## CENTRAL ELECTRICITY REGULATORY COMMISSION 3<sup>rd</sup> Floor, Chanderlok Building, 36Janpath, New Delhi-110001

No. MIS 1/2020-CERC

Dated, the 11<sup>th</sup> February 2021

Engagement of Corporate Consultant for "Development of AI Based Regulatory Expert System Tool (REST) for Central Electricity Regulatory Commission"

Terms of Reference (TOR)

#### 1. Purpose of the Document:

1.1 This TOR Document is floated by the Central Electricity Regulatory Commission (also referred to as "CERC" or "the Commission")to select a corporate consultant working in domain of Artificial Intelligence (AI), Machine Learning NLP (Natural Language Processing) to develop AI-based Regulatory Expert System Tool (REST) for CERC for the purpose of building institutional memory and for creation, reference and intelligent retrieval of information/documents to assist the Commission in discharge of its functions under the Electricity Act,2003 (in short, "the Act").

#### 2. Introduction:

CERC, as the central power sector regulator has been vested with various functions 2.1 under the Act, which inter alia include framing regulations; determination of tariff of Central Generating Stations, inter-State generating stations and inter-State transmission of electricity, grant of licence for inter-State trading and transmission of electricity; regulation of inter-State transmission of electricity; formulation of the Grid Code; open access and market development; and adjudication of disputes. CERC discharges its functions as per the mandate of the Electricity Act, 2003 by notifying various regulations, granting licence and undertaking adjudication. CERC performs the role of a quasi-judicial authority and adjudicates upon disputes covered by the Act which are brought before CERC in the form of petitions. Over the years, the number of petitions filed before CERC have increased manifold which the Commission has also been disposing through its orders. Further, not only there has been a manifold increase in the number of orders, but also the orders issued by the Commission have ranged over increasing number of topics/issues. Therefore, monitoring and analyzing of such orders has become a challenging task for CERC. In addition, CERC regularly receives voluminous information from the regulated entities/ stakeholders/ nodal bodies that are important from the regulatory perspective. However, such information often contains interrelated data of complex nature that needs more analysis.

- 2.2 At present, data sources for CERC are CERC SAUDAMINI Portal (cerc-efiling.gov.in) and CERC website (www.cercind.gov.in).
- 2.3 Some of the challenges being faced in the existing MIS system are as follows:
  - Lack of meaningful recommendations based on user's search history and those of other users, who did similar searches.
  - Absence of intelligent search-based solution that provides easily searchable list of historical cases, citations etc.
  - Lack of summary of each search result with ranking in terms of relevance along with metadata like date, case type, etc.
  - Lack of ability to index various document types such as pdf, word, etc.,—and provide a taxonomy and semantic-based efficient search to find relevant documents from the existing repository.

#### 3. Objective:

3.1 The objective of engaging the corporate consultant is to develop an AI-based Regulatory Expert System Tool (REST) for creation, reference and intelligent retrieval of information/documents to assist the Commission in discharge of its functions under the Electricity Act, 2003.

#### 4. Scope of Work:

4.1 The Scope of the assignment will be to carry out the design, development, testing, deployment and maintenance of the AI-based Regulatory Expert System Tool. The broad scope of work of AI-based REST is as follows:

#### Module I: AI based Search

- i) Query completion- To guide users to use the right query, instead of only keywords.
- ii) Related searches- To guide users to use the query to get the best search results, as intelligent recommendations will be based on user's initial query. This would help users nail their searches quickly.
- iii) Related cases- When a user searches a case, he or she may like to explore other related cases. Suggestions within the search results (e.g. right under the description of the search result), can help users explore and find other similar case.
- iv) Deep indexing and analysis of data in case of documents in word, pdf etc., for key phrases and references etc., and provide related and recommended content.

**Module II: Automatic Legal Document Creation & Assembly** comprising of automated extraction of data to assist in preparation of fact sheets/ Record of Proceedings (ROP)/ orders/orders summary etc. for the Commission.

**Module III: Process Automation & Data Visualization tool** to automate the process like sending notices, ROPs, orders through email automatically on schedule and data visualization tool with dashboards for data trends, data analytics of regulatory compliance and petition status etc.

- 4.2 Activities: The major activities to be carried out to achieve the scope of work broadly cover the following:
  - To conduct study of the existing systems and processes in respect of the functional requirements and the conceptualized REST.
  - ii) User requirement gathering, preparation of Software Requirement Specification(SRS):

The SRS shall define the Solution Architecture Design for deploying the computerized system. The Solution Architecture design definition would essentially include the framework for

- Design of User Interface Layer
- Definition of Business Logic
- Creating and managing the database /algorithms etc
- View of Architecture for Deployment
- Development, Testing and Hosting the system at CERC Data Center & NIC Meghraj Cloud.
- iv) Post go-live, handholding, removal of bugs, defects and small changes etc. in the system.
- 5. Detailed AI Based Regulatory Expert System Tool Components & Process Flow is attached at Annexure VI (Key Features of AI based Regulatory Expert System Tool):

#### 5.1 AI-based Search

- Search that can parse documents & data by deep-indexing features that will provide intelligent search results.
- Suggest logical search attributes based on the search data being inputted. The attributes will act as guide to users to further narrow their results.

- Perform efficient search based on user's historic search patterns.
- Provide meaningful recommendations of similar content (cases) that exist in the database with the context reference.
- Integration with current SAUDAMINI portal (cerc-efiling.gov.in), cercind.gov.in and other data sources of CERC.

#### **5.2** Additional System Features

- It should include consideration on textual as well as audio data.
- It should be a big data analytics system and should use relevant system architecture.
- It should be an AI-based system with components (whichever relevant) to be able to increase the outcome accuracy and performance with future learning.
- It should serve as a single data repository/institutional memory for all the data including CERC MIS system, CERC portals/websites and other disparate data sources like pdf (not in image format)/word/excel documents for intelligent (advanced AI-based search) analytics over existing data to speed up the order preparation process.
- It should serve both manual and automated search for relevant orders for any new reference petition.
- It should have provision to list and play audio/video recordings of past hearings available in the database.
- It should be scalable to any amount of data(at present, data size is about 2 TB) and further customizations/integrations around video, audio and textual content/data sources in future.
- Itshould be accessible from multiple client locations with role-based access.
- It should have a dedicated ACL module to provide role-based access to different category of users, with designated permissions as per the defined roles.
- It should be natively integrated with Facial Recognition System as needed.
- It should be designed on open source technology as far as possible and only in exceptional cases, it should have any 3<sup>rd</sup> party software dependency.
- It should have an intuitive User Interface (GUI) and should have separate options for searching relevant orders, creating summary report, issuing ROP, issuing order, sending hearing notice, dashboard and analytical reports.
- Itshould be able to collect data from MIS system to send hearing notices through emails automatically on schedule.
- It should be scalable to further additional third-party software/ data sources/ tool

integrations in future.

- It should have provision to create a dashboard in future to see visual data (graphs) based on statistics from MIS system and other data available in institutional memory.
- It should have provision to create a reporting section in future to export reports based on analytical data available in MIS system and Institutional memory.

#### **6.** Deliverables & Timelines:

#### 6.1 Deliverables

- Regulatory Expert System Tool (REST) Source Code
- Knowledge Transfer & Training
- Software Requirement Specification (SRS)
- Design Document
- User Manual, Technical Manual, Installation Manual
- One year warranty and production support after final deployment and go live. The warranty and production support shall cover all the deliverables which should be free from any bugs, defects in design and development, and minor changes, if any, required by CERC after using the System.

#### 6.2 Timelines

- The assignment shall be completed within a period of 6 months from the date of signing of the agreement.
- The timelines for deliverables shall be strictly adhered to except where extension is allowed by Secretary, CERC. For delays, penalty/ liquidated damages as per clauses 8 and 9 of the Agreement will be applicable.
- Time is essence of the contract. In case of any delay on part of the Consultant, the Commission may, if need be, get the work done through an alternate source, at the cost of the bidder.
- The Consultant is expected to formulate the strategy regarding the presence of Team Members at CERC. The same shall be discussed and mutually agreed after the contract is awarded and as per the requirement of the Project.

#### 7. Eligibility Qualification Criteria:

7.1 The bidder should have completed at least3 (three) assignments in the last 5 (five) years involving the design and development of AI-based applications/solutions/tools. Documentary evidence in this regard shall be submitted by the bidder. In view of restrictions

in movement due to the prevailing Covid-19pandemic, copy of email from previous clients can also be considered for project status update in case documentary evidence is not available.

- 7.2 The key staff of the bidder shall have professional qualifications and experience in the areas of Artificial Intelligence, ML & NLP. The bidder shall submit details of such staff who will handle the project.
- 7.3 The bidder shall be a firm or a start-upor a Micro, Small & Medium Enterprise(MSME)or a limited liability partnership or a Company registered in India. Documentary evidence in this regard shall be submitted by the bidder.
- 7.4 The bidder shall submit the methodology to be adopted for the proposed assignment.

#### 8. Payment:

8.1 The Consultant shall be paid for the said assignment as per the following schedule:

Sl.N	Stage	Percent of
0.		agreed
		amount
1.	Advance of the total fee of the system development at the time of	10%
	signing agreement/ acceptance of the offer, subject to production of	
	Bank guarantee for 10 % of amount to be valid till successful	
	completion of work	
2.	Design, Development & Deployment of Module 1 of Regulatory	25%
	Expert System Tool (REST)	
3.	Design, Development & Deployment of Module 2 of Regulatory	25%
	Expert System Tool (REST)	
4.	Design, Development & Deployment of Module 3 of Regulatory	25%
	Expert System Tool (REST)	
5.	On successful integration of all the modules in Regulatory Expert	15%
	System Tool (REST) and acceptance of the same by the CERC with	
	training and knowledge transfer.	

<sup>\*\*</sup>Bank guarantee shall be released after successful completion of work.

#### 9. Bid&Bid Evaluation Criteria:

- 9.1 The bidders shall quote the rate exclusive of taxes which shall be over and above the quoted rates;
- 9.2 Any conditional bid is liable to be rejected;
- 9.3 The bidders should have a valid registered PAN/TAN and GST number;
- 9.4 Two separate sealed bids clearly marked as "Technical Bid" and "Financial Bid" are required to be submitted which shall be placed in one outer envelope clearly mentioning in

bold letters on top of envelope "Development of AI Based Regulatory Expert System Tool (REST) for Central Electricity Regulatory Commission";

- 9.5 The format of application is at Annexure-I (for Technical bid) and Annexure-II (for Financial bid). The bidders are required to submit two (2) copies of Technical bid (each of which will be treated as original) along with the soft copy and one copy of Financial bid;
- 9.6The bidder should not have been blacklisted or debarred by Government of India/ any State Government or Public Sector Undertakings and shall submit a declaration as per Annexure-III and a Certificate (as per Appendix- A);
- 9.7The bids of the eligible bidders will be scrutinized by Consultancy Evaluation Committee (CEC) and shortlisted bidders will be called for interaction. The bidders shall be required to make a presentation and demonstrate Proof of Concept (POC)/past projects etc. before Consultancy Evaluation Committee (CEC) on the proposed Approach and Methodology. The total score will be obtained by adding the Technical component and Financial component;
- 9.8The technical performance of the bidder shall be evaluated by the Consultancy Evaluation Committee on basis of the following criteria:

Technical Parameters	Weights
The bidders relevant experience for the assignment	40%
The quality of the methodology proposed	10%
The qualifications and experience of the key staff proposed	20%
Quality of presentation	30%
Total	100%

- 9.9The minimum qualifying score shall be 70% for Technical component. Only those bidders who qualify technically, would be considered for Financial evaluation. The Financial bid of only technically qualified bidders will be opened;
- 9.10 Technical component will carry 70% weightage and financial component will carry 30% weightage;
- 9.11 Proposal with the lowest cost will be given a financial score of 100 and other proposals would be given financial scores that are inversely proportional to their prices;
- 9.12 CERC shall have the right to cancel the bid and/or reject any or all bids without assigning any reason thereof;
- 9.13 Any requests for extension of date for submission of bids will be at the sole discretion of CERC;

9.14 The successful bidder would be communicated the award of consultancy assignment. The

successful bidder shall enter into an Agreement (as per Annexure-IV) and a

Confidentiality/Non-Disclosure agreement (as per Annexure-V) prior to taking over the

assignment and shall abide by the terms and conditions contained therein;

**10. Termination of Contract:** 

The Consultant shall abide by the terms and conditions agreed to under the Agreements

(Annexure-IV and Annexure-V) entered into by them. In case of non-performance or any

breach/violation of any of the terms and conditions of any of the said agreement, CERC shall

have the right to terminate the said agreement, in addition to the right to impose any

penalty/liquidated damages.

