Section: 3
Scope of Work

3 Scope of Work

MBMC wishes to engage a vendor to Develop NOC, License & Permissions Approval Portal of Mira Bhayander Municipal Corporation (MBMC) (hereafter referred to as "Service Provider", "Selected Agency", "Vendor", and "Bidder").

The selected bidder shall perform the following brief scope of activities where bidder has to

1. Develop NOC, License & Permission approval portal.
2. Operations, Maintenance & Support for 2 years
3. Training and Capacity building for all MBMC officials on the system implemented.

The proposed solution should offer a web integrated platform to the citizens for applying of various NOCs, licenses and permissions by MBMC.

With this solution citizens will be able to submit application along with supportive documents, get alerts through mobile and email, make online payments, view and track the status of their applications and get the final approval online. It may also have the provision for linkage with digital signatures. The application submitted as well as the final permission/NOC/license shall be generated with a unique bar coded/ QR coded identification number.

1. The solution should have the provision of status tracking by citizens as well as generation of various MIS reports and dashboards for HOD's/Commissioner as required by MBMC.
2. The solution should have the provision to define the service owners, service levels
3. The solution may also have the provision for linkage with digital signatures.
4. The application submitted as well as the final license should have the provision to be generated with a unique identification number which may be bar coded/ QR coded if required.
5. The Bidder shall provide maintenance and support for the application for a period of 2 years from the date of Go-Live.
6. It shall be the responsibility of the Bidder to provide for UAT environment.
7. The Bidder shall give training to all the stakeholders and shall make necessary customizations as required by MBMC during the course of the project.
8. The operations, Maintenance & Support for 2 year is extendible for a further period of 1 year if required by MBMC based on the performance and approval from competent Authority.

3.1. Scope of Content

The system will be the interface and delivery channel for citizens, businesses and other stakeholders to access various services of MBMC.

3.1.1 Development of NOC, Licenses & Permissions Approval Portal

Bidder has to develop the modules for various NOC, license and permission approvals given by MBMC with sms/email and e -payment integration facility. It will facilitate citizens to avail various permissions, NOCs, licenses and services available with MBMC in online mode. Following is an indicative list of various NOCs, License & Permission approval modules.

1. Storage License
2. Trade License

3. Factory License
4. Film License
5. Show Tax License
6. Advertisement
7. Advertisement and Sky-Sign License
8. Temporary License
9. Welcome Spring License
10. Name Board License
11. Hospital License
12. Lab License
13. Clinic License
14. Any other as required

Aspects that needs prime attention include:
- Service definitions, service organization, service personnel;
- Effectiveness and efficiency of provided services;
- Service levels

Envisaged Benefits from the BPR:
- Status Tracking of application
- Automated monitoring of service level
- Creation of electronics database for certificate details
- Creation of certificate database
- Generation of Various MIS report
- Reduction in time line from application submission to issue of certificate
- Maintaining Unique Certificate number
- Taking leverage of IT application by Integration with other application/database for automated verification of applicant.

These 13 components are the basic building blocks of the entire NOC, Licenses & Permissions Approval Portal. These components are listed as follows:

I. Information –
The information component is envisioned for handling the dissemination of information only.

II. Forms availability –
Service inputs are accumulated with the aid of various Forms. Forms could be in physical or non-physical format. Forms in both formats consist of various fields of required information, which would be the basis for any process to be initiated.

III. Application receipt –
Application receipt component of the portal deals with issuing a receipt to provide a piece of information to the applicant through which he can be associated with the requested service.

IV. Payment –

Payment element of the proposed framework will define the overall process of payment for the selected services. It will account for the flow of funds from the initiation points (Web Application) to the final destination point (concerned departments) where the payment needs to be deposited.

V. Verification (physical/online) –

Verification component of the portal is going to deal with the authentication of a particular service request. Verification process would ensure that no counterfeit or frivolous applications are lodged in to the system also it will help to identify and validate the right beneficiary availing the services.

VI. Rejection –

Rejection element of the proposed Portal framework is envisaged to meet all the rejection related functions of concerned departments for the selected services under the project. This element allows rejecting the service request at the defined designated levels.

VII. Approval/signing of approver –

Approval service component of the framework is envisaged to provide for mechanism for approval of service request. It allows the concerned responsibility center to approve the service request through a secured method.

VIII. Delivery/collection –

The delivery service component of the proposed portal framework relates to the Delivery/Collection of the output against the service request made by the applicant. It is envisioned that this component will detail out the specifics involved for service delivery of the listed service under the project.

IX. Status –

The objective of this component is to keep track of the service levels of the various processes involved in a given service. This component is solely related with status tracking from the consumer's perspective as well as the department/administration perspective.

