

CENTRAL ELECTRICITY REGULATORY COMMISSION (CERC)
3rd & 4th Floor, Chanderlok Building, 36, Janpath,
New Delhi – 110 001
Tel : 23753920/ Fax : 23753923

Ref.No.: 2/7(8)/2008-RIMS/Policy/CERC

Dated: 29th December, 2008

Sir/Madam,

**Sub: Proposed “Consultancy assignment for designing and Implementing
Regulatory Information Management Systems (RIMS) for CERC”.**

Central Electricity Regulatory Commission (CERC), a statutory organisation constituted under an Act of Parliament proposes to commission study on the above subject. The Terms of Reference (TOR) for the proposed study including format of application are enclosed.

2. Sealed quotations are invited from the reputed Consultants for the aforesaid purposes. Two separate sealed bids clearly marked as “**Technical**” and “**Financial**” are required to be submitted which may be placed in one outer envelop clearly mentioning in bold letters on top of the envelop “**QUOTATION FOR CONSULTANCY ASSIGNMENT FOR DESIGNING AND IMPLEMENTING REGULATORY INFORMATION MANAGEMENT SYSTEMS (RIMS) FOR CERC**”. The bids may be addressed to **Secretary, CERC** so as to reach by 1500 hours on 23rd January, 2009. “**Technical**” bids will be opened by the Assistant Secretary on 23rd January, 2009 at 1545 hours for preparing the list of bidders. Bidders may send their authorized representative to note the name and number of bidders.

3. It may kindly be noted that the proposal would be evaluated by a committee to be constituted by CERC. Selection of the Consultant will be based on two-stage-evaluation process. In the first stage, “**Technical**” evaluation will be done by the committee based on the parameters as mentioned in the TOR. The “**Financial**” bids of only those bidders who qualify in “**Technical**” evaluation will be opened for final evaluation.

Yours faithfully,

S/d

Encl. as above.

(Sushanta K. Chatterjee)
Dy. Chief (RA), CERC

Terms of Reference (TOR)

“Consultancy assignment for designing and Implementing Regulatory Information Management Systems (RIMS) for CERC”

1 Introduction

- 1.1 Central Electricity Regulatory Commission (CERC) proposes to develop Regulatory Information Management Systems (RIMS) for the purpose of information collection, regulatory analysis, compliance monitoring, decision making and other regulatory functions.
- 1.2 CERC felt the need for systematizing the process of collection of data from regulated entities through an appropriate Regulatory Information Management System (RIMS) so that data is collected at required periodicity and is in consistent form so as not only to enable meaningful analysis but also reduce the scope of discrepancies.
- 1.3 The use of information technology in this process would improve the overall quality of data and would lead to an overall improvement in the flow of information.

2 Objective of the Assignment

- 2.1 The objective of this assignment is to develop specification for RIMS that would provide the generating companies, transmission, trading licensees, power exchanges and other stakeholders a medium to provide information to CERC over the Internet. The system is also expected to disseminate this information/ data to the CERC staff over the existing LAN through an Intranet.
- 2.2 Further, the objective of developing RIMS is to share relevant information between stakeholders in the power sector and archive the information for later use to bring in transparency and improve stakeholder participation.
- 2.3 The Consultant has to keep in mind the regulatory framework of the Commission evolved for overarching reform objectives of efficient operations and market development in the electricity sector and further requirements, while developing specification for RIMS.

3 Information Requirements for CERC

- 3.1 In order to discharge its regulatory functions, CERC needs to collect data from the regulated entities and analyse them. The information requirements for the Commission can be broadly categorised inter-alia under the following heads:
 - a) Information in connection with determination of tariff.

- E.g. information on capital expenditure, operational data on O&M expenditure and data on operating performance.
- b) Information in connection with trading and market development:
 - Quarterly report from the trading licensee
 - Transactions in power exchanges
 - Transactions through UI
- c) Inter-state open access transactions.
- d) Regulatory supervision over the grid discipline and settlement of dues.
- e) Monitoring of compliance of conditions of licenses and payment of due fees by various entities.
- f) Information in connection with projects coming up through competitive bidding route, etc.

3.2 It is envisaged that RIMS would automate this process of periodic information submission by various entities in order to have an overall improvement in the flow of information for decisions support for the commission.