For more clarification, answers to the queries/suggestions received from various bidders

are enclosed at Annexure VII.

11. The address for submission of the bid/proposal and seeking any clarification through

email (within the due date of submission of the TOR i.e. upto 1500 hours on 04th March,

2021) is given below:

The Secretary,

Central Electricity Regulatory Commission,

3<sup>rd</sup> Floor, Chanderlok Building,

36, Janpath, New Delhi – 110001

Email: secy@cercind.gov.in

Ph: 91-11-23353503 Fax: 91-11-23753923

Sd/-(Sanoj Kumar Jha)

Secretary, CERC

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## Annexure - I DETAILED PROPOSAL FOR ASSIGNMENT

(TECHNICAL)

Note: Two (2) copies of the proposal shall be submitted to Secretary, CERC.

I. GENERAL INFO	RMATION :
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- 1) Title of the Proposed Assignment :
- 2) Name and address of the Organization/ Institution:
- 3) Name & Designation of the Key Person:
- 4) Contact address of the Key Person:

a) Address :

b) e-mail :

c) Telephone :

d) Fax :

e) Mobile No. :

#### II. TECHNICAL SPECIFICATIONS

Net-worth/Turnover of the Organization/:
 Institution (To be supported by Annual Statement of Accounts of Last Financial Year)

:

- 2. Registered PAN/TAN and GST number of the Organization /MSMEs
- 3. Brief review of the experience in the relevant field (National and International).
- 4. Detailed Approach & Methodology for undertaking the assignment.
- 5. Facilities available for the proposed work in the applicant's organization/institution
- 6. Previous experience of the applicantin this or related field
- 7. Biographical sketch of the System Development Team (for every team member)
  - (i) Name
  - (ii) Designation
  - (iii) Date of Birth
  - (iv) Education and Experience
- (v) Man days to be spent on this assignment

#### A. Academic Qualification

Degree	University	Field(s)/Specialization	Year

#### **B.** Experience

- (1) Total Relevant Experience for the proposed assignment: .... Years
- (2) Detailed Experience:

Institution	Topic of work done	Period

- (3) Field of major interest
- (4) Additional information (if any)
  - 8. Capacity to impart training/transfer of knowledge
  - **9.** Whether blacklisted/debarred for conducting studies or consultancy services, by any Government/semi-government/quasi-judicial agency, if so the details thereof:

[Undertaking to be given as per Annexure-III]

**Signature of the Head of the Corporate Consultant** 

## <u>**DETAILED PROPOSAL FOR ASSIGNMENT**</u> (FINANCIAL)

I.	<b>GENERAL</b>	INFORM	<b>MATION:</b>
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•	TENDED IN THE	
1.	Title of the Proposed Assignment	•
1.	Title of the Proposed Assignment	•

- ii. Name and address of the Organization/Institution:
- iii. Name & Designation of the Key Person:
- Contact address of the Key Person: iv. (e-mail/fax/telephone)
- Certificate of authorization in case of Institutes/other organizations (Format enclosed at Appendix-A).

#### II. **Fee Proposed:**

Amount of Fee proposed for:

Components	Basis	Amount (in Rs.)
I ) System Development Charges		
Module I		
Module II		
Module III		
II ) Suggested Third Party API/Software/ Licenses procurement if any(5 year cost)		
III) Misc./Others Charges (if any)		
Total		
(The amount quoted is exclusi	ive GST)	

	_		
(RUPEES			)

Signature of the Head of the Corporate Consultant

#### **Declaration/Certification**

To

#### The Secretary

Central Electricity Regulatory Commission, 3<sup>rd</sup> Floor, Chanderlok Building, 36, Janpath, New Delhi - 110001 Ph: 91-11-23353503 Fax: 91-11-23753923

Sir,

I have carefully gone through the Terms & Conditions contained in the Terms of Reference (TOR) regarding study on "Development of AI Based Regulatory Expert System Tool (REST)" pronounced by Central Electricity Regulatory Commission". I hereby declare that my firm has not been debarred/blacklisted by any reputed Government/Semi Government Organizations from conducting Studies or consultancy services within last three years nor is there any pending dispute in this regard. I further certify that I am an authorized signatory of my company/firm and therefore competent to make this declaration. Yours sincerely

Name: _	
Designation:	
Company/firm:	
Address:	

#### **CERTIFICATE**

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

Signature of the Competent Authority of CERC	Signature of the Head of the Corporate Consultant
Name and Designation	Name and Designation
Date	Date
	Official stamp of Organization

#### On 100100 Stamp Paper

#### **AGREEMENT**

This AGREEMENT entered into on this	day of 2020 [here give the date
ofthe agreement] BETWEEN	[give Name and full address of the
Consultants whoenters into agreement on beha	olf of the firm/company] hereinafter referred
to as "the Consultants" or the party of the First 1	Part (which term shall wherever the context
permit include its successors and assigns) AND	Central Electricity Regulatory Commission
(herein after called "CERC") or the party of the,	"Other Part' (which term shall wherever the
context permit include its successors and assigns)	and represented by (name and
designation of the Officer signing this agreemen	nt) having its office at 3 <sup>rd</sup> Floor Chanderlok
Building, 36 Janpath, New Delhi -110001WHERI	EAS

CERC, on being satisfied that there is a need to engage a [Corporate Consultant or Professional Expert] for the assignment of "Development of AI Based Regulatory Expert System Tool (REST) for Central Electricity Regulatory Commission"

- **A.** has invited quotations vide its notice [give here the details with date of the NIT/notice]
- **B.** On scrutiny of all the quotations received in response to the above NIT **dated[]**, the quotation submitted by the Consultant [] vide Letter [give details withdate of the quotation] emerged successful and accordingly, CERC has decided to engage the Cconsultant [] for the above said assignment in terms of the provisions of the Central Electricity Regulatory Commission (Appointment of Consultants) Regulations, 2008 as amended from time to time.
- **C.** The Consultant [ ] has by letter dated (details of letter with date)unconditionally agreed to take up the above said assignment. The parties have therefore decided to put forward the terms of agreement in writing as stated below:

#### NOW THIS AGREEMENT WITNESSETH AS UNDER:

That the Parties to this Agreement have agreed to terms and conditions mentioned below:

#### 1. Definitions:

- i. "Commission" means the Chairperson and the Members of the Commission, including the Ex-officio member.
- ii. "Confidential information" means any and all information but not limited to the information communicated to the consultant by the CERC duly marked so and as defined under the Confidentiality and Non-Disclosure Agreement.
- iii. "Person" shall include any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person;
- iv. "Secretary" means the Secretary of the Commission.

#### 2. Scope of work:

The scope of work assigned to the Consultant shall be as specified under clause 4 of the TOR

The consultant/professional expert shall be engaged as [Corporate Consultant or Professional Expert] for the assignment of "Development of AI Based Regulatory Expert System Tool (REST) for Central Electricity Regulatory Commission" The Scope of Work under the said assignment shall include, but is not limited to, the following:-

#### 3. Module I: AI based searching

- i) Query completion- To guide users to the right query instead of only keywords. ii) Related searches To help the users to use the query to get the best search results, as intelligent recommendations will be based on user's initial query. This would help users nail their searches quickly.
- iii) Related cases When a user searches a case, he or she may like to explore other related cases. Suggestions within the search results (e.g. right under the description of the search result), can help users explore and find other similar case.
- iv) Deep indexing and analysis of data in case documents in word, pdf etc., for key phrases, keywords, references etc., and providing related and recommended content.

**Module II: Automatic Legal Document Creation & Assembly comprising of a**utomated extraction of data in preparation of Factsheets/ Record of Proceedings(ROP)/ orders/orders summary etc for the Commission

Module III: Process Automation & Data Visualization tool to automate the process like sending notices, ROPs, orders through email automatically on schedule and data visualization tool for data trends data analytics of regulatory compliance and petition status etc.

#### 4. Commencement and duration of assignment:

The above assignment shall commence with effect from [the date of this agreement (or) specify the date] and shall be valid for a period of [here give the duration of the contract]

#### 5. Obligations of the Consultant:

- (i) The Consultant shall adhere to the time-frame as specified in the Terms of Reference and shall submit the deliverables to the Secretary of the Commission.
- (ii) The Consultant shall make the presentations before the Commission as required by the Secretary.
- (iii) The Consultant shall ensure that the contents of the said assignment are strictly confidential and shall not be disclosed to any other authorities or person. The provisions of the confidentiality and nondisclosure agreement are applicable to these information.

[Here give any other responsibility to be discharged by the consultant].

(iv) The Consultant shall provide the all reports and calculations in the report format as well as digital format as the CERC desires.(not clear)

#### **6.** Entitlements of the Consultants:

- (i) The Consultants shall be entitled to Rs. [Here give the amount payable andthe schedule of payment and any other provision such as TDS, etc.];
- (ii) The mode of payment to the Consultant shall be as per Clause 6 of the Terms of Reference. If advance amount is not requested by the Consultant, 10% of the fee can be claimed at the end of the contract period on submission of the final report.
- (iii) The Consultant shall not be entitled to any other remuneration or reimbursement of perquisites or facilities.

#### 7. Restrictive terms:

- (i) The Consultant further affirms and confirms that the current assignment is not and shall not be, in conflict with any of its present obligations to any party with whom he/she/it has association.
- (ii) The Consultant further affirms and confirms that he/she/it shall hold all Confidential Information in confidence and with the same degree of care he/she/it uses to keep his/her/its own similar information confidential, but in no event shall it use less than a reasonable degree of care; and shall not, without the prior written consent of CERC, disclose such information to any person for any reason at any time;
- (iii) CERC shall be entitled to, without prejudice to any other right for civil or criminalproceedings, receive from the Consultant [] a compensation for the damages forviolation by him/her/it of any of the terms of the agreement which shall be limited to the total fee of the assignment.

#### 8. Performance Guarantee:

The Consultant shall furnish an irrevocable Performance Bank Guarantee amounting to 10% of the value of (assignment) amount at the time of signing the agreement and thesame shall be kept valid for 3(three) month after expiry of the agreement or completion of work whichever is later. In the event of extension of Assignment/Contract, the Performance Bank Guarantee furnished shall be suitably extended by the Consultant. The Performance Bank Guarantee and/or the extended Bank Guarantee shall be kept as security for performance of the contract work and shall if need be, invoked for breach of any of the terms of this Agreement and/or for non-performance of the terms of the contract.

#### 9. Liquidated Damages:

The timelines for deliverables as per clause 5 above shall be strictly adhered to by the Consultant. The assignment shall be completed in a phased manner and overlapping of one or more study shall not be a constraint for adherence to the timelines specified. In case of any delay in adhering to the timelines for completion of the assignment or in case of any error/variation in the assignment submitted, liquidated damages shall be levied in the following manner.