X. Monitoring (MIS) –

Monitoring and reporting element of the proposed framework is envisaged to meet all the monitoring and reporting requirement of concerned departments for the selected services under the project. The element will capture relevant information from service perspective.

XI. Workflow –

Workflow is the base component of the indicative framework where the 'AS IS processes' will be mapped against the 'TO BE envisioning', based on consultant's understanding various service delivery models have been envisioned, based on nature and processing of services.

Details of Components Each of the 13 service components of the proposed NOC, License & Permissions Approval Portal framework have been discussed below.

3.1.2 Information Component

The information component is envisaged for handling the dissemination of information only since the lack of information is a key impediment in availing of services on time and with minimum effort.

The information regarding the following will be disseminated:

- Procedural information
- Supporting documents requirement
- Service Levels
- Service Owners
- Any recent Government Orders or Administrative Orders for all the services
- Cost for availing the services
- Details of any citizen centric government schemes

Citizen Relevance

- Expedite the application procedure since all the requirements would be clearly indicated to the applicant
- Reduce the effort required for an applicant to avail a service by eliminating the need for making multiple visits to the service centers for collecting information regarding the service owners, the supporting documents etc.
- Aids in disseminating information regarding any citizen welfare centric government schemes

Department Relevance

- Reduced number of queries by the citizens
- Aids in disseminating information regarding any citizen welfare centric government schemes

3.1.3 Form Availability Component

Service inputs are accumulated with the aid of various Forms. Forms could be in physical or non-physical format. Forms in both formats consist of various fields of required information, which would be the basis for any process to be initiated. In physical format, form availability becomes an important consideration as this can depend on a variety of external factors. Lack of availability of forms would impede the process. Non-physical or electronic forms would address the lack of availability issue and would standardize the fields using a system approach. Form availability would ensure that the services can be accessed. Forms once available with the appropriate fields will not only form the basis for accessing any particular service, but would also be used in creating an incremental database. The purpose of the element as envisaged in the proposed portal framework has been listed below:

- To make available the relevant form available for making service request for the selected Services.
- To standardize the format for the form pertaining to selected services

Citizen Relevance

- Easy availability of form at multiple locations and through multiple channels

☐ Standardized format of forms removing confusion of applicability and genuineness of form

Department Relevance

☐ Standardized format for the forms resulting in reduced number of service specific forms

3.1.4 Application Receipt Component

This component will handle submission of the applications. As the component exits operation, an acknowledgement would be generated for the applicant containing a unique reference ID for status tracking, date of application, department responsible, date of delivery, information about delivery channels, service fee receipt etc. The receipt will also help the applicant to track the status of the application with the help of unique registration number provided with the receipt besides enabling the system to uniquely identify each and every application along with the candidate. This receipt would be automatically generated by the system thus minimizing the duplication of effort and redundancy in the process.

Citizen Relevance

☐ Proof for service request being made by the citizen getting established
☐ Citizens will benefit from the ability to track the status of a file/application or work status on the basis of a file number. There will be transparency in terms of processing steps and help desk features
☐ High degree of convenience in terms of proximity of location and shorter waiting period to deposit the filled application form
☐ The citizen gets first-hand information as to when the service delivery/status is expected

Department Relevance

☐ Decreases work load on MBMC's employees
☐ Improved data management
☐ Minimize the duplication of effort and redundancy in the process
☐ The data collected in the application can be used for generation of MIS for monitoring purposes

3.1.5 Payment Component

Payment element for the proposed portal will define the overall process of payment for the selected services under the project. It will account for the flow of funds from the collection points to the concerned departments where the payment needs to be deposited. The purpose of the element is listed below:

☐ Provide secured and trusted process of payment collection and deposit in the concerned departmental head for the selected services
☐ Ensure exact payment by the citizen as defined for the service

Citizen Relevance

- Ease of payment through location in proximity
- Allow payment of prescribed amount by the citizen for which receipt is provided against the service request made at the service delivery centers.
- Allow citizen provision of including the payments made at other financial institution through the application
- Reduced time for making transactions
- Maximum security for transactions

Department Relevance

- Responsibility center for payment collection defined, i.e. responsibility for the collection of payment is given to various centers from where the funds are routed to the concerned departments
- Decreases work load on department employees
- Multiple payment options, secure transmission and rapid processing
- Increased internal efficiency in service delivery

3.1.6 Verification Component

Verification component is going to deal with the authentication of a particular service is request. Verification process would ensure that no counterfeit or frivolous applications are lodged in to the system also it will help to identify and validate the right beneficiary availing the services. Verification also helps to establish that the application meets the regulatory and the service requirements.

