyzed by the TRAI personnels and various reports are prepared to project vital parameters and trends of the sector.

**4 Need for IT intervention**

- 4.1 The proposed solution envisage following:
  - 4.1.1 Enable TRAI to collect data from the telecom, broadcasting and cable service providers at a centralized location in predefined formats at specified intervals. The format shall be customizable as per user requirement from time to time.
  - 4.1.2 Analysis of the captured data and generation of the report in prescribed formats.
  - 4.1.3 Support High Level online query response system.

## 5 Scope of work

- 5.1 The TRAI intends to develop MIS system for collection of online data from Service Providers / Stakeholders and further analysis to generate periodic reports. The system shall be capable to capture data through web-portal, have access control, secure and centralized system, where the service providers are able to upload all kinds of data at required intervals.
- 5.2 The development of MIS system is divided in following parts for ease of understanding and implementation:
  - 5.2.1 Online Data Collection from service providers (Telecom, Broadcasting and Cable services)
  - 5.2.2 Development of Applications software to analyze the captured data and support customized report generation.
  - 5.2.3 The software shall also support high level query-response system
- 5.3 The scope mentioned here is only indicative and not exhaustive. Final scope shall be given at the stage of request for proposal (RFP) to short listed firms/agencies based on the EOI.
- 5.4 The shortlisted firms/agencies shall carry out detailed analysis of TRAI's requirement and produce a report incorporating broad features of user specifications. The technical proposal for developing MIS software for online data collection shall incorporate detailed procedures/steps and methods for intermediate bench marking. Some of the system requirements are given as under:
  - 5.4.1 MIS system shall be capable to collect required data in given format 'online' using web portal of TRAI and store appropriately for further analysis.
  - 5.4.2 Data collection from service providers shall be feasible using any open interface and no proprietary interface shall be used.
  - 5.4.3 The system shall support modification of data formats (Inclusion of new parameters and deletion of existing fields) based on the need of TRAI from time to time without requiring any software customization. Process of introducing such changes shall be user friendly and be executable in-house.
  - 5.4.4 MIS system shall also facilitate collection of information in different soft formats like MS word, PDF, Excel sheets, jpg files etc. based on the requirement of TRAI from time to time.
  - 5.4.5 For the purpose of data submission, system shall be able to allocate user name and password to the designated officer of the service provider to facilitate online access to web portal to punch / submit data.

- 5.4.6 System shall allocate unique identification number to each service provider. TRAI being the regulator for telecom, broadcasting and cable services, it has to deal with large number of service providers. Collection of data from these service providers shall be easy and identifiable by allotting Unique ID to each service provider.
- 5.4.7 The system shall also be capable to store punched data/ collected data under designated service provider's account from different service areas and facilitate audit before final submission by service provider's key person to TRAI. The data collection process shall include provision for internal approval from the designated authority of service provider before submission to TRAI.
- 5.4.8 The system shall be capable to time stamp the receipt of the data from different service providers, confirm receipt of the data to designated officer of the service provider through e-mail and check if all the fields have been filled.
- 5.4.9 The system shall be capable to check the data in different fields with reference to given values to identify any mistake/discrepancy in data input/ un-probable values. The system should have an auto-run kind of facility to check the data. In case of discrepancies, proper notification mechanism shall be developed for taking appropriate action by the concerned division of TRAI as well as service provider.
- 5.4.10 The system shall be able to monitor timely receipt of the data and issue e-mail reminder to the designated officer of the service provider if required data is not received within pre-determined timeframe. Alert shall also be given to the designated officer in TRAI.
- 5.4.11 The system shall deploy proper tools/ software for encryption and decryption of data while data is under transit for data security purpose.

## **6. Applications software for data analysis & Report Generation**

- 6.1 The application software shall be capable to analyze captured data, perform trend analysis, do data mining and generate the reports in a format as prescribed by TRAI from time to time.
- 6.2 Different divisions of TRAI have different analysis requirement. The System shall capture the requirement and design application software to support the needs of various divisions of TRAI. The software design shall be flexible, easy to modify and customizable to accommodate user request subsequently.
- 6.3 The Application software shall also be capable to project impact of inter-related parameters, with change in one or few parameters based on the past trends.
- 6.4 The report generation capabilities shall be user friendly, customizable and capable to generate report at frequencies as indicated by different divisions as per the changing user requirement from time to time.

- 6.5 The application software shall support report generation in different formats like Pie charts, Bar charts, line graph, area chart etc as per the user requirement.
- 6.6 Application software shall also provide all captured data in Excel format to give flexibility to user to further analyze any information as per specific need.
- 6.7 Application software shall also support online query-response system for the fields captured by MIS system.
- 6.8 Application software shall be capable to generate alerts/ Flag the incidence for violation of threshold values in respect of captured indicators and issue e-mails/ notifications as decided by TRAI.
- 6.9 The system shall deploy an escalation matrix while developing the supervisory control feature for sending alerts, auto e-mails, show-cause notices etc.
- 6.10 System shall be able to customize profile of the users like access rights to data, modification rights, report customization rights etc.