#### 9.1 Liquidated Damages for delay and for error/variation in the assignment report.

In case of delay in the deliverables/schedule as per clause 5 and in case any error or variation is found in the assignment submitted to CERC by the Consultant and if such error or variation is found to be the result of negligence or lack of due diligence on the part of the Consultant, liquidated damages not exceeding an amount equal to 0.5% (zero point five per cent) per day of the agreement value, shall be imposed on the Consultant, from the payments to be made as per schedule, subject to a maximum of 10% (ten per cent) of the Agreement Value. However, in case of delay due to reasons beyond the control of the Consultant, suitable extension of time with no additional financial commitment shall be considered.

Prior to imposition of LD in case of error/variation, the Consultant may be issued notices to rectify the error/deficiencies as pointed out by CERC.

In the case of non-completion of the said assignment either in full or in case the assignment is partly completed, within the stipulated time or the extended time, CERC shall have the right to get the assignment (in full or in part) completed by another agency, at the risk and cost of the Consultants, in addition to the LD imposed as above.

In case significant deficiencies are noticed in services of the Consultant and in case these deficiencies cause or likely to cause adverse effect on the assignment or on the reputation of CERC, appropriate legal action, including debarring the Consultants for a specific period may be considered.

#### 10. <u>Termination of Contract</u>

In addition to the imposition of LD as above, CERC has the right to terminate the agreement on account of non-performance or breach of the terms and conditions of the said agreement.

- (i) Without any notice: The assignment may be terminated by CERC, any time, with immediate effect, under following circumstances.
  - (a) It has come to notice that the consultant/professional expert has been convicted for an offence involving moral turpitude or unethical professional practices. In such an event, the Performance Bank Guarantee shall be invoked in addition to any further legal remedy against the Consultant.
- (ii) With one-month notice: The assignment may be terminated by CERC, under any of the following circumstances, by giving one month's notice and after providing an opportunity to the consultant/professional expert to offer explanation. In case the explanation is not satisfactory, the Performance Bank Guarantee amount shall be invoked/encashed:
  - (a) It has come to the notice of the CERC that the consultant/professional has resorted to fraud or suppression of material information or submission of false information or unethical means to secure the assignment.
  - **(b)** It has come to the notice of the CERC that there is a material change in the circumstances of the Consultant based on which the assignment was awarded to the consultant/professional expert.
  - **(c)** The Consultant has failed to perform the assignment as per terms and conditions of the agreement; and

- **(d)** The Consultant has violated or breached any of the provisions of the agreement.
- (iii) The CERC and the Consultant shall have the option to terminate the agreement on "mutual consent' by giving notice of one month to the other. This is however subject to adjustment of Liquidated Damages imposed if any, for any error/variation in the assignment or for delay in completion of the work as per deliverables/schedule in this agreement.

#### 11. Effect of termination:

On pre-mature termination of the assignment at any time under circumstances other than those mentioned above, CERC shall pay the Consultants, the consultation feeonly for the work performed by them till the date of such termination, subject to adjustment of any liquidated damages imposed by CERC as per terms of this agreement.

Provided that in case of any dispute as to what is the entitled consultation fee for the work, the matter shall be referred to arbitration under the provisions of this agreement.

#### 12. Notice:

Any notice between the parties shall be in writing and posted to the other party to the last known address.

#### 13. <u>Arbitration:</u>

- i) Any difference, dispute, claims which may arise between the parties hereto as to the construction or true intent and meaning of any of the terms and conditions herein contained or as to any payment to be made in pursuance hereof or as to any other matter arising out or as to any other matter arising out of or connected with or incidental to these presents or as to the rights, duties and obligations of any of the parties, such difference, dispute or claim shall be mutually settled amicably by the parties failing which the parties may resort by arbitration in terms of the Arbitration and Conciliation Act 1996 as amended from time to time. In the event of arbitration, CERC shall appoint sole arbitrator which shall be binding on the Consultant.
- ii) The venue of the arbitration will be Delhi/New Delhi and the language shall be English.

#### 14. JURISDICTION:

In respect of any legal proceedings arising as a result of or relating to or incidental to this agreement, the courts in New Delhi alone shall have exclusive jurisdiction.

IN WITNESS WHEREOF, the Parties above named have executed this Agreement of the day, month and year mentioned hereinabove.

[The corporate consultant/ or on his behalf of]	[on behalf of the CERC]
in the presence of [witness]	the presence of [witness]
Signature	Signature Name
Name	Name
Signed by:	Signed by:

\*\*\*\*\*

#### On Rs.100 Stamp Paper

#### CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT

This CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT entered into on this \_\_\_\_\_ day of ................, 2018 [here give the date of the agreement] BETWEEN [give the Name and full address of the Consultant or Professional Expert] hereinafter referred to as "the Consultant" or the party of the First part AND Central Electricity Regulatory Commission represented by .................. (name and designation of the Officer) having its Office at 3<sup>rd</sup> and 4 the Floor Chanderlok Building, 36 Janpath, New Delhi -110001 (herein after called "CERC") or the party of the other part:

Whereas CERC has undertaken a bidding process for selection of a Consultant/Professional expert for the assignment of "Development of AI Based Regulatory Expert System Tool (REST) for Central Electricity Regulatory Commission" (hereinafter called "the assignment") in accordance with the provisions of the Central Electricity Regulatory Commission (Appointment of Consultants) Regulations, 2008 and its amendments thereof;

- **A)** Whereas, CERC, after evaluation of bids, decided to engage [name of Consultant] as the Consultant for the said assignment and the said Consultant has agreed to take up the above said assignment and has entered into an contract agreement on [Insert date] for undertaking the said assignment;
- **B)** Whereas, CERC, desires to share business information which inter-alia include CERC information or business information of confidential or non-confidential nature to the Consultant for the purpose of the assignment for which the consultant agreed to enter into a confidential and non-disclosure agreement;
- **C)** Whereas, the said Consultant has agreed to enter into a confidential and nondisclosure agreement in accordance with clause 8 of the Terms of Reference and Clause 6 of the Contract Agreement dated (Insert Date of Contract Agreement);
- **D)** Whereas, CERC intends to lay down in writing the obligations of the Consultant with respect to the handling and disclosure of the business Information shared with or made known to the said Consultant by in connection with the said assignment.

#### NOW THIS AGREEMENT WITNESSETH AS UNDER:

In consideration of the mutual covenants and conditions set forth herein, the consultant, is legally bound and agrees as follows:

#### 1. Definitions:

- (a) "CERC Information or Business Information" includes, but is not limited to, information relating to tariff petitions, intellectual property, reply affidavits / rejoinders/objections, written submissions, technical and financial information, sources of information, strategic decisions and discussions, plans, datas, methods and approach, personnel and business relationships in respect of the functioning of CERC etc.
- **(b)** "Commission" means the Chairperson and the members of the CERC including the Ex-officio member.

(c) "Confidential information" includes, but is not limited to business information and includes all and any information communicated to the said Consultant in writing or orally by CERC:

Explanation: The Confidential Information shall not include any information which (i) was already known to the consultant/professional prior to the time of disclosure by CERC as evidenced by written records, (ii) or is available or becomes available to the public, through any other source, other than through a breach of this Agreement by the Consultant /professional.

- (d) "Person" shall include any company or body corporate or association or body of individuals, whether incorporated or not, or an artificial juridical person;
- (e) "Secretary" means the Secretary of the Commission.
- (f) "Effective Date" means the date from which this agreement is signed by the consultant/professional;

#### 2. The Consultant/Professional expert agrees that:

- (a) It shall use the business information including confidential information or non-confidential Information for the assignment and for no other purpose whatsoever;
- **(b)** It shall take all necessary and appropriate steps to keep the business information including confidential and shall protect the confidential Information including: (i) restricting access to all confidential Information received, to those employees who have a "need to know" and advising such employees of their obligations to handle the Confidential Information with the highest degree of care and prudence to prevent any violation of this Agreement; and (ii) not using, disclosing, or allowing access to such Confidential Information by any third party, except as authorized by CERC in writing.
- (c) It shall be liable for any breach of this agreement by any of its employees, employees of its affiliates or subsidiaries and by any Consultant, agent, or other third party to whom it has communicated the said business information including confidential Information.

#### 3. Disclosure of information

- **3.1** If the Consultant/professional expert becomes legally required to disclose business information including confidential Information, or any part thereof, the Consultant will give CERC prompt notice of such requirement. Upon such notice or request, CERC shall either waive compliance to any of the terms of this agreement or if CERC is unable to obtain any order prohibiting disclosure of such business Information and made known to the consultant, only then the Consultant shall disclose that portion of the Confidential Information, which are necessary to ensure compliance of such legal requirement.
- 3.2 Any business information including confidential Information that is disclosed pursuant to a legal obligation as above shall maintain its confidential or restrictive access character if the disclosure does not result in the information becoming generally known or available to third parties, without restrictions on further disclosure. The Consultant shall have the responsibility to show that the information remains confidential based on the foregoing exceptions and must inform CERC within forty eight hours from the date /time of disclosure

upon such exceptions.

#### 4. Rights on Information

- **4.1** The Consultant agrees that business information including confidential Information is and will remain the property of CERC and all such Information in tangible form and copies thereof will be returned promptly to CERC upon request of officer in charge or at the end of the assignment. In case, the consultant is required to hold on to the confidential information in furtherance of the assignment, then such copy shall be maintained in a safe and secure location by the said consultant. No use of such business information including confidential Information is permitted except as provided in this agreement, and the Consultant agrees not to rely upon, in any manner, the said confidential Information, except as authorized by this agreement. No grant of any of the CERC's intellectual property rights, including any license implied or otherwise, is given or intended to be given.
- **4.2** Any additional information provided by CERC to the Consultant for its evaluation, together with the tariff petitions and the information obtained by the Consultant/professional expert as a result of the scrutiny and examination thereof shall also be deemed to be confidential Information and is subject to this agreement. The interim report or analysis or deliverables made there from shall be returned or disposed of as directed by CERC.

#### **5.** Effective date and termination of the Agreement:

- 5.1 This Agreement will be effective as on the Effective date of (Insert Date) and will cover all the business information including Confidential Information disclosed to the Consultant by CERC subsequent to such date. This agreement shall remain valid for 10 years from and after the effective date of this agreement and from the termination of the agreement dated (Insert Date) unless extended by CERC in relation to the said assignment/Permitted Purpose.
- 5.2 The expiry of the agreement dated (Insert Date) does not give liberty to Consultant to disclose any information shared/disclosed by CERC and available with the consultant and/or their employees and the Consultant shall indemnify CERC to the extent of the breach of confidentiality and affecting the interests of CERC.
- **6.** The Consultant acknowledges and agrees that the unauthorized disclosure or any other violation, or any perceived violation of this agreement by the Consultant will cause irreparable damage to CERC. The Consultant agrees that CERC has the authority to prohibit the Consultant/professional expert from any such disclosure, attempted disclosure, violation or perceived violation without the necessity of proving damage of its interests. The Consultant hereby agrees and indemnifies and holds the CERC harmless from and against all or any damage, losses and costs (including reasonable attorneys' fees) resulting from any such actual, attempted or threatened disclosure or perceived violation.
- 7. Neither this agreement nor anything disclosed or provided pursuant to this agreement shall create or should be construed to create, in any manner, any obligation to enter into any contract or business arrangement nor does it obligate either Party to purchase any service or item from the other or offer for sale any products using or incorporating Confidential Information.
- **8.** The Consultant agrees and acknowledges that neither CERC nor its officers, employees, assigns or advisors make any representation or warranty (express or implied) as to the

accuracy and completeness of Confidential Information except as may be expressly represented or warranted in any subsequent agreement concluded between the Parties.