3.3 Further, the Commission regularly issues directives to licensees, generating companies as well as other stakeholders such as state nodal agencies as a part of regulatory orders. The Commission is required to monitor the compliance of these directives. It is envisaged that the proposed RIMS will identify directives and will assist the Commission in monitoring the compliance.

4 Scope of Work

4.1 In order to enable CERC to meet and effectively execute its duties as laid down under the Electricity Act 2003 and to assist in the development of a transparent regulatory framework, the CERC has decided to commission a consultant to assist in the development of a Regulatory Information Management System (RIMS). Assistance, for this purpose, would be required in defining information requirements, defining the system (software and hardware) requirements, selection of the vendor for development and implementation of RIMS and subsequent support to the Commission during implementation of RIMS.

4.2 The Consultant would be expected to act as a Domain Expert and IT Strategy Consultant with in-depth knowledge of both the electricity industry as well as of information technology and would be responsible for overall development of RIMS.

4.3 As part of the assignment, the Consultant would develop the Requirement Specifications and prepare the Tender Documents for invitation of bids and would also be expected to assist the CERC during the tendering process including negotiations and final selection of the software vendor/ developer. The Consultant would also be responsible for management of the implementation of the RIMS and subsequent trial operation for a period of 12 months.

4.4 The consultant is expected to execute the entire assignment in three phases as outlined below but CERC would be open to alternate plans if these were found to be more efficient. The specific tasks expected under each phase are also outlined for the benefit of the consultant and a work plan would need to be developed and submitted on the basis of these tasks. However, it should be noted that the Consultant is expected to perform all such tasks required for the successful implementation of the RIMS and not restrict his scope to those mentioned herein.

4.5 The Consultant shall also be responsible for training to be provided to the relevant staff/consultants of the Commission as well as that of the Licensees/regulated entities by the software vendor. The various phases along with the specific sub-tasks a consultant is expected to perform are detailed below.

4.6 Phase - I: Development of User Requirement Specification (URS) and Implementation Plan

During this phase, the consultant is required to understand and identify the information requirements of the CERC, both current and foreseeable future, and to develop a Requirement Specification for the proposed RIMS.

While developing this, the consultant will specifically take a note of following:

4.6.1 Develop high level understanding of the CERC's functions: -

- To develop an understanding of the key factors which are critical for the RIMS of CERC
- To identify the data required for effective execution of responsibilities of the CERC under EA 2003, rules and regulations. The Consultant will work in close coordination with the staff and other consultants working with the Commission.

4.6.2 Identify critical processes & Key Performance Areas

Identify the processes and the KPA's that are critical to CERC, and would have an impact on the RIMS. Such processes would include internal processes such as petition processing, analysis and drafting of orders, compliance monitoring and external factors such as broad macro-economic indicators needed to determine tariffs, fuel price and its

trends, major policies relating to power generation, transmission and distribution on which a database needs to be generated.

4.6.3 Carry out 'As-Is' process review:

Carry out a review of the existing information management processes at CERC. The key activities in the 'As-Is' review would be as under:

- Review the current processes at CERC
- Identify the objectives and critical success factors for the RIMS
- Identify the various sources of information for the existing systems
- Identify the medium of the information flow to the existing systems
- Review the output (reports) of the existing systems
- Identify current technology and applications
- Current software applications
- Current data warehousing process and technology
- Current data mining process and technology
- Reporting tools used
- Efficiency in terms of Time-Effort for generating reports and analysis from the present system

4.6.4 Experience of RIMS implemented in India and outside

The Commission understands that attempts have been made in the States of Andhra Pradesh and Orissa, Maharashtra to develop and implement RIMS. In order to build upon the experiences of these states, the Consultant will visit the regulators in these States to understand the purpose, process and experience of the development of said systems. To the extent possible the CERC will assist the Consultant and facilitate collection of information from these Regulatory Commissions in India. The Consultant, as part of this task, will need to specifically identify the "Lessons Learnt" as well as undertake a benchmarking exercise taking note of the Best Practices followed across various regulators and will consider these while designing and developing the RIMS for CERC.

