



KERALA ELECTRICAL & ALLIED ENGG. CO. LTD.

(A Govt. of Kerala Undertaking)

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Expression of Interest

For Selection of Technology Partner for Paperless
Legislative Assembly

Sl. No	Description	Details
1	Date of Issue of EOI	18-03-2020
2.	Last date of submission of EOI	02-04-2020
3	Website	www.kel.co.in
4	Contact Details of KEL	General Manager (Business Development Centre), 7th Floor, Housing Board Office Complex, Panampilly Nagar, Kochi – 682 036.
5	Contact No	0484 2310012

General Manager (Business Development Centre)

1. About KEL:

A Multi-Product Engineering Company with 50 plus years of experience and expertise in Engineering Industry, and now proudly serving an envious client base including Defence, Irrigation and Power Projects, Space Research Organizations, State Electricity Boards, Indian Railways and the General Public both in India and abroad. The Company which is a Public Sector Undertaking fully owned by Govt. of Kerala has four state-of-the-art manufacturing units spread across Kerala and has a pan India presence with its Sales and Service unit in all major metros and selected cities.

2. Notice of Expression of Interest

- 2.1 KEL invites Expression of Interest (EOI) from IT/ITES Companies, System Integrators and the OEMs for Deployment/Development of Software and required Hardware infrastructure for **“Paper Less Legislative Assembly”** Project
- 2.2 The EOI must be submitted in English language only with a font size of 12. All the documents including the supporting documents/enclosures etc. must be fully legible. Supporting documents if in a language other than English must be accompanied by a certified English translated document. The English version shall prevail in matters of interpretation. EOI documents which are not legible shall be rejected.
- 2.3 Each bidder shall submit only ONE EOI. If a bidder submits more than one EOI or any of the partners of consortium also submit the EOI, the EOIs are liable to be rejected.
- 2.4 The bidder shall bear all costs associated with the preparation and submission of EOI and KEL will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the EOI process.
- 2.5 In case the bidder has any doubt about the meaning of anything contained in the EOI document, she/he shall seek clarification within 2 days of issue of EOI. Except for any written clarification via email to info@kel.co.in

2.6 The Management of KEL reserves the right to amend or withdraw any of the terms and conditions mentioned in the EOI Document or reject any or all the bids without giving any notice or assigning any reason. The decision of the KEL Management in this regard shall be final and binding on all. Bidders may verify at KEL website for any amendments / modifications in the EOI conditions before submission of their offers.

3. Submission of EOI

3.1 EOI, complete in all respects, must be submitted to the General Manager (Business Development Centre), 7th Floor, Housing Board Office Complex, Panampilly Nagar, Kochi – 682 036

3.2 At any time, KEL may for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the EOI Document by an amendment. The amendment will be notified on KEL's website www.kel.co.in and should be taken into consideration by the prospective bidders while preparing their EOI.

3.3 The EOI shall be ignored, if complete information is not given there-in, or if the particulars and data (if any) asked for are not filled in.

4. Objectives

KEL envisaged integrated Paper Less Legislative Assembly Eoi: Paper Less Legislative Assembly project to develop integrated next generation IT platform to enhance productivity and streamlining internal processes associated with service delivery to end-users and Vidhan Sabha Members

The invitation to Expressions of Interest is for IT/ITES Companies, System Integrators and the OEMs for Deployment/Development of Software and required Hardware infrastructure for **“Paper Less Legislative Assembly”** Project for the following deliverables:

Part I

1. Provisioning for Deployment/Customization of Software
2. Digital Workflow Automation as required
3. Required Hardware/ infrastructure for Vidhan Sabha
4. Training & Support
5. PMU Setup & Management
6. Session Management and Operational Support

Part II

1. Digitization of Documents
2. Metadata Entry of Scanned Documents

The document can be downloaded from the website www.kel.co.in in response to this EOI shall be deemed to have been done after careful study and examination of this document with full understanding of its implications. This section provides general information about the Issuer, important dates and addresses and the overall eligibility criteria for the parties

Aim of the project

1. Role-enabled work-flow and web-based system for automation, standardization and uniformity of the working methodology.
2. Dynamic search engine which will generate several reports at click of button.
3. Auto compilation of reports and queries.
4. Removing redundant processes which otherwise delay flow of information among various stakeholders.
5. Induction of transparency and accountability in operations.
6. Electronic security and control of confidential data.
7. Dissemination of information as per requirement.
8. MIS for easy monitoring and quick decision making.
9. Improving efficiency in working.
10. Improving decision making in view of better reporting mechanisms.
11. Significant reduction in manual records/register maintenance.
12. Elimination of duplicate and inconsistent record keeping.
13. Reducing the dependency.
14. Supporting the organization in meeting its business and legal requirements.
15. Ensuring better implementation of Schemes by the Government.
16. Using less paper to save trees and implement green practices (Go Green).

5. Scope of Work

The following table lists the scope of work projected in this proposed.

- a) Procurement of the Hardware components and preparing the digital infrastructure to make the operations of the Assembly paperless.
- b) Re-engineering and computerization of the operations of the Assembly, including the activities of Hon'ble Members during the sessions.
- c) Development of the software for digitizing the existing paper-based documents

of the Assembly procedures.

- d) Development of a public website which is accessible by the public.
- e) Development of a web portal to be used by various departments and Assembly Secretariat for controlling the data and workflow.
- f) Development of a mobile framework which can be used by the Hon'ble Members and public to electronically interact regarding the matters of constituency.
- g) Enable all the services with Geographical Information System
- h) Training of the stakeholders.
- i) LAN connectivity within the Assembly Area and provision of shifting entire IT infrastructure to the new Vidhan Sabha building.