- **9.** This Agreement may not be amended or modified, nor may any right or remedy of any Party be waived, except in writing and signed by such Party. The waiver by any Party of the breach of any term or provision hereof by any other Party will not be construed as a waiver of any other subsequent breach.
- **10.** The rights and obligations of the parties pursuant to this Agreement shall be in addition to and shall not derogate from either party's obligations under any other agreement between them. In the event of any conflict between any provision(s) of this Agreement and those of any other agreement between them, the more restrictive provision(s) shall apply and the interpretation of CERC in this regard shall be final.
- **11.** The Consultant affirms that the individual(s) executing this agreement on behalf of the said consultant has the authority to bind the Consultant to the terms hereof.
- 12. The consultant acknowledges and agrees that each and every term of this agreement is of the essence. If any one or more of the provisions contained in this agreement should be declared invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained in this Agreement shall not in any way be affected or impaired thereby so long as the commercial, economic and legal substance of the transaction contemplated hereby are not affected in any manner materially adverse to any Party. Upon such a declaration, the Parties shall modify this Agreement so as to carry out the original intent of the Parties as closely as possible in an acceptable manner so that the purposes contemplated hereby are consummated as originally contemplated to the fullest extent possible. However, the decision of CERC shall be final.

#### 13. Arbitration:

- a) Any difference, dispute, claims which may arise between the parties hereto as to the construction or true intent and meaning of any of the terms and conditions herein contained or as to any payment to be made in pursuance hereof or as to any other matter arising out or as to any other matter arising out of or connected with or incidental to these presents or as to the rights, duties and obligations of any of the parties, such difference, dispute or claim shall be mutually settled amicably by arbitration through a sole arbitrator to be appointed by CERC.
- **b)** The Arbitration shall be conducted in accordance with the Arbitration and Conciliation Act, 1996 or any statutory amendments thereof. The venue of such arbitration will be Delhi/New Delhi. Arbitration shall be subject to English language.

#### 14. Jurisdiction:

In respect of any legal proceedings arising as a result of or relating to or incidental to this agreement, the courts in Delhi/New Delhi alone shall have exclusive jurisdiction

IN WITNESS WHEREOF, the Parties above named have executed this Agreement on the day and month of the year mentioned hereinabove.

#### Presence of

# Witness 1. 2. Signed by, ...... for on behalf of CERC in the presence of Witness

1.

#### CERC AI Based Regulatory Expert System Tool (REST) Components & Process Flow

- I. Input component to take in Documents, text, drop-down menus etc.
- II. Integration layer
- III. A Core processing Engine:
  - A. Document templates and document creation engine
  - B. Institutional memory
  - C. Search Engine
  - D. Speech to Text conversion engine
  - E. NLP Algorithm (Natural Language processing)
  - F. Facial recognition system
- IV. Output system (Results and export system)

#### I) Input layer:

- a) The input section should consider taking user inputs as well as inputs directly from CERC SAUDAMINI Portal, CERC Website etc.
- b) The Input system should have a provision of taking a custom query as input by user for further processing over the data available in the system's institutional memory.
- c) The Input system should be able to take in documents like Petitions, Factsheets, ROP, Orders as input in editable word documents/PDF (in non-image formats) for further processing and searching relevant orders/other documents as results.
- d) The Input system should take in video recordings and/or audio recordings for draft ROP (Record of Proceedings) document preparation and Speech to text conversion.
- e) The Input layer should have specified filters to select and search relevant orders from institutional memory. The filters may include various parameters like Coram Members, Regulations, Petition type, Petition status, Petitioner name, Project type, asset name, relevant sections and keywords.

#### **II) Integration Layer:**

a) The System designed should be integrated with MIS (Management information system) available and already functional at CERC. The MIS system and CERC website will be a key source of information for the resultant system's institutional memory.

- b) The System should be integrated with CERC web portal for accessing required information and download it as required.
- c) The System should be able to integrate with other structured and unstructured data file formats like Word, PDF (not in image format), excel, etc. to capture relevant information as and when needed.
- d) The System should be integrated in such a way that the data and information flow is smooth and flawless.

#### **III) Core Processing Engine:**

#### **III A) Search Engine:**

- a. The Search engine considered should be an elastic search engine
- b. The Search engine should have both custom query search, phrase search, document (browse and upload) search and drop-down menu search.
- c. The search engine should have relevant filters including Coram members, Regulation, Petition type, Petition status, Petitioner Name, Project Name, Asset name, relevant sections and keywords.
- d. The search engine should have automated search mechanism for document (petition) search and yield results as relevant in terms of:
  - i. Resultant orders by Petition no.
  - ii. Resultant orders by Petition type, Petition Status
  - iii. Resultant orders by Project type
  - iv. Resultant orders by Project name, location, etc.
  - v. Resultant orders by Petitioner
  - vi. Resultant orders by Petitioner versus Main Respondent
  - vii. Resultant orders by Coram
  - viii. Resultant orders by Petition Status
    - ix. Resultant orders by Keywords
    - x. Resultant orders by Regulation
    - xi. Resultant orders by Relevant Electricity Act sections
  - xii. Resultant orders by Asset Name
  - xiii. Resultant orders by Similar Petitions/Review Petitions/IA through
    Natural Language Processing, Understanding and Interpretation
    (NLP/NLU/NLI)

- xiv. Resultant Orders sorted by Relevance Percentage/Score w.r.t. relevance between the new petition and orders in the database.
- e. The search engine should have provision to refine search results (search on search mechanism) appeared by enabling/disabling filter options.
- f. The search engine should also provide a preview with search results to understand the relevance of document before opening it.
- g. The search engine should list relevant results in the order of their relevance through a relevance score. This scoring system will be developed after a detailed discussion with CERC officials.

#### **III B) Institutional Memory:**

- a) The system should have a provision of a dedicated institutional memory for storing all relevant data and to process the same for different desired outcomes.
- b) The institutional memory should receive data constantly from different data sources as specified in this document.
- c) The institutional memory should be able to store both Textual and Audio-visual data formats.
- d) The institutional memory designed should be scalable in future to accommodate increasing amount of data in both Textual and Audio-Visual formats.
- e) The institutional memory should be designed to keep the space optimized and should be easily accessible at all the point of time.
- f) The institutional memory components should be designed in the best possible way to provide search results in least possible amount of time.

#### **III C)** Document Templates and Document creation engine:

- a) The Document creation engine should have templates for Summary report (Factsheet), ROP (Record of Proceedings) and Draft Orders.
- b) The document creation engine should work on automated creation of a Summary report draft from any new petition received.
- c) The document creation engine should provide an automated ROP draft based on the ROP document template, proceedings records, summary report and petition as existing already.

- d) The proceeding records so available for ROP creation will be in Audio or Audio-visual file formats and the system should be able to conduct Speech to Text for the draft preparation.
- e) The system should be able to automatically create a draft order utilizing the petition received, summary report, ROP(s) and draft orders. System can also use other relevant orders from the institutional memory for reference.
- f) The System should provide all created draft document including Summary report, ROP(s) and Order draft for final manual supervision and proof-reading for final document preparation.
- g) System should utilize NLP techniques to understand, interpret and process the data for automated document creation with maximum accuracy.

#### **III D) Speech to Text conversion engine:**

- a) The System should have a provision for Speech to Text conversion to automatically convert Audio/Audio-visual data to text.
- b) The System should be able to identify the speaker from the Audio/Audio-Visual data to utilize the same information for ROP document preparation.
- c) The system should be an AI (Artificial Intelligence) based system and be able to learn new datasets (Speech data) in future to identify new speakers.
- d) The system if required should be able to learn new content (Legal content, relevant for CERC) in future.
- e) System should have Speech to Text as native algorithm/component to the core processing engine and should be seamlessly integrated with it.

#### **III E) NLP (Natural Language Processing):**

- a) The system should be an AI based system with a provision to carry out Natural Language Processing through Natural Language Understanding and Interpretation.
- b) The system should have NLP as key component and should be natively integrated.
- c) The system should have provision to further learn new data and interpret in future as and when needed.
- d) The System should be able to predict the outcome of the petition as accurately as possible through the native NLP algorithm.

- e) The system should have NLP as source of Auto-Correct/Auto-Suggest while working on any document creation including Summary report, ROP or Order.
- f) The NLP component should be able to understand different pronunciations of same word by different people and interpret the same while creation of the documents, specifically an ROP.
- g) The NLP engine should have a logical mechanism to understand the relevance between 2 statements. It should not only depend on matching keywords in 2 statements but the theme of the statement to be similar as well.

#### **III F) Facial Recognition System:**

- a) The system should have a Facial recognition system to assist speaker identification during ROP creation.
- b) The Facial recognition system should be able to accurately recognize the faces of the multiple people in any video stream.
- c) The Facial recognition system should be able to recognize the faces in live video stream, a recorded video stream or offline images to the images saved in the database for identification of the person.
- d) The facial recognition system should be able to differentiate between the CERC Officials, Petitioner and Respondents.
- e) The system shall use the Artificial Intelligence based Deep learning mechanism for detection, search and recognition solution that uses a stored database of faces to detect, recognize and record people's faces that appear in a camera's field of view for facial recognition.
- f) The system should be able to interact with the image database flawlessly and should be able to perform Facial recognition over newly added images as well.

#### **IV) Output Section (Results and Export section):**

- a) The output section should be able to provide display results as per the search criteria provided.
- b) The output section should be able to export the search results with selection.
- c) The output section should be able to export the metadata of search results in a CSV or Excel format.
- d) The search results should be in HMTL formats.

- e) The search results should have hyperlink (for direct and quick reference) to the relevant regulations, review petitions mentioned and other relevant content as specified and required.
- f) The output section should have Summary reports, ROPs and Orders as additional outcomes of different processes outlined earlier.
- g) The output section will allow the outputs as drafts (Summary report, ROP and Orders) to be exported to word and PDF formats.
- h) The output section will allow the outputs as drafts to be reviewed and amended before final export in a small view and edit panel.
- i) The output section will suggest outcomes of the case based on pattern .
- j) The output section will provide data analytics dashboard of number of petitions based on various parameters like Petition Type, Petition Status, Number of Hearings etc.