4.6.5 Gap Analysis and Identification of needs:

Based on the existing status at CERC, the requirements of CERC from the RIMS and the industry trends, profile the RIMS needs of CERC

- Gaps in terms of non-availability of the information required by the CERC for effective analysis and compliance monitoring

- Based on key weaknesses inherent to existing processes, identify opportunities for improvement
- Best practices (including appropriate KPA's) incorporation opportunities
- Review technology enablers that could be introduced and consequently changes to business processes
- Develop a gap analysis between the "As-Is" and "To-Be" processes and identify key issues, implications and considerations, particularly relating to IT support required

4.6.6 Office Automation

It may be noted that CERC intends to automate certain processes (including HR and accounts) internal to the commission. Such automation is expected to facilitate not only data exchange between various departments but also to expedite issuance of Orders and Regulations.

Further, CERC provides secretariat to Forum of Regulators and Forum of Indian Regulators. While these institutions are independent suitable interface will form part of the RIMS.

4.6.7 Assessment of Technology Options

The Consultant, based on the needs identified earlier, will assess and identify software and hardware technology options and recommend the preferred option, most suitable for the needs of the Commission. It may be noted that the bids will be invited from the vendors on the basis of the 'preferred technology option' suggested by the consultant.

4.6.8 Interface with Stakeholders

The Consultant, in discussion with the key stakeholders, including the utilities, the consumers and the Government, will develop an interface for the transfer of data / information. The Commission would prefer internet based solution; however it is open to any other solution.

4.6.9 User Acceptance Testing (UAT)

The Consultant will define the User Acceptance Testing (UAT) criteria for system which will be used to determine acceptability of the system developed by the Vendor.

4.6.10 Training Needs Analysis

The Consultant will outline the training requirements to ensure successful implementation and will, at an early stage, assist in the identification of the right personnel and will ensure their involvement through the process of development of the RIMS. The consultant will also ensure that adequate training, at the implementation

stage, is provided to these CERC personnel as well as certain identified personnel from the licensees/entities to ensure their common understanding of the new system. The Consultant will ensure that this forms part of the scope of work of the Vendor for Software Development.

4.6.11 Cost Estimation

The Consultant will carry out preliminary cost estimation for the next phase based on his experience in the industry and the proposed information requirements / system design. The costs identified should include all costs associated with the procurement of software and hardware (additional), including training and implementation of the system.

4.7 Phase – II: Vendor evaluation and selection

During this phase, the Consultant will assist the Commission in selection of the vendor for the software solution.

4.7.1 Assistance in preparation of tender documents

The Consultant will assist the Commission in finalizing the configuration of software and hardware for the proposed RIMS. The Consultant will provide necessary assistance to the Commission in development of tender documents for inviting proposals from the reputed software vendors/ developers with expertise in providing similar solutions. These documents will not only specify the technical details but will also state the criteria for evaluation of the developer / vendor in order to provide clarity to the bidders and ensure transparency in the process. The Consultant will assist the Commission during 'Pre-Bid Conference' for selection of vendor.

4.7.2 Technical / Financial Evaluation of vendors / developers

The Commission will carry out evaluation of the tender with the assistance of the consultant. The Consultant will assist the Commission in evaluation of the technical proposals based on criteria specified in the tender documents. The financial bids of the short-listed vendors, based on their technical capabilities would be opened in the presence of the bidders. The Consultant would assist the Commission in evaluation of financial bids, negotiation and finalisation of the contract with the preferred developer.

4.8 Phase – III: Implementation management

While the software vendor / developer will carry out the implementation of RIMS, the Consultant would, amongst other things, be responsible for:

- Conducting tests and determine acceptability as User Acceptance Testing (UAT) criteria defined at the specifications stage;
- Coordination of the implementation activities with software and hardware vendors;
- Preparation and maintenance of a work plan and schedule for the implementation including monitoring of progress of various parties;
- Overseeing the training of staff on relevant areas and ensuring adequate training has been provided to ensure a smooth transition of the system;
- Overseeing documentation of the system and preparation of the required manuals etc;
- Overseeing the transition to the new RIMS and ensuring a smooth integration with all existing systems; and
- Managing the associated Risk and Quality issues.

5 Special Conditions

This assignment will be governed by the following special conditions.