The verification components envisaged can be a set of following one or both kinds of verification as decided by the service owner:

- Physical Verification
- Online Verification

A. Physical Verification

There are certain cases where documentary proof doesn't suffices the requirement of proving that an applicant is genuine for availing the benefits of a particular service. In such cases, physical verification is the required medium to validate the genuineness of the individual and to validate the information supplied by him/her in the application. Though physical verification is a time consuming mechanism for proving the genuineness of the applicant, it helps in verifying the information provided. Also it helps as an input for creating tools to carry out nonphysical verification.

B. Online Verification

Online verification component is going to deal with all such components that help to validate applicant's genuineness and the benefits accrued by him/her by presenting the same. Online verification can be carried out using validated predefined database. Predefined database can help to validate the applicant by matching the details provided with the information stored in the database and eliminate the need of physical verification. The information that would be saved in the database would be validated, cross checked and entered by the department officials that are managing the database.

Citizen Relevance

- ☐ Simplified process of verification
- ☐ Efficient

Department Relevance

- ☐ Significantly improves the service levels for the delivery of the service
- ☐ Eliminates the need of submission of supporting documents each time a service is requested
- ☐ Physical verification - Provides all the relevant information about the details of an applicant prior to field verification, as required, in order to cut down on the total time required for actual verification in the field

3.1.7 Approval Component

Approval service component of the framework is envisaged to provide for mechanism for approval of service request. It allows the concerned responsibility center to approve the service request through a secured method. The approving authority will use the established verification process for deciding about the authenticity of the credentials given in the service request. It is envisaged that once all the relevant citizen data is captured, verified and digitized, approval process will be linked through the database. The approving authority will use the databases to decide whether the claim made in the application is correct or not. In case the claim is found to be verified by the database, the authority would approve the application using his digital signature.

The information regarding the following will be disseminated:

- ☐ To allow the responsibility center to approve the service request
- ☐ To integrate and embed secured process through which approval will happen

Citizen Relevance

- ☐ Although this component is department centric and has no direct connection with citizens, indirectly this component enables the citizen to act fast for next step as soon as his application get approved from respective departmental approving authority.
- ☐ In nutshell it helps to save lots of time & energy of citizen, thus leads to customer satisfaction

Department Relevance

- ☐ Authority for accept service request and provide relevant output to the citizen as required under the service request
- ☐ Allow only authorized person to use this feature thus maintaining sanctity of authority to approve service request

3.1.8 Rejection Component

Rejection element of the proposed portal framework is envisaged to meet all the rejection related functions of concerned departments for the selected services under the project. This element allows for rejection of the service request at the defined designated levels on the basis of the following reasons:

The information regarding the following will be disseminated:

- ☐ Pre-defined requirement/eligibility not being met in the service request
- ☐ Other reasons based on the discretion of the designated authority

This element will also act as a precursor for providing stated reason for rejection to the applicant. It will be mandatory for the department/designated authority to provide a valid reason for rejection of the service request to the applicant. This will ensure accountability and ownership in the system and will result increased transparency.

Approving authority will use the established verification process for deciding about the authenticity of the credentials given in the service request. It is envisaged that once all the relevant citizen data is captured, verified and digitized, rejection process will be linked through the database. The approving authority will use the databases to decide whether the claim made in the application is correct or not. In case the claim is found to be verified by the database, the authority would approve the application using his digital signature.

The purpose of the rejection element as envisaged in the proposed framework is listed below:
- ☐ Allow designated MBMC official to reject service request in case prerequisite conditions are not met along with the service request
- ☐ Allow designated MBMC officials to reject service request subject to their best judgment and interest of the power vested in them by the Municipal Corporation
- ☐ Allow rejecting authority to provide reasons for rejection of the service request (mandatory)
- ☐ Allow requesting applicant/citizen to have valid reason for rejection of their service request (mandatory)

Citizen Relevance

- ☐ Although this component is department centric and has no direct connection with citizens, indirectly this component enables the citizen to view reason for rejection of his application online which help him to save lots of time rather keep waiting for some official communication from department.

Department Relevance

- ☐ The significance of the rejection element relates to the vested power of the MBMC on the concerned department for rejecting service requested based on described qualifying criteria's relating to the selected services under the project.

3.1.9   Delivery Component

The delivery service component for the proposed NOC, License & Permissions Approval Application relates to the delivery/collection of the service output for the service request made by the applicant. It is envisaged that this component will detail out the specifics involved for

service delivery of the listed service under the project. This will involve the use of security features like digital signatures, passwords, etc. to be employed for service delivery at the front end where the citizen receives the output for the service request.