#### **Programming Platforms (As relevant):**

- Programming Languages: PHP, HTML5, CSS3, Python, C++, OpenCV,PyTorch,Tensorflow or similar/relevant
- Technologies: Artificial Intelligence, Machine Learning, Big Data Analytics, Natural Language Processing
- Database: Elastic Search, Apache Solr, PostgreSQL or similar/relevant
- Others: Apache spark, Pyspark, Hadoop or similar/relevant

#### **Important Links for Reference:**

http://www.cercind.gov.in/ (For Sample ROP,Orders, Regulation Documents)

<u>https://cerc-efiling.gov.in/cerc/</u>(Online Help Section - For Sample Domain Knowledge and search parameters)

https://www.manupatrafast.com/ (For Sample AI Searching User Interface& Features)

http://apps.powergridindia.com/cerc/ (For Sample Petitions Documents)

#### **Annexure VII**

### **Clarification & Answers to Queries received from various Bidders**

S.No	Queries	Clarifications/Answers	Raised By
1	Is MIS(Management Information System) part of Saudamini portal or a separate application with its own database and user interface?	MIS system is one of the module of SAUDAMINI Portal	krtrimaIQ Cognitive Solutions
2	What tools, technologies and databases are used to develop Saudamini portal, CERC web site, and MIS application?	SAUDAMINI PORTAL-Language Java 7.0, Server Jboss/Apache Tomcat 7 AS/7 and above, View JSP 2.3 Framework Struts 2.3, ORM Hibernate 3.0, Service Spring 3.0, Database Postgresql 9.4, Reporting Tool BIRT Report, DMS Alfresco Community 5.0, CERC Website is a static website developed in HTML, CSS etc and do not have any database.	krtrimaIQ Cognitive Solutions
3	How will this new application(s) interact with currently existing applications(Saudamini, Internet Website, MIS)?	Any seured method like through API, secured database access etc or as per the technology/methodology suggested by the successful consultant	krtrimaIQ Cognitive Solutions
4	Where are various documents(Petitions, Factsheets, ROPs, Orders) housed currently? Are they part of Saudamini and CERC web site databases or there is a separate data base for these documents? Should they all be part of institutional memory database that you plan to develop as part of this RFP?	They are part of SAUDAMINI and CERC Website, Yes as per present scope they all be a part institutional memeory database	krtrimaIQ Cognitive Solutions

5	Is the process automation limited to automation of e-mail communications only or are there any other process automation envisaged?	Process Automation is not only limited to email communication only it will also include small Voice Assistant/Virtual assistant which may fetch the data from SAUDAMINI Portal/CERC Website based on the voice/speech input of CERC user.	krtrimaIQ Cognitive Solutions
6	a. E-mail process automation consists of two parts, first scheduling the communication (what content to be sent to whom, when), and then triggering e-mail at appropriate time. b. How is the scheduling done currently? A document is prepared manually, and emails are sent manually? c. Or you have an user interface application using which you schedule? d. If no scheduling application is there currently, do you want to develop such a user interface as part of this RFP? e. Typically e-mails are prepared with a template by filling in specific details and sent out automatically. How many such templates are to be created? It would depend on different types of content to be mailed. Can we get a list of different types of content to be sent out?	Scheduling the communication is done through SAUDAMINI interface we upload the Hearing Notiice/Other Notices/ROP/Orders etc one by one and email is triggered through the SAUDAMINI portal automatically, we require bulk communication facility i.e we upload an excel sheet/word document or hearing schedule and standard Hearing notice template after taking party name etc from excel sheet/word ducument will be automatically triggered/sent to the parties on their registered email ids. (Reference http://www.cercind.gov.in/2020/hearing_schedule/HSADVAUGV7.pdf), At present we may assume 5-6 templates but the system shall be flexible enough to add more templates in future.	krtrimaIQ Cognitive Solutions
7	Do you currently have any visualisation tool as part of MIS application? b. Can you provide list/approximate number of Reports, Dashboards, KPIs/Metrics to be developed as part of this RFP? This will help us size the effort required to develop such an application	As part of SAUDAMINI Portal we have simple dashboards and reports developed in Birt. But we expect more data analytics and visualization tools which cater/show trends etc of time series data analysis/corelations etc. With the current proposal we may assume 12-15 Dashboards/KPIs/Metrics etc as part of this RFP.	krtrimaIQ Cognitive Solutions

8	We understand you have Petition, Fact Sheet, ROP and Order documents. Are there any other documents apart from these 4 types?	Apart from this TV letters, Regulations etc are there all the types of documents are present at www.cercind.gov.in	krtrimaIQ Cognitive Solutions
9	What specific formats of files you have for audio and video files, e.g. MP3, MP4, wav etc?	MP3, MP4	krtrimaIQ Cognitive Solutions
10	For search to work effectively, we need to convert all the documents into text and index them using elastic search. Can you provide number of documents and average number of pages for each type of document that we need to search on? This helps us estimate the effort & timelines to convert all these documents and index.	Some of the documents are already available in Word Format. It is very difficult to tell the number of pages which will keep on increasing day by day in future. However at present it may be assumed that total size of data is approx 2TB.	krtrimaIQ Cognitive Solutions
11	Currently you seem to have search facility on CERC internet website, as well as Saudamini intranet portal. Will these applications and search features would continue as they are today, or they will need to be upgraded with new search functionality being requested as part of this RFP?	Search facility at CERC Website and SAUDAMINI Portal will continue, however it is expected to have more extensive AI Based Searching for that new interface will also be developed by the Consultant. (CERC is expecting some similar AI Based interface searching like Manupatra (www.manupatra.com), Refer: https://www.manupatrafast.com/Defaults/training manual.aspx for seeing interface, features, visulization tools etc etc.	krtrimaIQ Cognitive Solutions
12	How many total users are expected to use this system, how many concurrent users, and how many distinct roles are there for role based controls?	Approx 70, Concurrent Users may be 10-15,	krtrimaIQ Cognitive Solutions

13	Is the current infrastructure you have on-premise or cloud based? Are you open to host this new application(s) on cloud(AWS, Azure, GCP or any other cloud) or you prefer only on-premise implementation?	On Premise Inftrastructue and AI Based tool is also expected to run on intranet, however if requirement exist CERC may procure space and resources on NIC Meghraj Cloud also.	krtrimaIQ Cognitive Solutions
14	Can you please provide address and contact person details to whom technical and financial bid hard copies to be couriered?	As per point 12 of RFP: The Secretary, Central Electricity Regulatory Commission, 3 rd Floor, Chanderlok Building, 36, Janpath, New Delhi – 110001 Email: secy@cercind.gov.in Ph: 91-11-23353503 Fax: 91-11-23753923	krtrimaIQ Cognitive Solutions
15	Appendix A template refers to study team, but the work involves full application design, development and implementation, beyond study. Do you mean that during initial requirements collection, vendor team should be present at your facilities, and subsequent application design and development can be carried forward remotely from vendor's offices? Also does the vendor need to fill second column of the table, while the first column would be filled by CERC?	Study Team here refers to entire system development team, The Consultant is expected to formulate the strategy regarding the presence of Team Members at CERC, the same shall be discussed and mutually agreed after the contract is awarded and as per the requirement of the Project. Appendix A needs to be filled by Head of the Corporate Consulatant and CERC	krtrimaIQ Cognitive Solutions
16	We are required to submit physical and electronic copy of proposals. Is it acceptable, if we mail electronic copy before deadline, but physical copy reaches CERS address slightly after the deadline?	It is expected that Hard copies may be received on or before deadline.	krtrimaIQ Cognitive Solutions
17	Lack of meaningful recommendations based on user's search history and those of other users, who did similar searches Would a user be able to see his own search history and recommendations or he wil be able to see the results based on other users' searches as well? Ot this will work as per the access control List (ACL).	User would be able to see his own search history as per access control list/rights	Artificial Visual Labs Pvt. Ltd.

18	Module 1, Point i) Query completion - To guide users to use the right query, instead of only keywords What would be the query format (including Character type, expression, operators and length). Will it be a query containing free flow of words?	Query Format as well as free flow of word/text	Artificial Visual Labs Pvt. Ltd.
19	Since the RFP has requested past experience of the firms with a weightage of 40%, the past experience can be better measured by a demonstration of past projects or similar projects built on AI. We request breaking up of past experience score of 40% into 2 section, a). Past Experience - 20% with separate score for each project with documents & b). Past project/similar work demonstration - 20%	It is expected that the Consultant shall do its own assessment and decide strategy for the said task. The evaluation would be done on comparative basis based on all the bids received.	Artificial Visual Labs Pvt. Ltd.
20	Proposal with the lowest cost will be given a financial score of 100 and other proposals would be given financial scores that are inversely proportional to their prices; - Government of India has issued guidelines w.r.t MSMEs for price match in bid. Please refer to the circular attached by name "MSME Procurement financial bid relaxation"	The engagement of consultants is regulated under the provisions of CERC (Appointment of consultants) Regulations 2008. With regards to price matching in bid, it is stated that the requirement for engagement of consultant is technical/specialized in nature hence cannot be distributed amongst various companies. Please refer Q.No-08 FAQ of OM dated 24 October 2016.	Artificial Visual Labs Pvt. Ltd. (Point 21)
21	Government of India has issued a circular for Exempting MSMEs from past experience and past turnover criteria for public procurement. We would request you to consider the same and access the bidders majorly on Execution methodology, Relevant product demonstration, Manpower skill sets and presentation. This will give a fair chance to technically compotent MSMEs in competition to established companies. Attached government circular by name "Public Procurement relaxations for MSME" for MSME Public Procurement with this email for reference	The nature for engagement is technical/specialized in nature. The qualification criteria given at para 7 of ToR is for developing expert system on specific issues of relevance and interest to the Commission as per provisions of CERC (Appointment of consultants) Regulations 2008 hence relaxation on the exemption of past experience (i.e at least completed three projects) may not feasible. The evaluation would be done on comparative basis based on all the bids	Artificial Visual Labs Pvt. Ltd.

		received.	
22	The bidder should have completed at least 3 (three) assignments in the last 5 (five) years involving the design and development of AI-based applications/ solutions/ tools.  Documentary evidence in this regard shall be submitted by the bidder - Kindly consider email option for proejct status update along with the ongoing assignment too	Seeing the Covid Pandamic copy of email from previous clients may be considered for project status update.	Pragya Solar
23	The System designed should be integrated with MIS (Management information system) available and already functional at CERC. The MIS system and CERC website will be a key source of information for the resultant system's institutional memory Please confirm if current MIS is webbased system.	Its an internal MIS system running on CERC intranet as well as on NIC Meghraj Cloud and developed on Java/ Postgress	Pragya Solar
24	The Input system should be able to take in documents like Petitions, Factsheets, ROP, Orders as input in editable word documents/PDF (in non-image formats) for further processing and searching relevant orders/other documents as results.	Refer cercind.gov.in , Also refer answer of queries at S.No 8 & 10	Pragya Solar

25	The system should have a provision of a dedicated institutional memory for storing all relevant data and to process the same for different desired outcomes All infra will be provided by CERC i.e. harware, servers, network etc., Will the solution be hosted on premise or on cloud? Is providing cloud infrastructure also in scope of Bidder?	All infra will be provided by CERC, Hybrid Cloud- Both internal/cloud- All hardware infrastructure and cloud VM will be provided by CERC	Pragya Solar
26	The System should be able to identify the speaker from the Audio/AudioVisual data to utilize the same information for ROP document preparation-For facial recognition will the client provide us with data of face samples to train the algorithmFor facial recognition will the client provide us with data of face samples to train the algorithm.	Yes CERC will provide the data of face samples to train the algorithm	Pragya Solar
28	(1) The scope includes search on English Text only and no other languages.	English Text only	Asset Plus Consulting
29	(1) What is the volumes of documents in terms of Size of data (Eg. GB) and no. of documents?	It is very difficult to say number of documents, However total size of data as on date is Approx	Asset Plus Consulting
	(2) Of all the documents in repository, what is the break-up of docs in terms of	2TB.	
	· structured docs (E.g. MS Word, MS Excel)		
	PDF docs (images)		
	PDF docs (text)		
	Audio		
	Video		
	Others		
30	(1) What is the current backend database of mentioned portal.	Database Postgresql 9.4	Asset Plus Consulting
	(2) What is the current volume. Please mention the types of source.	Approx 2TB data, CERC Website, CERC SAUDAMINI Portal & CERC File Server	Asset Plus Consulting