Procurement and installation of required IT infrastructure

Targets	Proposed Solutions
Digital Assembly House	<p>Member PAD:</p> <ul style="list-style-type: none"> • Login will be allowed for members with Aadhaar /password, biometric and QR code. • Automatic attendance registration • Interactive touch sensitive List of Business in e-Book format • eBook will contain Starred/Un-starred Questions • Facility to view specific questions related to self, party etc. • Facility to view old session's questions for comparing answers • Facility for e-voting on issues • Facility to view earlier rules and directions by Hon'ble speaker • Facility to send and receive hand-written notes between members. <p>Minister PAD:</p> <ul style="list-style-type: none"> • Facility to view supplementary replies from departments • Facility to view handwritten notes sent by secretaries <p>Speaker PAD:</p> <ul style="list-style-type: none"> • Facility to view daily business of House and control the proceedings. • Facility to view all the questions to be answered in the House <p>Budget Documents Viewer:</p> <ul style="list-style-type: none"> • Facility to search and retrieve all the budget related documents for the current year as well as for older years. • Facility to read retrieved documents • Facility to show the current business of the House in big display panes.

	<ul style="list-style-type: none"> • Facility to show the list of members participating in the current discussion. • Facility to show the results of e-Voting. • Facility to show the time-taken analysis of members participating in a discussion <p>Member Registration:</p> <ul style="list-style-type: none"> • Register each member with his/her Aadhaar id, password, biometric data to enable the use of Paper Less Legislative Assembly eBook features inside the House
Business controlling	<ul style="list-style-type: none"> • Record the time of speeches by members and other events. This includes the starting time of speeches and total time taken by each member. • Event data segregation into member-wise, party-wise, subject-wise etc. • Facility to control e-voting • Controlling display unit to show the current ongoing event, all the members participated in the discussions, Timing of each member, party-wise charting of members in discussion and the results of eVoting • e-Voting results are available party-wise, consolidated values for YES/NO/ABSTAIN. • Facility to submit and play videos for seeking special attention on urgent matters
Assembly Reporters	<p>For Assembly Speaker:</p> <ul style="list-style-type: none"> • Facility to view the LoB, Questions, Answers, Session Video and listen to Session audio. • Editor interface to make the data entry of verbatim for a day. • Facility to enter the verbatim text based on timeslots and based on time taken by individual members. • Facility to view previous day' / previous session's data. • Facility to view the exact timing taken by each member, thus facilitating data entry in specific slots. For Assembly Chief Reporters: • Verify all the other Reporters' data entry and make necessary updates. • Consolidate and prepare the final Day's proceedings • Export the Proceedings to Word and Pdf formats <p>For Editor of Debates:</p>

	<ul style="list-style-type: none"> • Editor interface to prepare the Brief of Proceeding for the day. =>All data will be finally approved by Vidhan Sabha Secretary
List of Business Creation	<ul style="list-style-type: none"> • All the Business fixed for a session day are consolidated and the List of Business is prepared automatically by the software. • Vidhan Sabha Secretariat can modify and update the LoB to suite the situations. • The LoB can be generated in various formats like eBook, Text, xml etc. • Prepared LoB is instantly available for all stakeholders with proper rights.
Entry Pass Requests, Generation & Verification	<ul style="list-style-type: none"> • Identity Cards Generation for Members • Identity Cards Generation for Employees of Vidhan Sabha • Approval of requests for Gate Passes and generation of the same during Sessions for Employees of various Govt. Departments • Approval of requests for Gate Passes and generation during Sessions for Press / Media Correspondents • Gate Passes for Public • Parking Passes System for Vehicles • Request for Employee Identity Cards for VS Sessions • Request for Reporters for Recording Proceedings • Verifies the entry passes by reading QR code or Pass Code • System shows all the details of the pass holder including photo, Aadhaar etc. • Provision to instantly allow or deny entry for the pass holder • Facility to see the detailed list of all the verified passes date-wise, session-wise etc. • Facility to plot various analytical graphs which shows the number of allowed, blocked and invalid passes
Budget Documents viewer	<ul style="list-style-type: none"> • All the Budget related digital documents are available in server in proper hierarchical structure. • Specialized application available for members to refer any budget document anywhere at any time. • Provision to release the Budget speech and other documents in a timed way, after the Minister starts the Budget speech. • Budget proposals are instantly available for members, media and other stakeholders. • Eliminates the printing of budget related documents en mass.
Questions Processing	For Vidhan Sabha Secretariat

	<ul style="list-style-type: none"> • Online/offline entry of questions by Member • Diary of Questions • Assigning questions for typing. • Typing & proofreading of questions • Approval, Rejection & Clubbing (bracketing) of questions at various levels of authority (Speaker, Secretary, Section officer). • Clubbing is possible before fixation and after fixation. • Fixing (posting) of questions for any particular date as per the Rotation of Ministers • Send questions to Departments for getting the replies • Postponing of Questions • Change the types of Questions (Starred / UnStarred) <p>For Govt. Departments</p> <ul style="list-style-type: none"> • Accept & Add the replies to the questions • Send/change the question to another more appropriate Dept. • Send the replies to Ministers/Vidhan Sabha Secretariat • Update the replies till one hour before on the fixed date of the question • Attach supplementary replies to the ministers even after submitting the original answer. <p>For Ministers & Secretaries</p> <ul style="list-style-type: none"> • Possibility of preparing and communicating supplementary answers during the session • * Secure documents using DSC • * Separate logins and roles at different levels. • * Removal of paper at every level • * Ministers can view the relevant answers well in advance
Notices	<p>For Vidhan Sabha Secretariat</p> <ul style="list-style-type: none"> • Online/offline entry of Notices under various rules by Members • Diary of Notices • Approval, Rejection at various levels of authority (Speaker, Secretary, Section officer). • Fixing (posting) of Notices for any particular date • Send Notices to Departments for getting the replies • Change the type (Rules) of Notices For Govt. Departments • Accept & Add the replies to the Notices • Send/change the Notices to another more appropriate Dept. • Send the replies to Ministers/Vidhan Sabha Secretariat