- a. Selected consultant will not be permitted to bid for subsequent development of the RIMS.
- b. It shall be the responsibility of the Consultant to provide handholding support to the Commission for three months after the commissioning of the system. Software vendor will provide onsite support for one year after the commissioning of the system.
- c. The Consultant must quote for all three phases and will not be permitted to take any deviations.

6 Duration of the assignment:

The phase I and II of the assignment are required to be completed within a period of 8 (eight) months as per the following schedule:

- Development of User Requirement Specification (URS) and Implementation Plan within three months from the date of assignment
- Development of Vendor evaluation and selection criteria within four months from the date of assignment.
- Implementation Management Strategy by the end of eight months from the date of assignment.

7 Eligibility criteria:

- The consulting organisation should have personnel well familiar with regulatory framework and regulatory information practices in Indian power sector.
- It must have completed at least two consultancy assignments with the Regulatory Commissions in India in last four years.
- The consultancy team should necessarily include qualified and experienced personnel in the areas of designing and developing information systems, software designing and management of computer systems.

8 Application and Evaluation Criteria:

- 8.1 The format of application is at Annexure-I and Annexure-II
- 8.2 The Consultant is required to submit separate bids for **Technical** and **Financial Offers**, duly sealed in separate envelopes.
- 8.3 **Technical component** will carry **70%** weightage and **Financial component** carry **30%** weightage.

- Within the Technical component, weights will be assigned in the following manner for different technical parameters :-

S.No.	Technical Parameters	Weights
1.	The Consultants relevant experience for the assignment	0.3
2.	The quality of the methodology proposed	0.3
3.	The qualifications and experience of the key staff proposed	0.4

- Weight for Financial parameters :- Proposal with the lowest cost will be given a financial score of 100 and other proposals given financial scores that are inversely proportional to their prices.

- **The total score will be obtained by weighting the Technical and Financial scores and adding them.**

DETAILED PROPOSAL FOR STUDY

(TECHNICAL)

Four copies of the proposal along with project summary to be submitted to Secretary, CERC.

I. GENERAL INFORMATION :

01. Title of the Proposed Study :

02. Name and address of the Organization/
Institution :

03. Name & Designation of the Key Person :

04. Contact address of the Key Person :
(e-mail/fax/telephone)

05. Net-worth/Turnover of the Organization/
Institution :

II. TECHNICAL SPECIFICATIONS :

06. i. Department(s) of the organization/ Institution(s) where the study will be carried out

ii. Other department(s), if any, which will collaborate in this study

07. Brief review of the state-of-art in the field (National and International)

08. Detailed Approach & Methodology for undertaking the assignment
09. Facilities available for the proposed work in the applicant's organization/institution
10. Previous experience of the proposer in this or related field

11. Biographical sketch of the Study Team

- (i) Name
- (ii) Designation
- (iii) Date of Birth
- (iv) Education and Experience
- (a) Academic Qualifications

Degree	University	Field(s)	Year

- (b) Experience

Institution	Topic of work done	Period

- (v) Field of major interest
- (vi) Additional information (if any)

12. Capacity to impart training/transfer of knowledge

DETAILED PROPOSAL FOR STUDY

(FINANCIAL)

I. GENERAL INFORMATION :

01. Title of the Proposed Study :
02. Name and address of the Organization/ Institution :
03. Name & Designation of the Key Person :
04. Contact address of the Key Person (e-mail/fax/telephone) :
05. Net-worth/Turnover of the Organization/ Institution :
06. Certificate of authorization in case of Institutes/other organizations (Format enclosed at **Appendix-‘A’**).

II. FINANCIAL SUPPORT:

07. Amount of consultancy fee proposed for _____ :

Components	Basis	Amount (in Rs.)
(I) Consultant Charges - (a) Consulting services fees (b) Consultants' Travel & Per Diem (c) Publication Costs		
(II) Misc./Others (if any)		
Total		

(RUPEES _____)

Signature of the Principal Investigator/

Head of the Study Team

CERTIFICATE

The undersigned agree to abide by the conditions of the consultancy and certify that available facilities for proposed work shall be extended to the investigator/study team.

Signature of Executive Authority
of the Organisation

Signature of the Principal Investigator/
Head of the Study Team

Name and Designation

Name and Designation

Date

Date

Signature of Co-investigator

Official stamp of University/

Name and Designation

Organization/Institution

Date

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