31	<ul><li>(1) What is the volume of audio file.</li><li>(2) What are the different types of the audio files vizwav, kindly share the volume against each type</li></ul>	Past adudio data will not be used hence current volume is Nil, Types of Audio files- MP3, MP4	Asset Plus Consulting
32	(1) Should we consider that Scanned pdf is not in scope and All pdf are in textual format	1)Scanned Pdf are in scope and some of the documents are scanned PDF documents also.	Asset Plus Consulting
	(2) Will the necessary software licenses will be in procured in name of CERC or vendor for project implementation	2) CERC prefer open source softwares/in case consultant is suggesting some paid software the same may be procured in the name of CERC and cost of the same shall be mentioned in the submitted technical and financial bid.	Asset Plus Consulting
	(3) Will the hardware be provided by CERC or it has to be managed by the vendor	3) Hardware/Cloud VM will be provided by CERC.	Asset Plus Consulting
33	(1) What's the concurrent users' volume and total users who will be accessing the proposed system (2) From how many locations will the application be accessed?	Approx Users Approx 70, Concurrent Users may be 10-15, It is expected that application developed wil be web based and if required can be accessed on CERC intranet as well as on internet	Asset Plus Consulting
34	(1) Since AI/ML projects are long duration, It is requested to consider the ongoing projects as well with their project completion and execution status in email too.	The Qualification criteria provided under ToR(Section 7) appears to be adequate and are in line with several other studies floated earlier.	Asset Plus Consulting
35	What is the volume of video data and how it's stored currently. Is there any meta data of audio/video files are available.	As on date Nil as past, Stored as a file. No meta data of audio, video file is available	India Smart Grid Forum
36	Since the project involve specialized solution for India;s foremost power regulatory organization, the context of work as REST application can further be enhanced if ALLOWED tp bring in consortium in of from best of power sector experience and technology deployment	CERC believes in knowledge sharing after due approvals from the Competent Authority and acknowledgement to the Commission and will be governed by ToR confidentiality agreement.	India Smart Grid Forum

37	(1) It is requested, along with completed projects, to consider the ONGOING PROJECTS as well in the space of design and Development of AI & ML implementation 2)Because of COVID environment, where every thing is in remote way of working and deployment, outside person can not visit out client location, in such a scenario, instead of hard copy, soft copy EMAIL document should also be considered as documentary evidence for project completion /execution	The Qualification criteria provided under ToR appears to be adequate and are in line with several other studies floated earlier.	India Smart Grid Forum
38	Only ENGLISH language conversion is in scope, or there are any other languages too	Only English	India Smart Grid Forum
39	Is procurement and fitment of Camera is in scope of the bidder	No	India Smart Grid Forum
40	Whether CERC allows use of sub-contractors	As per TOR the bids submitted by Consortium of Companies/Sub Contract is not envisaged in the ToR	Deloitte
41	Images saved in the database will have all the members in the courtroom if not how we should handle that? Even if the speaker is not available on video and we are able to hear audio, how to handle this case.	CERC will provide images of all the Members and developed system shall be capable of recognizing it, In case of audio voice recognition tags will be used to identify the members	Kreate Technologies LLP
42	What will be sources for these data? Apart from the CERC website and MIS reporting systems.	CERC SAUDAMINI Portal, CERC Website, CERC File Server data (Word, PDF,Excel)	Kreate Technologies LLP

43	Whether we have mapping and tagging for each of the sources or it needs to be developed in future. e.g. Who were Coram Members, Petitioner name, date when event occurred, etc.	No audio and video Mapping/tagging is available with CERC however Petitoner name, Coram Members, event date etc can be fetched from CERC SAUDAMINI Portal database/API	Kreate Technologies LLP
44	Which will be the primary language which we should consider during audio or Audio-visual conversion to text and if there are other languages how should we proceed with that?	English	Kreate Technologies LLP
45	a. What is your expectation of data increase in the next coming two years? What is the percentage of additional optimized space which should be easily accessible to CERC? b. Hosting on cloud server or in-house, If it's cloud server does it need to be hosted in India.	Approx 2 TB increase in data is expected in next 2 years.All Hardware/ Cloud /VM space will be provided by CERC	Kreate Technologies LLP
46	Can we get samples for each template before bid submission.	All are in public domain refer CERC website www.cercind.gov.in	Kreate Technologies LLP
47	Example, a case about exceeding expenses, they may want to explore other related cases to increase knowledge on that topic Question is "what are criterias which we should choose for developing scoring system"	Some Parameters are mentioned in RFP, others domain related information will be provided in requirement gathering/SRS Development phase and Consultant have to plan its own strategy based on CERC requirements.	Kreate Technologies LLP
48	1. There are some AI specific algorithms which need some 3rd party software, example audiovisual Google API which is 3rd party software, we would like to use them in our algorithms, so how should we proceed with that?  2. If there is a platform by a private company like IBM watson, it is a collection of open source with customizations, can we use it?	CERC prefer open source softwares/in case vendor is suggesting some paid software the same may be procured/subscription taken in the name of CERC and cost of the same shall be mentioned in the submitted technical and financial bid.	Kreate Technologies LLP

49	As our organisation is regestered under MSME DIPP Start-up, So like to know do we have any relexation in submitting the AI software project.	The nature for engagement is technical/specialized in nature. The qualification criteria given at para 7 of ToR is for developing expert system on specific issues of relevance and interest to the Commission as per provisions of CERC (Appointment of consultants) Regulations 2008 hence relaxation on the exemption of past experience (i.e at least completed three projects) may not feasible. The evaluation would be done on comparative basis based on all the bids received	Kreate Technologies LLP
50	As we have our product related to the design and development of machine Learning based applications such as Demand and Wind/Solar forecasting could be considered as relevant experience for participating in the RFP as such application make use of advanced algorithms which are based on R & Phython language, so we like to request to accept the work order related to ML project for the 40% scoring	This query pertains to technical evaluation stage	Kreate Technologies LLP
51	Further, the AI/Machine Learning based applications are under the advanced stage of implementation, and hence many bidders may not be having 5 years of experience in this field. therefore, request you to kindly consider the experience of a minimum of 1 year.	The condition relates to the completion of 3 assignments in last five years and do not necessary requires that the company shall be five years old	Kreate Technologies LLP
52	Six months time period is less for completing all the 3 Modules of project, Can we extend it for 1 year.	The timeline provided in the TOR is adequate and does not require any change. However later on if CERC feels the same shall be discussed and mutually agreed	Kreate Technologies LLP

53	Data sources which are mentioned for projects are MIS system, CERC SAUDAMINI Portal (cerc-efiling.gov.in) and CERC website (www.cercind.gov.in), to run real time systems can we have a unified Data source so that we can run algorithms with less latency and provide better and accurate results.	CERC Website is a static website and do not have database, for others we may think of unified database depending upon the methodology adopted and as per technical advice of successful bidder	Kreate Technologies LLP
54	For data source do you have any API's ? In what format these data are available?	No, Postgress Database, PDF, WORD, EXCEL Documents	Datawise Management Services India Private Limited
55	What kind of questions may be asked?	Will be informed at information gathering stage, For sample Reference Manupatra website www.manupatra.com may be seen	Datawise Management Services India Private Limited
56	What languages these queries would be?	English	Datawise Management Services India Private Limited
57	How many documents would be there?	Approx 2 TB Data, Refer CERC Website www.cercind.gov.in	Datawise Management Services India Private Limited
58	How often are the documents refreshed?	Documents are added/uploaded on daily basis	Datawise Management Services India Private Limited

59	Please specify for what purpose you want to integrate facial recognition.	For Preparation of Record of Proceedings, Minutes of Meeting etc on	Datawise Management Services India Private Limited
60	How many users are going to be there?	Approx Users Approx 70, Concurrent Users may be 10-15	Datawise Management Services India Private Limited
61	We wanted to understand, does system will guide user with how many sets of recommendation?	As per CERC user requirement and domain	E&Y
62	Request to share the list of all possible data sources with type of data and application name (OEM details) and high-level current architecture of CERC.	Postgress/ CERC File Server/CERC Website, Word, PDF, Excel files. Details may be shared to successful bidder.	E&Y
63	Please include "Firms should be at least CMMI 3 or above"	Section 7: Qualification criteria provided in the ToR appears to be adequate and does not require any change.	E&Y
64	Please include "Average annual turnover of the bidder should be minimum Rs. 20 Crores in preceding three financial years ending 31st March 2020 and should be a profit-making (PAT should be positive) concern for the last three completed financial years.	Section 7: Qualification criteria provided in the ToR appears to be adequate and does not require any change.	E&Y

65	Request to modify as "The bidder should have completed at least 3 (three) assignments with Central or State Government/PSU for value INR 2 Crores or above each in the last 5 (five) years involving the design and development of AI or ML or Advanced Analytics or Statistical Models -based applications/ solutions/ tools. Documentary evidence in this regard shall be submitted by the bidder."	Section 7: Qualification criteria provided in the ToR appears to be adequate and does not require any change or clarification.	E&Y
66	We wanted to understand the unstructured and the semi structured data CERC is currently using? What is the semi structured and unstructured data sources CERC wants to analyse in case of various document?	Pdf documents(Searchable) and Pdf Documents(Non Searchable), Word Documents, Excel Sheets	E&Y
67	What is the current volume (unstructured and semi structured data) and any guidance in terms of the volume (unstructured and semi structured data) to be provisioned?	Total data size Approx 2 TB, Very difficult to say size of unstructured data	E&Y
68	We understand that automated extraction of data to assist in preparation of factsheets/ Record of Proceedings (ROP)/ orders etc. for the Commission will happen. But does it also have recommendation on panel just to ensure commission to pick, if not its is not done correctly	It is expected that firstly these documents are created automatically based on domain Algorithms and once the Algorithms are trained the system ,giving recommendations will be an added advantage	E&Y
69	We understand that process automation is happening automatically on schedule time. What will be the schedule interval?	As per CERC requirement for example for Hearing notices to sent it may be 2-3 days per week	E&Y
70	What will be the historic timeline that model will be picking up to perform efficient search based on user's historic search patterns	Optimum without affecting the system efficiency or as suggested by successful technical consultant	E&Y

71	What is the total data sources we are expecting to be integrated in system? We understand that it would be requiring to access data from different data sources. However, is there a requirement for migrating the data into cloud/elsewhere, when volume of data is large? Please provide the plans or migrating the implemented solution to cloud so that the cost of transition could be estimated appropriately.	No migration is required	E&Y
72	Is there any indicative schedule that CERC has/ thought for implementation of data lake? How many years of historical data might CERC be expecting to be migrated to the data lake?	May be in second version or phase of the project	E&Y
73	We understand that it will be role-based access, but how many role we foresees in systems.	Divisionwise/Designation wise roles	E&Y
74	What will be the schedule interval?	As per CERC requirement	E&Y
75	Milestone 1: Advance of the total fee of the system development at the time of signing agreement/ acceptance of the offer, subject to production of Bank guarantee for 10 % of amount to be valid till successful completion of work -10% Milestone 2: Design, Development & Deployment of Module 1 of Regulatory Expert System Tool (REST) - 30% Milestone 3: Design, Development & Deployment of Module 2 of Regulatory Expert System Tool (REST) - 25% Milestone 4: Design, Development & Deployment of Module 3 of Regulatory Expert System Tool (REST) - 25% On successful integration of all the modules in Regulatory Expert System Tool (REST) and acceptance of the same by the CERC with training and knowledge transfer 10%	The Payment terms under Section 8 provided in the ToR appears to be adequate and does not require any change	E&Y

76	Request to make the evaluation more objective by bifurcating the weightage for each project, qualification, experience of key staff, quality of methodology and presentation. 1.Please share the presentation evaluation parameters and marking criteria to get 30% marks 2. please share the minimum qualification and experience parameters for evaluation and marking criteria to get 20% marks 3. Please share the breakup of experience and marking criteria to get 40% marks	The evaluation would be done on comparative basis of all the bids submitted.	E&Y
77	Please confirm if IT Hardware/Storage/ Network/Security/Cloud Infra/ Connectivity/Connectors requirements if any for a legacy data source/Licensing if any will be provided by CERC as per requirement highlighted during the design phase.	All IT Hardware/Storage/ Network/Security/Cloud Infra/ Connectivity/Connectors requirements if any for a legacy data source will be provided by CERC. CERC prefer open source softwares, Cost of Any third party software Licensing if used in the development of system will have to be mentioned by the vendor in his Technical & Financial Bid and will be procured by the Vendor	E&Y
78	Suggested addition The Client (and any others for whom Services are provided) shall not recover from EY, in contract or tort, including indemnification obligations under this contract, under statute or otherwise, aggregate damages in excess of the fees actually paid for the Services that directly caused the loss in connection with claims arising out of this Agreement or otherwise relating to the Services.	The terms and conditions provided in ToR appears to be adequate and in line with several other studies floated earlier by the Commission.	E&Y