	<ul style="list-style-type: none"> • Update the replies till one hour before on the fixed date of the Notice • Attach supplementary replies to the ministers even after submitting the original answer. For Ministers & Secretaries • Possibility of preparing and communicating supplementary answers during the session • Secure documents using DSC • Separate logins and roles at different levels • Removal of paper at every level • Ministers can view the relevant answers well in advance
Members' Secure site	<ul style="list-style-type: none"> • Online submission of questions • Online submission of notices under various rules • Creating & updating own tour programmes • Creating & updating customized gallery of images and video for the public. • Creating & showing the achievements in the Constituency • Querying / updating of constituency related works/schemes progress, consumption of budgets, status of transfers etc. • Submission of all types of claims to VS Secretariat • Members can register themselves and update their profiles
Ministers' Secure site	<ul style="list-style-type: none"> • View online the replies for Questions/Notices prepared by Departments before laying in House • View online the Bills prepared by the departments before laying in House. • View online the annual reports prepared by the departments before laying in House • View supplementary replies for questions provided by departments • Generate session pass requests online for their personal staff
Bills Management	<p>Government Departments</p> <ul style="list-style-type: none"> • Uploading Bill - original and all modified versions until assented • Scrutiny of Suggestions & Modification in Bill Document <p>Vidhan Sabha Secretariat</p> <ul style="list-style-type: none"> • Introducing Bill • Passing Bill • Assenting Bill • Seeking People Suggestions on Bills (People Participation) • Scrutiny of Suggestions

<p>Constituency Management MIS</p>	<p>For Hon'ble Members</p> <ul style="list-style-type: none"> • Updating Member Calendar (Tour Programme, meetings etc.) • Updating List of public representatives of the constituency • Sending bulk SMS to officers and public representatives of the <p>For Constituency Officers</p> <ul style="list-style-type: none"> • Submitting Priority List of Works under MLALAD Fund • • Monitoring of various Works running in the Constituency • Monitoring and managing Public Grievances/Demands • Managing Requests of Employees • Video Conferencing with field offices in the constituency <p>For Other Government Departments</p> <ul style="list-style-type: none"> • Updating Current Status of Public Grievances • Updating Current Status of Public Demands • Updating Implementation Status of Employee Requests submitted through Members of Legislative Assembly • Updating Monthly Financial & Physical Progress of various Projects/Works - new and on-going in the constituency
<p>Legislation MIS / House Proceedings MIS</p>	<ul style="list-style-type: none"> • Publishing Sessions • Publishing Provisional Calendar for the Session • Publishing Rotation of Ministers for the Session • Preparing & Publishing of List of Business for the Session • Digital Audio Recording of House Proceedings and Auto Text • Digitization of Verbatim Record of House Proceedings • Publishing House Proceedings • Publishing Brief of House Proceedings • Publishing of Budget • There will be no emails being sent in part of any process. All the data resides inside secure database and will be available only through Paper Less Legislative Assembly application • Distribution of List of Business eBook for Hon'ble Members, Hon'ble Ministers, Hon'ble Speaker and Vidhan Sabha Secretary
<p>User Management</p>	<p>For Super Administrator</p> <ul style="list-style-type: none"> • Creation of various User types / Sub-types • Creation of functional modules / sub-modules • Approval of logins for all high-level users like Secretaries, Members etc. • Create Roles and allocate roles to users <p>For Self-Services</p>

	<ul style="list-style-type: none"> • Any Member / Officers can register themselves with Aadhaar and Mobile number making it easy for building the user base. Users can request for validation and approval by higher officials. • For each and individual tasks to be done by Field level officers, onetime user login with mobile number and onetime password will be generated by system itself. • Users will get SMS/eMail alerts at various levels of work • Specific dashboard for each user Role. • In addition to Aadhaar and password-based validations, officials can authenticate their work by digital signature certificates
Library MIS	<ul style="list-style-type: none"> • Handling of Receipt of books, Issuance of books and return of books • Auto submission of reminders using SMS/eMail integration • Debates and other House documents are automatically added to the Library repository. • Extensive search and retrieval of digital content • Cutting the digital copies of Papers is made possible • All the members of the library can view the articles without any email mechanism • All the budget related books are available for Members in various mobile applications.
Member Amenities MIS	<ul style="list-style-type: none"> • Complete amenities required by members related to Legislation process is taken care of through online transactions. • Member's Personnel Details are kept updated • Member's Aadhaar number and Mobile Number are used as the most accessible authentication logins • Special Salary MIS module dedicated to prepare the salary for Members ==> Preparation of Salary ==> Preparation of Pension • All the travel claims allowed for Member's shall be handled by the MAS module of Paper Less Legislative Assembly • Special module to handle the Loans of Members • Online processing of Re-Imbursement of Bills (Medical, Telephone, Electricity, House Rent etc) • Online Payments and instant notifications through SMS/eMail

	<p>integration.</p> <ul style="list-style-type: none"> • Facility for Income Tax Calculations based on the earnings of Members • Online Submission of Property Returns by Members • Online Submission of Personal Bills • All the accommodation related facility requirements of members are taken care of through MAS module. • When a new member is added to the system, automatically the process of allotting quarters will be started. • Various levels of approving and allocating the accommodation for Members • Versatile reports can be generated by end user with several groupings and sorting
Procurement & Stores	<ul style="list-style-type: none"> • Complete data maintained related to the stores in Vidhan Sabha • All the transactions between Members and stores are tracked and recorded • Complete reports of utilization of materials by Members which can be published online
Employee services & Employee Claims / eOffice	<ul style="list-style-type: none"> • Employee Data Bank- complete information of employee right from joining to current working details along with the reqd personal information • Generation of Electronic Service record • Reports like unit-wise employees, Contact Reports, Employee wise Pay Scale Reports, Vacancy Report, Office Strength, etc. • Provision to capture details of loans & Advances, LTC, court cases, Leave Register maintenance and Pension calculation for Gazetted& Non-Gazetted Officers • Services for applying & approving to Medical Reimbursement, Generation of Last Pay certificates to parent Department officials serving in Legislature • Process for TA/DA Bills, Supplementary Bills, IT Returns files • Reports like Employee wise Leave details, Service Register, LPC Issued Report, TA/DA Claimed Reports.etc • Services for the allotment of vehicles to the officials • Services to capture the maintenance details of the vehicles. • Provided services for generation of bills like fuel consumption, repairs etc. • Capturing of employee leaves & updating /approval of Leaves

	<ul style="list-style-type: none"> • Integration with Biometric device to capture daily attendance of employees • Reports like to monitor employee leaves & attendance and automatic updating of leave register
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- **Information & Documents Archival Management modules**

All the functional modules are to be developed over a single platform with integrated workflow, document management, and reporting and digitization capabilities. Solution architecture should be flexible for feature modification and should be scalable to archive millions of images and tera bites of data securely.