## **7 Terms and Conditions**

- 7.1 The interested firms/agencies must be established IT Company in India having annual turnover of more than rupees 200 crores with seven years of IT consulting experience.
- 7.2 The firm/agency shall have successfully executed atleast one data warehouse projects in India costing more than one crore.
- 7.3 The firm/agency shall have successfully executed projects of similar nature for atleast two Indian companies/ Organization out of which atleast one for Govt. /PSUs. The copy of purchase orders and/or a letter of successful execution of project shall be attached with EOI.
- 7.4 Interested firms/agencies must provide additional information indicating that they are qualified to execute the project in the form of details of other projects indicating nature of the project and recommendation letters, work orders, completion certificates of such assignments etc.
- 7.5 The firm/agency should have in-house expertise in this field and should provide detailed resume of the expert(s) likely to be responsible for this work as one of the inclusions in response to this EOI.
- 7.6 The firms/agencies are requested to additionally submit a detailed note outlining how they would carry out the assignment if selected including the timelines of activities.
- 7.7 Based on their eligibility and suitability, firms shall be short-listed to submit a detailed technical proposal including user specification. The decision of TRAI in this regard shall be final. The short-listed firms would be eligible to participate in the second and final stage. Such

Firms/ agencies shall be given detailed tender document. Such firms shall be asked to submit their detailed technical and financial offers. The detailed technical bid shall be evaluated and financial bid of only qualified bidders shall be opened. No financial bid shall be submitted as part of response to this EOI.

7.8 TRAI reserves the right to accept or reject any proposal or to annul the EOI process and reject all proposals at its discretion, at any time prior to finalization of the firms/ agency without assigning any reason whatsoever and without thereby assigning any liability to the affected EOI participant on the ground of TRAI's action(s).

7.9 The firm/agency would also have to arrange a presentation on methodology of project implementation and the Application Software development related issues before the committee nominated by TRAI at a date and time notified by TRAI.

## **8. Organization of work.**

8.1 The successful firm/agency would derive the overall guidance from the project manager assigned by TRAI who will be closely involved in reviewing the progress of the project and provide guidelines as necessary and would act as interface between the firm/agency and the Authority.

8.2 TRAI would provide reasonable office support within TRAI premises and will facilitate access to data, reports etc. available in TRAI after award of the work. The firms/agencies are expected to identify all the resources necessary in completion of the work. The assignment is expected to be completed within four months from the date of award of work.

## **9. Submission by willing firms/agencies**

9.1. The firm/agency who fulfill the eligibility conditions may submit a write-up in support of their meeting the required eligibility criteria along with sufficient documents and write up on scope of the work and deliverables in a sealed cover superscribed with "Developing MIS Application Software for online data collection and report generation" to the following address latest by 15.02.2010. A list of minimum documents required with EOI is attached at Annexure '1'.

9.2 Sh. S.K. Gupta, Advisor (CN&IT), Telecom Regulatory Authority of India, 5th Floor, Mahanagar Door Sanchar Bhawan, Jawahar Lal Nehru Marg, New Delhi 110002 may be contacted on [advcn@trai.gov.in](mailto:advcn@trai.gov.in) or [sroit@trai.gov.in](mailto:sroit@trai.gov.in) for any clarifications.

**Check List of Documents for EOI**

|   |                                                                                                                                                                                                                                                                    |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Certificate showing firm/agency registered in India                                                                                                                                                                                                                |
| 2 | Certificate of annual turnover of more than rupees 200 crores                                                                                                                                                                                                      |
| 3 | Proof of being established IT company with seven years IT consulting experience                                                                                                                                                                                    |
| 4 | Document showing having successfully executed atleast one data warehouse projects in India costing more than one crore                                                                                                                                             |
| 5 | Document showing having successfully executed projects of similar nature for atleast two Indian companies/ Organization out of which atleast one for Govt. /PSUs. (copies of purchase orders and/or a letter of successful execution of project shall be attached) |
| 6 | Documents indicating that they are qualified to execute the project in the form of details of other projects indicating nature of the project and recommendation letters, work orders, completion certificates of such assignments etc.                            |
| 7 | Documents indicating that the firm/agency has in-house expertise in the field.                                                                                                                                                                                     |
| 8 | Detailed resume of the expert(s) likely to be responsible for this work.                                                                                                                                                                                           |
| 9 | A detailed note outlining how they would carry out the assignment if selected including the timelines of activities.                                                                                                                                               |