79	Suggested addition Except as otherwise permitted by this Agreement, neither of the parties may disclose to third parties the contents of this Agreement or any information provided by or on behalf of the other that ought reasonably to be treated as confidential and/or proprietary. Parties may, however, disclose such confidential information to the extent that it: (a) is or becomes public other than through a breach of this Agreement, (b) is subsequently received by the receiving party from a third party who, to the receiving party's knowledge, owes no obligation of confidentiality to the disclosing party with respect to that information, (c) was known to the receiving party at the time of disclosure or is thereafter created independently, (d) is disclosed as necessary to enforce the receiving party's rights under this Agreement, or (e) must be disclosed under applicable law, legal process or professional regulations. These obligations shall be valid for a period of 3 years from the date of termination of this Agreement	The terms and conditions provided in ToR appears to be adequate and in line with several other studies floated earlier by the Commission.	E&Y
80	Suggested addition EY may use data, software, designs, utilities, tools, models, systems and other methodologies and know-how ("Materials") that EY own in performing the Services. Notwithstanding the delivery of any Reports, EY retain all intellectual property rights in the Materials (including any improvements or knowledge developed while performing the Services), and in any working papers that EY compile and retain in connection with the Services (but not Client Information reflected in them). Upon payment for the Services, Client may use any Materials included in the Reports, as well as the Reports themselves as permitted by this Agreement	All the copyrights of the developed system will lie with CERC. CERC believes in knowledge sharing after due approvals from competent authority and acknoledgement to the Commission and will be governed by ToR confidentiality agreement.	E&Y

81	Suggested addition EY may terminate this Agreement, or any particular Services, immediately upon written notice to Client if EY reasonably determine that EY can no longer provide the Services in accordance with applicable law or professional obligations.	The ToR appears to be adequate and in line with several other studies floated earlier by the Commission.	E&Y
82	Suggested Addition -To the extent that the provision of the Services is impacted by a pandemic (including COVID-19) and any reasonable concerns or measures taken to protect the health and safety interests of either Party's personnel, the Parties will work together to amend the Agreement to provide for the Services to be delivered in an appropriate manner, including any resulting modifications with respect to the timelines, location, or manner of the delivery of Services. Where EY Personnel are required to be present at Client's premises, EY will use reasonable efforts to provide the Services on-site at [Client] offices, provided that, in light of a pandemic the parties agree to cooperate to allow for remote working and/or an extended timeframe to the extent (i) any government or similar entity implements restrictions that may interfere with provision of onsite Services; (ii) either party implements voluntary limitations on travel or meetings that could interfere with provision of onsite Services, or (iii) an EY resource determines that he or she is unable or unwilling to travel in light of a pandemic-related risk.	The Consultant is expected to formulate the strategy and framework in this regard. The same shall be discussed and mutually agreed after the contract is awarded.	
83	Input form from the wbesites CERC and SAUDAMINI?	Yes	Algofocus Technologies Pvt Ltd.

84	IA through Natural Language Processing, Understanding and Interpretation (NLP/NLU/NLI)	Clarification required	Algofocus Technologies Pvt Ltd.
85	Relevance Score calculation would be discussed before or after the tender bidding process?	The evaluation would be done on comparative basis of all the bids submitted.	Algofocus Technologies Pvt Ltd.
86	What is the accuracy metric here, how the created docuent would be judged?	Created document would be judged by the CERC domain User and simiar past data	Algofocus Technologies Pvt Ltd.
87	Which language will be used in audio/video to text? Can we assume, language used is English?	English	Algofocus Technologies Pvt Ltd.
88	What is the desired accuracy for audio/ audio-visual data to text conversion?	80%-90%	Algofocus Technologies Pvt Ltd.
89	Any speaker? or from a set of speakers?	Set of Speakers	Algofocus Technologies Pvt Ltd.
90	Hardware would be scope of which party, can we define scope for the hardware for audio/visual inputs and also provide the specs/items for same?	No	Algofocus Technologies Pvt Ltd.
91	Can you please allow consortium to bid for this?	As per TOR the bids submitted by Consortium of Companies/Sub Contract is not envisaged in the TOR	Algofocus Technologies Pvt Ltd.
92	Ø Does CERC desires to have capability of using free Basemaps like Imagery, High Resolution Imagery, Oceanic data, Topographic, Street View data etc along with CoTS software to have a more accurate location scenario with	No	Esri India Technologies Private Limited

	respect to. actual location.		
93	Ø Does CERC desires to have locational analytics and reports in form of configurable dynamic interactive dashboards which can help the management to track data using Pie/Bar Charts, run queries. User should be able to configure them rather than writing scripts.	No	Esri India Technologies Private Limited
94	Ø Does CERC desires to have a locational intelligence platform which can easily integrate with CRM, ERP, BI system unlike Power BI thus enabling Scalability and Interoperability of existing solution. BI platform along would Locational Intelligence would give better prospective of fraud and reports into a single unified platform.	No	Esri India Technologies Private Limited
95	Ø AI, ML and Deep learning concepts are provided using Notebook server for ease of development and implementing logics using API's. ensuring CERC internal logics for analytics to be integrated with the platform and viewing results spatially on map.	NA	Esri India Technologies Private Limited
96	Ø Does ERC desires to have locational analytics software to connect to multiple databases like SQL, Oracle, Postgres, Netzerra, DB2, Informix, Hadoop, HANA. Where-in data can be integrated with MIS and reports can be visualized spatially on map.	No	Esri India Technologies Private Limited
97	Ø Does CERC desires to analyse and predict the values using geo-statistical models associated with spatial or spatio-temporal data patterns using multiple predictive techniques used for fraud analytics in finance.	NA	Esri India Technologies Private Limited

98	Ø Does CERC desires to have locational analytics platform to support multiple Mobile OS. To ensure provide a single unified app for all its users on using any device which would enable users to visualize reports on devices.	No	Esri India Technologies Private Limited
99	Ø Does CERC desires to create web sites using templates and software should also have support to create website from scratch using Wizard. This would enable department to have multiple apps on browser, tabs, mobiles etc. for different users with different roles and responsibilities.	No	Esri India Technologies Private Limited
100	Ø Does CERC desires to make application using development options .NET, Java, COM and Python to ensure scalability of the software among other software's.	No	Esri India Technologies Private Limited
101	Ø Does CERC require capabilities to create In-Built Reports Generation facility without requiring any additional software. Locational analytics software should be capable of generating infographic informative reports.	No	Esri India Technologies Private Limited
102	Ø Does CERC desires to have software which helps visualize, analyse data including Link Analysis from multiple sources on maps, charts, and tables using drag and drop options without writing a single line of code. It should also help investigate a spatial financial problem, interactively apply analysis tools, and share results across the enterprise.	No	Esri India Technologies Private Limited
103	Are there any other sources other than SAUDAMINI and CERC website? If yes, how many other sources are there and what are they? Will existing MIS system be used as a source of data?	Only Three Sources CERC Website, CERC SAUDAMINI Portal, CERC File Server, MIS is one of the module of SAUDAMINI portal	PWC

104	Module I - Data analysis of PDFs/Word documents - Summary of the documents, audio and video files needs to be done through AI based summarization process. In other words, there will be no summary provided in the document database. Please confirm.	Some Parameters from which Summary may be prepared are stored in the database and it needs to be created through Algorithms building /NLP etc	PWC
105	Module I - Please provide a sample list of queries (including different variations) that are being searched today.	Petition no., subject, party's name, key words, key figures, quoted orders/judgements etc. Guidance be taken from manupatra website, https://www.manupatra.com/	PWC
106	Module III - Sending notices - Setup of schedule - Will it be done through an admin module?	No, Users right based access module	PWC
107	Module III - Data Visualization - Who are the different types of user personas who will use the system?	Chairperson and Members, Officers and staff of Commission, external permitted users	PWC
108	It is mentioned that solution should not have 3rd party dependency - Will CERC be open to use API services from major cloud service providers for services such a Speech to text, Translation etc.	CERC prefer open source softwares/in case vendor is suggesting some paid software the same may be procured/subscription taken in the name of CERC and cost of the same shall be mentioned in the submitted technical and financial bid.	PWC
109	Will there be documents/audio in any language other than English? If yes, which other?	English only	PWC
110	What are the functionalities that the CERC's current MIS system is already providing?	Entire internal petition workflow, more information will be provided at information gathering stage to successful bidder. Please refer CERC SAUDAMINI Portal online help section for details.	PWC
111	How many users will be using the system and how many concurrent users are present?	At present 70-80 may increase upto 100 in future, Concurrent Users may be 10-15,	PWC

112	What is the data volume (approximate number and file size) that currently exists segregated in terms of search pages, documents, audio files, video files?	Approx 2 TB data	PWC
113	How many searches happen during the day on an average? What is the peak search volume?	Number depends on the requirement of end users	PWC
114	Does CERC intend to host the new solution in cloud or on premise? If on cloud, is there any constraint on data residency?	Hybrid Cloud- Both internal servers/cloud- All internal infrastructure and cloud VM will be provided by CERC	PWC
115	Are the current solutions hosted in cloud or on premise?	Some modules are on cloud and some are on internal servers	PWC
116	It is mentioned that Big Data architecture is required, does CERC want to mandate an HDFS file system or any other suitable data structure can be used?	CERC may consider as per the recommendation of successful bidder and afer full requirement gathering by the successful bidder	PWC
117	You have mentioned that GUI should have separate options for search of relevant orders, create summary report, create ROP, create order, send hearing notice, dashboard and analytical reports - Do you want to capture all stages of each process in REST or in other words should the tool include any workflow capture module too?	Workflow is captured in CERC SAUDAMINI Portal	PWC
118	Is CERC expecting the filters mentioned for tagging the input documents for institutional memory?	Yes	PWC
119	The search engine should have relevant filters including Coram members, Regulation, Petition type, Petition status, Petitioner Name, Project Name, Asset name, relevant sections and keywords - Are current documents already classified in these categories, or REST should have capability to classify the documents using AI?	Some documents are classified in the SAUDAMIN Portal but some needs to be classified based on the contents of its word/pdf files and REST should have capability to classify the documents using AI	PWC