- **Proposed Solution for Members & User Management System:**

The prime stake holders of a legislative assembly include the Hon'ble Members in the Assembly, various officials like Administrative Secretaries, supporting staff at Assembly Secretariat, and also the technical staff running the system. The members also have different privileges such as Speaker, Ministers etc. In the same way, the Assembly staff in different sections has different privileges.

In an efficient system, each stake holder should be allowed to use the system based on predetermined credentials, and all the activities of the users should be recorded for security reasons. What a person can do within the system will be determined based on the organizational hierarchy.

A comprehensive Member & User management system helps to create different user groups and roles. The individual users can be mapped to the desired groups. For the various roles, required access can be provided to the different functions available in the system. This ensures the security and availability of the system components. Each Member in the Assembly will be mapped to the corresponding constituency so that only the particular member will be able to handle the affairs of that constituency. Similarly, the Ministers will be connected to the secretaries of various departments too.

- The data and functions are available only for those with proper Roles and Credentials.
- Proper audit trails are prepared on the fly so that security auditing can be done any time.
- All activities are controlled based on the User profile; thus, even if the Member of a constituency changes during the tenure of the Assembly, the process will be able to continue.

- **Digitization of Assembly documents & Archival Management System:**

The legislative assembly has a large repository of assembly documents including proceedings, bills, bulletins, commission & committee reports from the beginning to

present. The physical preservation of these documents is not feasible when considering the cost, effort and the size. A Document management system is also required in a single platform to digitize and archive documents in PDF/A format for long term archival with indexing and full text search capabilities. All types of assembly documents need to be revived by document digitization techniques and kept in a manageable format for future references. The proposed solution is a system which meets the existing requirements and also addresses all the conceivable future needs as well. The major requirement would be the availability of a document management solution which facilitates advanced search and retrieval system for all types of assembly documents. Also, this requires the support for the various steps in digitization techniques including document preparation, scanning, meta data preparation and indexing.

The archiving system can collect the data and produce them in multiple formats such as images, PDF, PDF/A documents etc. The proposed solution provides an easy way to access, search, view and retrieve digitized documents from the repository with an advanced multilingual support as well.

- Long term preservation - Since the digital preservation techniques used, it ensures the long-term preservation of documents based on various policies such as Retention policies, disposition policies, storage policies etc.
- Quick & comprehensive search & retrieval - The desired document of proceedings, bills, bulletins, committee reports etc. can be searched and retrieved quickly.
- Better environment - Digitization of documents causes paperless environment and reduced storage space also due to centralized storage.
- Advanced Search - The search can be done on each meta data items of all types of documents for retrieving only the desired set of results.
- Multilingual support - Search on archived documents can be done based on the metadata captured in multiple languages for the convenience of the user.

- **Proposed Solution for Video Archival System:**

A Digital Video Archive System (DVAS) differ very much from a regular digital archive system, in that it can manage multimedia resources, such as video and audio contents, as well as metadata textual documentation. Thus, a complete digital video archive system must combine various technologies of multimedia searching and presentation. The core technologies used to digitize video/audio are the following:

- Video Format Transformation
- Video Shot Detection
- Video Abstract Extraction
- Key Frame Extraction
- Streaming Data
- Transformation
- Audio Data Extraction
- Voice Recognition
- Metadata Management

The DVAS transforms video data into different formats. For example, it can convert MPEG2 audio files into MPEG-1, WAV, MP2, WMV, or RM format. In addition, if the frame size and bit rate are configurable, it can transform data to a multi-bit rate format. The program can support multi-stage transformation of multiple files into different formats simultaneously, which is very useful for tasks involving multi-staged transformation of a large number of files. The DVAS also promote an environment for the easy retrieval of the vide footages. It integrates the mechanisms of data management and the technology of information searching to manage and present video data. The structure of DVAS is divided into two sub-systems based on their functionalities: The video metadata management system: This is for data entry and the management of metadata of digitized videos, including information about videotapes, continuous scenes, shots, and audio, visual and text content. The video search system: In addition to supporting metadata searching, this sub-system integrates the functions of voice data searching. To support real-time online viewing of videotapes, reduce the need for high network bandwidth by users, and protect intellectual property rights (e.g., to prevent illegal copies), this system employs a streaming technique to play the video/audio content of videotapes.

- **Proposed Solution for Management of Information for Public**

Providing information to the public about the results of various legislature activities happening in Legislative Assembly has prime importance as it contributes to a better public awareness on the Legislation process. This includes the news, updates on daily sessions and access to the assembly documents. Assembly related news, events and other information always need to be available to public through the public website of Assembly in a better way. It requires this to be more dynamic and interactive to facilitate the effective involvement of the public in the legislation activities. The concerned stake holders at Assembly should be able to update all the information regarding news, contacts, notices etc. The proposed system enables the public to access the latest notices, news and events related to the Assembly in an easy and convenient way through the public website. The

profiles, contact information, tour programs and personalized galleries of members are accessible to the public. Assembly documents and various speeches (governor's speech, speaker's speech etc.) also can be made available to the public. By participating in the suggestions on bills through online, the people get a platform to raise their views which improves the quality of legislative decisions. Public can also view the details of Members taking part in the discussions and bill presentations inside the Assembly.

- All public information at one place - The public website is a comprehensive source for all information and the public can get all the details from the single source.
- Designed for device independent access - The public users can access the dynamic public website from various types of devices including PCs, Tablets and mobiles.
- Easy content management - The concerned stake holders of Assembly can efficiently manage all the public information with the help of content management system to keep it up to date.
- Empowerment of public by providing vital information regarding the activities of Members inside the Assembly.

- **Constituency Management modules**

Each member of the Assembly represents a constituency and usually concerned about the news, events and other updates related to his/her constituency. Managing the constituency information and interacting with people in the constituency to deal with their grievances and demands have prime importance among the activities of a member. Every member need to get the updated information and need to convey updates to the people regarding the information related to the constituency as part of the daily activities. A system required for the members to manage and update the constituency information including the news, events, details of various schemes and works etc. and to communicate with the people in the constituency. The proposed constitution management system intended to help on this by providing necessary online features to meet all the functional requirements.

By using the same, the members can update their calendar (tour program, meetings etc.) for the public information and maintain the list of public representatives in the constituency. Communication to the representatives through the bulk e-mail and SMS enables the faster and efficient information sharing. The members will be provided with the facility to submit the priority works under various schemes and monitoring of various works running in the constituency. The public grievances, requests and demands can be received and also the status of the same can be monitored regularly.

- Faster & better public interaction - The members can communicate to the people in the constituency through the online system with access support to the functions on various types of devices. This helps on a faster & better communication.
- Better platform for the public for grievances, requests & demands - The inputs from public is instantly available to the member of the constituency with sufficient supporting data (text, images, videos etc.) and it helps for a better understanding and to be more responsive.
- Efficient monitoring of schemes & works - The field officers can do the online update on the status of the various schemes and works along with the proof which helps for an efficient monitoring.
- Tight integration of SMS and email facilities for easy communication.

- **Proposed Solution for Grants, Budgets and Expenditure Management**

It is really important to see how effective the Members are in examining the budgeted grants and execution of work in constituencies. Though specific information on this subject is hard to find, a IT tool can be devised to control the budget, work execution and manage the expenditure An

automated system is required to manage the availability of grants, proper budgeting for schemes and controlling the expenditure for various projects sanctioned in the constituencies. The solution should ensure the transparency in the utilization of funds and also should support the scrutiny over government finances by assembly. A specific software module is proposed for monitoring the demand for grants for the various works, budget allocated, and expenditure incurred by the departments. Using this software module, all departments will raise their demand for grants (work-wise) and update workwise the financial/physical progress periodically in accordance with budget allocated.

- Better utilization statistics - Enables all the stake holders to know the better utilization statistics of the funds and grants
- Instant status update - The updates on various projects/works under different schemes can be made available to all the concerned through the online system.
- Better progress review - The financial and physical progress can be reviewed periodically as the field officers can directly input (possible to use the tablets and mobiles for the same) the details to the centralized system and thus it is readily available with the detailed information.
- Members can clearly differentiate the consumption of grants coming through different schemes.

- **Proposed Solution for Mobile based Management of Constituency Affairs**

Most of the Hon'ble Members suggest that the most important factor for them is to be constantly in touch with the people in their constituency and keep track of the various issues in the constituency. What hinders them from effectively doing this is the fact that the Members are in constant move which prevents them from establishing conventional contact with the concerned people. It is required that the Members and Officials should have a mechanism which will enable them to be in touch with the various development activities going on in the constituencies even when they are away from the place. Proposed solution suggests a mobile application which will run in most of the smart phones and tablets. This module should be built using Enterprise mobility framework.

- Even if the application is working in areas without internet connectivity, the data will be stored locally and synced with the server on network reconnection.
- Application will run in background mode and provide necessary alerts in case any interesting developments happen related to the particular Member

- **Legislation Management modules**

Assembly questions and notices are the most important instruments in the hands of members of legislative assembly to raise the matter of public importance in the house and seek their answers from the concerned minister. Most of the session day's deals with the questions and notices and answers to them. It is a tedious task where the members manually submit the questions & notices and the concerned section of the assembly processes, consolidates and sends it to the concerned departments for the replies. The departments send replies and they are scrutinized by the assembly secretariat for laying in the house. Questions & notices processing system require meeting the objective of automating the workflow involved in question/notices processing. The parallel and adhoc movement of questions and notices between the Hon'ble members, speakers and the administrative departments for processing will require a BPM platform for rule-based routing and user access management. This should help to simplify the processes and improve the speed & efficiency of communication between the assembly and departments. The proposed solution automates the processes of questions and notices processing by providing the user interface for online submission of questions, processing & clubbing of questions by assembly, sending notices to department and viewing & consolidating the replies to lay in the house on fixed session dates.

- Faster collection & compilation of questions & notices - The members can do the submission

online & it is instantly available to the assembly for further processing. Similarly, the notices sent by the assembly to the departments & the replies from the Departments etc. are also available to the concerned persons immediately.

- Saves paper - Since the questions and answers for each session day will be compiled in digital form, it doesn't require the whole set of question & answers to be printed and thus saves paper.
- Updates can be done at any time till the session start - This gives more time to departments to come up with desired responses to the questions and notices.

- **Proposed Solution for Bills Management System**

One of the important functions of the legislative body is introducing and processing the bills and assenting as an act. This starts from where the department prepares the draft of the bill and it goes through various approvals and amendments before passing and assenting. In a manual system, it is difficult to maintain and provide instant access to the various versions of a bill and to track the current status. Also it is difficult to reach a majority of the people in the state for their opinions for those bills which requires the suggestions from public. The system requires automating all the processes in the workflow of bills. This should facilitate the departments to submit the draft of bills, maintain the various versions of bills, and maintain the related information such as suggestions from members and public. The system should be able to provide instant access to the status of all bills and alert the concerned stake holders. The proposed system will enable the departments to upload the drafts of the bills. The concerned stake holders can access and approve the bills for introducing in the assembly.

When a bill is introduced, the original version and all the modified versions of the bill can be stored and maintained in the system. The current status (introduced/modified/passed/assented) and latest versions on each status can be obtained. The suggestions from public for any particular bill can be collected, consolidated and scrutinize through online as part of the bills processing.

- Better participation of public - Online facility for suggestions on bills ensures a better and efficient participation of public in the legislature.
- Saves paper - Since all versions of various bills are submitted and passed to stake holders online, it doesn't require to be printed and thus saves paper. Faster retrieval of desired versions of bill - Any version of a particular bill can be easily accessed with a simple search in the system.
- Better tracking and status information - All stages of all bills can be tracked and current status information can be obtained easily.