120	We request you to limit consultant's liability to 1X of the total contract value and remove reference to other civil and criminal remedies. This is as per GFR and the guidelines issued by Meity. It is also the normal industry practice. We request you to include to clause to state that we will not be liable for any indirect and consequential losses or damages. This is as per GFR and Meity guidelines and also the industry standard. Even the law, Contract Act, stipulates and remote and consequential damages are not payable. Client is requested to include the below clause: Purchase/Client agrees that Consultant will not be liable for (i) loss or corruption of data from your systems, (ii) loss of profit, goodwill, business opportunity, anticipated savings or benefits or (iii) indirect or consequential loss.	The terms and conditions with regard to consultant liabilities are reasonable and were part of the ToR floated by the Commission for other assignments. Hence modifications as suggested are not agreed.	PWC	
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121	We request you to allow standard exceptions to confidential information, which is industry standard and reasonable. Not all information can be regarded as confidential. For eg., if the information is in public domain, we cannot be expected to keep it confidential at our end. Similarly, if any information is liable to be disclosed under the RTI, giving it a confidential status and obliging us to keep such information confidential is not correct. We request inclusion of following clause: Confidential information does not include any information which (i) is rightfully known to the recipient prior to its disclosure; (ii) is independently developed by the recipient without use of or reliance on confidential information; or (iii) is or later becomes publicly available without violation of this agreement or may be lawfully obtained from a third party; or (iv) which would be required to be disclosed under the (Indian) Right to Information Act.	The definition of "confidential information" and the explanation thereunder in the Confidentiality and Non-Disclosure Agreement are clear about the aspect of confidentiality to be maintained by the consultant. There is no need for revision as suggested.	PWC
122	We request you to kindly confirm that we will be obliged to protect Confidential information using the same degree of care as we use to protect our confidential information of similar nature, and in any event, by using at least reasonable degree of care.	Clause 7(ii) of Agreement takes care of apprehension of the bidder	PWC
123	We request you to reduce the survival period of confidentiality obligations to one year post expiry or termination.	The terms and conditions with regard to survival period of liabilities are reasonable and were part of the RFPs floated by the Commission for other assignments. Hence modifications as suggested are not agreed.	PWC
124	Request you to kindly delete these. Alternatively, kindly cap these indemnities to limitation of liability cap or one time the fees payable to us under this Agreement.		PWC

We agree to indemnify to the extent the damages/losses are finally determined by a competent court or arbitration. Please make indemnities subject to final determination by court/arbitrator. This is also the industry standard and prescribed by Meity in its guidelines. The indemnities set out in this agreement shall be subject to the following conditions: (i) the Indemnified Party as promptly as practicable informs the Indemnifying Party in writing of the claim or proceedings and provides all relevant evidence, documentary or otherwise; (ii) the Indemnified Party shall, at the cost of the Indemnifying Party, give the Indemnifying Party all reasonable assistance in the Defense of such claim including reasonable access to all relevant information, documentation and personnel provided that the Indemnified Party may, at its sole cost and expense, reasonably participate, through its attorneys or otherwise, in such Defense; (iii) if the Indemnifying Party does The indemnities set out in this agreement shall be subject to the following conditions: (i) the Indemnified Party as promptly as practicable informs the Indemnifying Party in writing of the claim or proceedings and provides all relevant evidence, documentary or otherwise; (ii) the Indemnified Party shall, at the cost of the Indemnifying Party, give the Indemnifying Party all reasonable assistance in the Defense of such claim including reasonable access to all relevant information, documentation and personnel provided that the Indemnified Party may, at its sole cost and expense, reasonably participate, through its attorneys or otherwise, in such Defense; (iii) if the Indemnifying Party does

The terms and conditions with regard to indemnities for breach of confidentiality are reasonable and were part of the ToR floated by the Commission for other assignments. Hence modifications as suggested are not agreed. Clause 13 of the Confidentiality and Non-Disclosure Agreement already provides for arbitration in case of dispute

**PWC** 

125	To uphold the principles of natural justice, we request client to notify us and give us a rectification period of at least 30 days, prior to invoking this clause.	Clause 10 of Annexure IV clearly distinguishes the cases for termination with notice and without notice. The provisions are reasonable and are part of all standard bidding documents floated by CERC. Hence suggestion not agreed to.	PWC
126	We wish to highlight that we are a large organization providing various services to various state and central government departments, PSUs, international organizations and private clients. We wish you to note that while we have a mechanism in place to identify patent and direct conflict of interests, it may not always be possible to identify any or all indirect or remote conflict of interests. Kindly appreciate that our no conflict confirmations will be subject to the foregoing.	It is the responsibility of the consultant to identify the areas of conflict of interest between the assignment by CERC and assignment by other organisation. No exception can be made to the said provision.	PWC
127	We request CERC to cap the liquidated damages/penalties cumulatively to 5% of the total contract value. We understand that as per Contract Act, where LDs are stipulated, generally any other damages cannot be claimed. Therefore we request you to kindly make imposition of liquidated damages as sole and exclusive remedy for corresponding breaches.	Clause 7(iii) and 9 may be read together. As per Clause 9, liquidated damages for delay and errors have been capped at 10%.	PWC

128	Request you to limit our liability under this clause to 10% of the value of corresponding goods/services not delivered by us. Please also confirm that client will use government procurement norms (including price discovery) for procurement of such services from third parties. By making time of essence of the contract, you retain the right to void the contract ab initio in case timelines are not met. There are various dependencies on the client and other third parties for completing the project. There may be delays on part of client and other parties also. Thus, contract can be voided by you even if the fault is not entirely ours. We understand that it is not the intention to make the agreement void ab initio in case of any delay in achieving the timelines. You may exercise your right to terminate the contract in case of material breaches. Thus, request you to kindly delete this clause.	Standard language. No need for deviation	PWC
129	In order to uphold the principles of natural justice (Nemo judex in causa sua- no one should be judge in ones own case) and the provisions of the Arbitration and Conciliation Act, we request that the arbitrator(s) be appointed with mutual consent of both the parties. Alternatively, a panel of three arbitrators may be set up in which one arbitrator is appointed by Consultant, one by the client and the two arbitrators appoint third arbitrator. Please confirm.	The terms and conditions appears to be adequate and in line with several other assignments floated earlier by the Commission.	PWC

130	If the project is to be completed on time, it would require binding both parties with timelines to fulfill their respective part of obligations. We request you that you incorporate a deliverable acceptance procedure, perhaps the one provided by Meity in their guidelines, or the one suggested below, to ensure that acceptance of deliverables is not denied or delayed and comments, if any, are received by us well in time. You may consider including the below simple clause: Within 10 days (or any other agreed period) from Client's receipt of a draft deliverable, Client will notify Consultant if it is accepted. If it is not accepted, Client will let Consultant know the reasonable grounds for such non acceptance, and Consultant will take reasonable remedial measures so that the draft deliverable materially meets the agreed specifications. If Client does not notify Consultant within the agreed time period or if Client uses the draft deliverable, it will be deemed to be accepted.	The terms and conditions appears to be adequate and in line with several other assignments floated earlier by the Commission.	PWC
131	We will be providing services and deliverables to you under the contract. We accept no liability to anyone, other than you, in connection with our services, unless otherwise agreed by us in writing. You agree to reimburse us for any liability (including legal costs) that we incur in connection with any claim by anyone else in relation to the services. Please confirm our understanding is correct.	The terms and conditions of ToR appears to be adequate and in line with several other assignments floated earlier by the Commission.	PWC
132	Is it necessary to submit the proposal in Word Document format? Is PowerPoint format not acceptable?	Word,Power Point formats are acceptable	PWC

133	Due to the current COVID 19 force majeure, we request CERC to confirm the following: If there are any circumstances that reasonably restrict travel or physical presence of our personnel at your office / location, then without prejudice to your payment obligations, you shall allow such personnel to work from home or other remote location till the time such reasonable restrictions exist. Any delay / default in performing our obligations arising from such restrictions, shall not be attributable to us and shall not be considered a breach of contract on our part and no consequent damages /penalties etc. arising therefrom would be imposed on us under the Contract.	The Consultant is expected to formulate the strategy and framework in this regard. The same shall be discussed and mutually agreed after the contract is awarded.	PWC
134	We request CERC to allow us to retain our working papers and a copy of confidential information for our records and any future reference or audit requirements, subject to confidentiality obligations under this Agreement. Please appreciate that this is a prestigious project for us and we would like to showcase this project in our future proposals. We request client to allow us to refer to you and the services we have performed for you for citation / reference purposes, as long as we do not disclose your confidential information.	This will be governed by the Confidentiality Agreement	
135	We request you to provide details on what are the other sources of data apart from MIS, SAUDAMINI database and CERC website?	CERC Website, CERC SAUDAMINI Portal & CERC File server data	Xalt Analytics Private Limited
136	We request you to provide details on the type of data provided for automatic document creation?	From pdf/word/excel data documents needs to be created based on the Algorithms	Xalt Analytics Private Limited

137	As mentioned, "integration with current saudamini portal (cerc-efiling.gov.in), cercind.gov.in and other data sources of cerc" Request you to provide details if CERC will provide the API access of the current data sources of CERC, mis and CERC portal?	Any seured method like through API, secured database access etc or as per the technology/methodology suggested by the successful consultant	Xalt Analytics Private Limited
138	As mentioned, "it should serve both manual and automated search for relevant orders for any new reference petition." What do you mean by "manual and automated search"?	After automated search if user further wants to input some parameters for searching the same can be done	Xalt Analytics Private Limited
139	At present the data size is about 2TB, so can you tell us what the expected final data size is to be?	At present 2TB increasing at a rate of 1 TB per annum	Xalt Analytics Private Limited
140	As mentioned in the point 'e', there are some filtration parameter: • What are coram members signify? • Can you share with us the list of these parameters with some brief information about each parameter?	Coram Members means the Commission Members. List may be shared only at information gathering stage to successful bidders	Xalt Analytics Private Limited
141	What type of preview is required here?	Will be provided at requirement gathering stage to successful bidderFor sample Reference Manupatra website www.manupatra.com may be seen	Xalt Analytics Private Limited
142	What does a dedicated institutional memory refer to? Do we need to provide any type of hardware as well? What will be the specifications of the hardware if it is required?	Institutional memory here means the data/information/documents etc. All hardware items will be provided by CERC	Xalt Analytics Private Limited
143	How much data will be there in institutional memory? And how much is expected to come?	At present 2 TB increasing at a rate of 1 TB per annum	Xalt Analytics Private Limited
144	What are the different data sources from which the data would be coming? Is it a real-time data or batch data?	CERC Website, CERC SAUDAMINI Portal & CERC File server data, Both real time and batch data.	Xalt Analytics Private Limited
145	What are the ways in which data processing is done for different desired outcomes?	Will be provided at requirement gathering stage to successful bidder	Xalt Analytics Private Limited,

146	We request you to provide us details of what is the rate of data coming?	Query not clear	Xalt Analytics Private Limited
147	What are the different types of desired outcomes?	Will be provided at requirement gathering stage to successful bidder	Xalt Analytics Private Limited
148	What is the expected size of textual/audio/audio-visual data? What can be the processes running on it?	Refer previous queries	Xalt Analytics Private Limited
149	What are the formats of the Factsheets/Petitions/ROP generated by the automated system?	Word/pdf with excel forms format	Xalt Analytics Private Limited
150	We request you to provide us the data of previous petitions and summary report so that we can create a machine learning algorithm for creating an automated system?	Will be provided at requirement gathering stage to successful bidder	Xalt Analytics Private Limited
151	We request you to provide us the data of ROP document template, proceedings records, summary report and petition for training a machine learning model? Also, it is possible to visualize the sample data before feeding it in training model?	Please refer www.cercind.gov.in	Xalt Analytics Private Limited
152	We request you to provide sample data of audio/audio-visual as well as previous text data for training a model?	Will be provided at requirement gathering stage to successful bidder	Xalt Analytics Private Limited
153	We request you to provide us the data of petition received, summary report and draft orders for creating a machine model?	Please refer www.cercind.gov.in	Xalt Analytics Private Limited
154	We recommend use Apache Solr instead of elastic search if required?	Added	Xalt Analytics Private Limited
155	We recommend apache spark, Pyspark, Hadoop and other bigdata technologies?	Added	Xalt Analytics Private Limited

15	56	We recommend use Pytorch, Tensorflow?	Added	Xalt Analytics Private Limited
15	57	In what format the data should be exported?	Word/pdf/ excel format	Xalt Analytics Private Limited
15	58	Is there any tender fee or EMD or security to be paid prior to bidding. If yes we request you to kindly provide us the details.	Tender Fee- Nil, No security to be paid prior to bidding	Xalt Analytics Private Limited