- **Proposed Solution for Committees Management System**

To make the parliamentary surveillance effective & more meaningful and to ensure the accountability of the executive to legislature, the legislative assembly has the committee system. At the commencement of first session and thereafter at the commencement of each financial year various committees are nominated by the Speaker. From the constitution of committees and sub committees, different committees go through various activities including the issuing of notices to department, receive and scrutinize the replies from department, schedule the sitting of the committees, digitization of verbatim records of committee proceedings, preparation and maintaining the original report, action taken reports, further action taken reports and any other related documents and laying of reports in the assembly. Without an automated system to support and keep track of the processes, it is tedious to deals with the involved processes by the stake holders. A system should be available to manage and maintain the detailed information on committees and sub committees. For each committee, the system should facilitate the scheduling of the sittings and the management of committee reports and all related documents. The proposed system will enable the concerned users to maintain the details of various committees and subcommittees. It also helps to manage the committee operations including the issuing of notices to departments based on different categories (Audit Paras, Particular Subject, Govt. Assurances,

Scrutiny of demands etc.). The proposed system facilitates the concerned stake holders to manage and maintain the proceedings of the committees and all types of the committee reports and related documents.

- Saves paper - All committee proceedings and reports can be maintained in digital form
- Faster & efficient communication - Online notices & replies improves the speed & efficiency
- Notifications to committee members - Latest updates on the committee sittings and committee reports will be notified to the members by means of email and SMS.

- **Proposed Solution for House Proceedings Management System**

The assembly proceedings management involves various steps starting from the publishing of assembly session information. There are various documents to be prepared and published including the provisional calendar, rotation of ministers, list of business and consolidating the papers to be laid on the table including question & answers, bills, committee reports etc. The most important work being handled by the Legislation Assembly is undoubtedly the conducting of Assembly Sessions in which the Hon'ble Members confer together inside the Assembly House. The List of Business for each session day is printed and distributed to the Members, Media persons and other concerned stake holders. It is required that the huge wastage of paper and the procedural shortcomings need to be eliminated. The proposed system simplifies all these activities by automating the processes. Inside the assembly house, all the members will be provided with touch enabled tablet PCs to access and view all the above-mentioned documents. Hon'ble Speaker and Secretary of Assembly will have more privileges where the permission to members for presentation can be controlled, the voting can be initiated and the start or stop the activities on various events included in the list of business for the day.

- Reduced consumption of paper in every step thereby reducing the cost of operation and saving the environment.
- Printing is eliminated causing reduced operational costs and reduced wait period to see the finalized documents.
- Members can use the system for voting on bills etc.
- The relevant documents can be viewed by the stakeholders, even if they are away from the Assembly

- **Assembly Secretariat Management modules**

The MLA Hostel Management System consists of comprehensive software suite consisting of integrated modules for the various aspects of the hostel management. The core features Hostel Management System includes are the following:

- Hostel Management Software
- Hostel Reservation Software
- Call Accounting
- Inventory Management System
- Hostel accounting software

- **Proposed Solution for Library Management System**

The library in the legislative assembly has good collection of books mostly related to the politics, historical events and related references which are very useful for the members of the assembly. The library also maintains the past assembly documents as well on various categories (proceedings, bills, bulletins, committee reports etc.) for borrowing/references. The library activities like managing catalogue, issue and return of books, search & retrieval of books and maintaining the newspaper clippings are not efficient in a manual system for both the storage and retrieval. A

system is required to manage the cataloging of books and other materials for borrowing/references. The system should be able to manage the users, issue & return of books and other library materials. The system should facilitate the collection of various news items related to the state and state legislative assembly. The proposed Library management system facilitates the members to view the available books, choose the books and know the issue/return status. In addition to this, newspaper clippings on assembly related news and events can be maintained and accessed online.

- Easy search & retrieval - The information on books and other materials can be easily searched and retrieved.
- Better view of issue & return status - The availability and usage of books & materials can be easily identified which helps to know a better picture of the utilization.
- Better access to all past legislative assembly news - The search and retrieval of newspaper clippings enables the members and other stake holders easily get all the assembly news regarding any subject.

- **Proposed Solution for Member Amenities Management System**

Handling the amenities for the Hon'ble Members is a complex process particularly in Assemblies with large number of members. Normal accounting or HR management software packages are not equipped to handle the special rules related to the state Legislative Assemblies. Software solution being proposed should be able to handle all the HR and salary related functionalities of the Members of the Assembly. All other special allowances and prerogatives of the members should be able to be handled through an integrated application which can interface with the other functional areas of the Assembly. The proposed application will seamlessly integrate with the other areas of the proposed system such as the User Management, Pass management etc.

- Tightly integrated with User management
- GIS enabled solution to clearly monitor the travelling expenses

- **Proposed Solution for ID Cards and Entry Pass Management**

The legislative assembly premises are a place where people with high profiles work and thus the physical security of the same have significant importance. The existing identity cards of members and other users which are printed on paper or plastic cards don't give any value addition. Also keeping track and verifying of the entry passes for various categories of people on session dates is difficult in a manual system. The identity cards for the members & other permanent staff can be revived in such a way that it can be used for multi-purpose identification needs. Also, there should be a system which facilitates the issue of entry passes and the automatic verification of the same. The conventional identity cards can be revived with RFID based e-Identity cards to enable it to meet multiple requirements related to the same. This also facilitates the further integration with attendance management and also any access control requirements like access-controlled entry to categorized areas if required. The proposed solution also automates the issuing and management of entry passes to the officials from various department, media persons and public. The entry pass can include QR code technology to uniquely identify the person and also for the automated verification of the passes at various security gates by the security officers.

- Multipurpose identity cards - The RFID based identity cards enables the support for attendance management and access control requirements
- Automated verification - Enables the security officers to verify the validity of users and entry passes with the help of QR code technology.
- Faster & Reliable - Since the solution uses automated verification of users, it ensures faster service and eliminates the queue in security gates and more reliable when compared to conventional ways.
- Provision to get very detailed drilled-down reports regarding people attending the session days.

- **Proposed Solution for Inventory Management**

The legislative assembly, like any other offices, requires the procurement, maintenance and management of different categories of items including fixed assets, stationery articles etc. A manual system to keep track of all these activities makes it difficult to identify the requirements of procuring, managing the stock and allocation of the available items to sub offices. A software-based inventory management system requires for acquisition, maintenance and up keep of stores, stocks, stationery articles, preparation of all types of bills and accumulate the data of stationery and stationery articles which are used in the offices of legislative assembly. An integrated inventory management system facilitates the procuring and inventory needs and provides support for identifying the requirements by analyzing the status of the stock of the items. Further to this, since the proposed solution supports for integration with the existing government e-Procurement system, it facilitates the concerned stake holders to view and access the status of procurements. The software is proposed to be fully integrated to the Member and User management to improve its significance further compared to other off-the-shelf software solutions.

- Accurate & Faster - When compared to the conventional way, the automated system will give an accurate inventory information and helps to reduce the time required for processing procurement needs.
- Integration with e-procurement - Since the solution can be extended to facilitate the integration with government procurement system, it gives the user an added advantage to view and access the status of the same.
- Reduced effort - Since the solution automates and simplifies the process of procurements and managing the inventory, less effort required to finish the related tasks.
- Tightly integrated to the other computerized areas of the Assembly thereby enabling it as part of the ERS solution for Assembly.

- **Training and Communication**

- AWARENESS, COMMUNICATION AND TRAINING STRATEGY
- Trainings programs are organized for MLAs and employees
- General computer trainings as well as “Paper Less Legislative Assembly” software specific trainings is imparted
- After trainings/workshops, feedback forms are filled by the participants
- Feedback forms are regularly evaluated by the Project Review Committee, Vidhan Sabha and training programmes are re-oriented as per the feedback
- Refresh courses are regularly conducted for the MLAs and employees so that they could be well versed with the IT tools

- **Data Maintenance & Security**

- The selected agency shall be responsible for preparing technical documents for recording each and every process of the implemented solution.
- The selected agency shall also prepare detailed documents on “how-to” and for training purpose like User manuals, Training manuals etc.
- The confidentiality of all such documents / reports generated shall be maintained by the vendor. The vendor shall handover the complete documentation to Legislative Assembly as and when asked for and also at the end of contract.

Section VI Service Level Agreement (SLA)

1. Service Level Agreement (SLA): During the term of warranty, the service/repair calls will have to be attended by the bidder within the time mentioned from the time of such calls. In case of major

defects requiring the defective equipment to be taken out of location, the cost for which will have to borne by the bidder, it should be returned within permissible time duly repaired and simultaneously immediate substitute equipment should be provided by the bidder for the continued smooth operation of the system.

2. Penalty for non-achievement of SLA Requirement (Implementation SLA): Delay shall attract a penalty per week as per the following –Penalty for delay in design, development of Software Application = 0.5% (A) per week of delay or part thereof (calculated pro-rata); (one week is of 07 days) beyond 60 days permitted work schedule from the issue date of work order/ supply order or LoI. Penalty for delay in supply, implementation, training etc = 0.5% (B) per week of delay or part thereof (calculated pro-rata); (one week is 07 days) Where A is the Design, Development Cost in Development Phase and B is the supply, implementation, training etc.

cost. Delays in equipment supply/installation: 0.5% * (Equipment cost) per week of delay or part thereof (calculated pro-rata); (one week is of 07 days) A total deduction as penalties of 10% (cumulative) of the charges for any of the above may lead to termination of contract.

Categories of SLAs: i. Support Related SLA (Operational SLA):

- I. If the complaint is booked and the response is not received within 24 hours from the time of booking, then the penalty applicable will be Rs. 100.00 per day per complaint. If the problem is not resolved within 48 working hours of the complaint booking time, then the penalty applicable is Rs. 500.00 per day per complaint. The complaint should be attended within 48 hours failing which the following additional penalties shall be imposed. The complaint will be recorded in help desk constituted by successful bidder for this purpose by email or phone and a log will be maintained of the complaints by SI. If the complaint is booked and the response is not received within 24 hours from the time of booking, then the penalty applicable will be Rs. 100.00 per day per complaint. If the problem is not resolved within 48 working hours of the complaint booking time, then the penalty applicable is Rs. 500.00 per day per complaint. The complaint should be attended within 48 hours failing which the following additional penalties shall be imposed. The complaint will be recorded in help desk constituted by successful bidder for this purpose by email or phone and a log will be maintained of the complaints by SI

SL.No	Duration	Penalty
1	Upto 24 working hours from the logging of the complaint with the SI	NIL
2	Beyond 48 working hours upto 15 days from the logging of the complaint with the SI	0.2% per day of the total value of the defective equipment/ software
3	Beyond 15 days of the logging of the complaint till rectification of the fault	0.3% per day of the total value of the defective equipment/ software

ii. SLA Monitoring: The Selected bidder will submit complaint status report quarterly for Issue call log to Legislative Assembly.

iii. Acceptance Testing: The primary goal of Testing & Acceptance is to ensure that the project meets requirements, standards, specifications and performance prescribed by the EOI: Completion of any other tests/evaluation criteria that the department may specify. The Acceptance Tests for the Hardware and Networking Components shall involve successful supply, delivery at site, installation and commissioning of systems at all implementation locations of the project. In the event of the site not being allocated by the Department, the SI and the Department may mutually agree to redefine the milestones by following appropriate change control process, to be defined in the contract. On successful completion of the Acceptance Test(s) and after the Committee so constituted by the department to conduct the said Acceptance Tests are satisfied with the working of the system, the acceptance certificates shall be signed by the SI and authorized representative(s) of the

department. Any delay by the SI in the performance of its contracted obligations shall render the SI liable to the imposition of penalties, as deemed appropriate. All components & deliverables of the Applications, hardware, networking components, software and other peripherals, as the case may be, would be deemed accepted on attainment of the receipt of Site Acceptance Certificate from each Location. Any delay.

attributable to the SI in the Acceptance Testing shall render the SI liable to the imposition of appropriate penalties, as mentioned in the EoI.

6. Qualification / Eligibility Criteria for Bidders

EoI of Individual firms or consortium of maximum three partners will be considered.

#	General Qualification Criteria	Supporting Documents
1	Bidder shall be a Company incorporated under the Companies Act 1956/ 2013 with their Registered office in INDIA. Bidder must be registered with appropriate authorities for all applicable statutory duties/taxes	Valid documentary proof of: 1. Certificate of incorporation 2. Certificate consequent to change of name, if applicable. GST Registration certificate
2	The Bidder should have neither been boycotted or blacklisted by any Government Institution/PSU for supplies Desired/intended in this EOI.	submit an undertaking (on non- Judicial stamp paper of Rs. 100/- Duly Notarized),
3	Software solution should be based on open standards and Interoperable	Letter of Undertaking. Documentary evidence to be provided on at least three platforms.
4	The Company should have more than 50 IT/ITES personnel on its payroll as on bid submission date in India	Certificate from HR.
#	Technical Qualifications Criteria	Supporting Documents
1	The bidder should have carried out or performing at least one ongoing software project related to automation of working of any institution with project value of more than 5 Crore, will be preferred. Previous experience in Assembly Automation Projects will be preferred	Copy of work order/Completion Letter enclosed by bidder
2	The bidder must have CMMi Level 3 or higher Certification for development as on tender floating date	Copy of the valid certification as on bid submission date
3	Company should have ISO 9001 certification for their process maturity and ISO 27001 for their data security practices.	Copy of the valid certification as on bid submission date

4	Organization should have at least 100 people on roles with relevant project experience.	Self-certification by the Bidder
5	Bidder should have a local office in Kerala or should be willing to setup one, once the bidder is selected for implementation.	Local office details
6	The bidder should have experience in IT/ITES field for a minimum period of 3 years	Certificate to be submitted
#	Financial Qualifications Criteria	Supporting Documents
1	Minimum average annual turnover of previous three consecutive FYs for the bidder / Consortium shall be INR 20 Crores.	Copy of audited statement of account (PL account & balance Sheet) duly certified by CA along with CA certificate stating the turnover and net worth shall be submitted as proof.
2	Bidder should have positive net worth.	CA Certificate

7. Bidder code of conduct and business ethics

KEL is committed to its fair business practices to ensure that companies and Bidders, who supply goods, materials or services, will also comply with these principles.

7.1 Bribery and corruption:

Bidders are strictly prohibited from directly or indirectly (through intermediaries or subcontractors) offering any bribe or undue gratification in any form to any person or entity and / or indulging in any corrupt practice in order to obtain or retain a business or contract.

7.2 Integrity, indemnity & limitation:

Bidders shall maintain a high degree of integrity during the course of its dealings with business/contractual relationship with KEL. If it is discovered at any stage that any business/ contract was secured by playing fraud or misrepresentation or suspension of material facts, such contract shall be voidable at the sole option of the competent authority of KEL. For avoidance of doubts, no rights shall accrue to the Bidder in relation to such business/contract and KEL or any entity thereof shall not have or incur any obligation in respect thereof. The bidder shall indemnify KEL in respect of any loss or damage suffered by KEL on account of such fraud, misrepresentation or suspension of material facts.

7.3 Reporting Misconduct:

Bidders are required to report any misconduct/violations/improper demands from KEL employees to the KEL Management.

8. OTHER TERMS & CONDITIONS

1. The shortlisted bidders shall demonstrate their product before the evaluation committee.
2. Relevant documents in proof should be enclosed wherever required.
3. Firm should have GST, Income Tax registrations, PAN, EPF and ESI registration (Furnish proof).
4. Firm should submit Income Tax returns submitted for Last three years.
5. KEL has sole right to accept or reject any bids. If required, KEL may reject all bids received without assigning any reason.
6. In case of dispute in the MOU/agreement, decision of MD, KEL will be binding on both parties.
7. The detailed bid must be submitted directly to the address mentioned.
8. KEL at its discretion will select the consortium partner from the empanelled bidders on case to case basis while participating in the automation of legislative assembly tenders considering the requirement of the tender qualification, chance of winning the contract, customer requirement etc.
9. The successful bidder has to pay the Cost of Tender documents/EMD/Security deposit amount for participating in any bids for Paperless Legislative Assembly with KEL.
10. Performance Guarantee, Security deposit etc. for the participated bids shall be paid by the successful bidder on behalf of KEL or has to be submitted to KEL for onward submission to customer.
11. Each page of the EOI shall be signed and stamped by the authorized representative of the Bidder and shall be submitted along with the bid.
12. Signed stamped (authorized person) EOI along with necessary supporting documents, Duly filled signed stamped in all the annexures and undertakings shall be forwarded to The General Manager (Business Development Centre), Kerala Electrical & Allied Engg. Co. Ltd, 7th Floor, Housing Board Office Complex, Panampilly Nagar, Kochi – 682036, Kerala State.

Annexure - I

Expression of Interest for Selection of Technology Partner to “Paperless Legislative Assembly. Details of the Bidder (Company)		
1.	Name of the bidder	
2.	Address of the Bidder	
3.	Status of the Company	Public Ltd / Pvt. Ltd / Others
4.	Details of Incorporation of the Company [Attach copy of Incorporation certificate]	Date:
		Ref. #

5.	Details of Commencement of Business	Date:
		Ref. #
6.	Valid Sales tax registration no. [Attach certificate]	
7.	Valid Service tax registration no. [Attach certificate]	
8.	Permanent Account Number (PAN) [Attach certificate]	
9.	Name & Designation of the contact person to whom all references shall be made.	
10.	Telephone No. (with STD Code) Mobile No.	
11.	E-Mail of the contact person:	
12.	Fax No. (with STD Code)	
13.	Manpower details	Technical Others

Annexure - II

FORMAT FOR PERFORMANCE STATEMENT

Orders placed by (Full address of Purchaser)	Order No. and Date	Description and Quantity of ordered	Value of Order	Date of completion of delivery as per contract/actual	Remarks indicating reasons for late delivery if any.
1	2	3	4	5	6

Name of the Firm:

Seal &Signature :

Annexure - III

Format for uploading Turnover information

(Total turnover of the bidder during the preceding 3 years)

Financial year	Turnover (Rs. in Lakhs)
2018-19	
2017-18	
2016-17	

Annexure - IV

Affidavit

[Use Rs. 100.00 Stamp Paper]

This is to certify that << COMPANY NAME >> is not blacklisted by the Government of Karnataka or any of its agencies/Central/any other State/UT Governments or their agencies for indulging in corrupt or fraudulent practices or for indulging in unfair trade practices or for any reasons whatsoever as on the 1st of Aug 2014 .

Company Secretary / Authorized Signatory

Name of Signatory:

Bidder Name:

Date:

Place:

Signature and seal of Notary