Citizen Relevance

- Easy delivery of services to citizens
- Easy availability of multiple copies of digital documents
- Leads to standardized procedures for delivery of service
- Citizen is issued digitally signed and printed copy of Certificates/Licenses which are legally accepted
- Service Delivery through easily accessible interfaces such as one-stop, single-window, automated service delivery outlets or common service centers
- Citizen are devoid of harassment or corruption
- Waiting time reduced and minimized inconvenience to the public

Department Relevance

- Convenient way of departmental working towards service delivery
- Reduced corruption, quicker service delivery
- Faster retrieval of records due to computerized records

3.1.10 Status Tracking Component

Objective of this component is to keep track of the service levels of the various processes involved in a given service. This component is solely related with status tracking from the citizen's perspective as well as the department/administration perspective.

Each application by a consumer will be logged against a unique reference number generated at the time of application submission and given to the consumer for future references and status tracking. The purpose of having the status component is to ensure the following facets of good governance in day to day working of the MBMC services:

- To ensure transparency in service processing by the MBMC to the citizen for the service request made
- To establish the validity and sanctity of the well-defined service level
- To ensure and define responsibility and ownership of the actors towards service delivery

Citizen Relevance

- Informs about registration of service request by the citizen which act as a proof for service request
- Enable applicant to keep a constant track of the application at various levels of service processing
- Citizen can check the status of his/her application right from the time of application submission till the time final service is delivered.
- Grievance process could be initiated by the citizen immediately if the service level is not maintained

Department Relevance

- Department can now utilize time saved by providing status at MBMC portal, in taking strategic decisions for customer satisfaction
- Reduced number of queries by the citizens

3.1.11 Monitoring Component

Monitoring and reporting element of the system is envisaged to meet all the monitoring and reporting requirement of concerned departments for the selected services under the project. The element will capture relevant information from service perspective (as defined in the proposed application) at predefined points of the digitized processes in predefined format and consolidate the same across the Permission/Approval for the defined user to see and take necessary action as deemed necessary.

The monitoring element will have the "drill down" feature to locate the base information from which it has been consolidated. The reporting element of the proposed system will be based on the departmental requirement.

Citizen Relevance

- The monitoring component would replace the top-down process characterized by the conventional government process and shall create new roles for citizens in participative governance

Department Relevance

The significance of the monitoring and reporting element relates to the concerned department owning the selected services under the Permission Approval project. The aim is to not only to automate the workflow so as to ease the functioning of the Permission Approval administration but also to provide for adequate window for the administration to monitor all aspects of the service and meet the reporting requirement at all levels of the department pertaining to the service under question. Apart from this the departments can also use the monitoring components to:

- Provide real time information on all the aspect of service – request, processing, delivery, etc.
- Progress tracking of work at defined levels on given time referential and help identifying any slack in the same
- Help to develop mid-term correction strategies by bringing out deficiency in any aspect of service delivery
- Generate required report basis physical and financial reporting requirement

3.1.12 Workflow Component

Workflow management system will link all the components of a given service and will provide a common platform to work and interact to all the stakeholders. Workflow management system is a mechanism that defines, creates and manages the execution of workflow through the use of

software, running on one or more workflow engines, which is able to interpret the process definition, interact with workflow participants and, where required, invoke the use of tools and applications. This system will also allow people to specify and manage working processes, which are distributed in time and across different domains and actors.

The system shall provide facilities so that process implementer needs only to define the Workstep parameters like the to do list, exceptions, comments, associated Forms and related document images for each step based on, which the user interface is automatically generated.

The system shall enables development of User friendly and customizable user interfaces for each stage of the Workflow on the fly. The system shall facilitate re-engineering of processes and act as a platform for building specific application and have a workflow engine to support different types of document routing mechanism including:

- Sequential routing –Tasks are to be performed one after the other in a sequence
- Parallel routing – Tasks can be performed in parallel by splitting the tasks among multiple users and then merging as single composite work item. The system shall support conditional merging of multiple parallel activities i.e. Response from mandatory parallel work stages before it can be forwarded to next stage
- Rule based routing - One or another task is to be performed, depending on predefined rules
- Ad-hoc routing: Changing the routing sequence by authorized personnel

Technologies such as work flow and document management can help cut the corporation's paper mountain down to size while improving the efficiency of basic operations. The key attraction of such technologies lies in their ability to help organizations and departments improve their existing working practices.

Citizen Relevance

- Overall transparency in the service delivery would be improved
- Due to better participation, citizen would be able to receive better quality service
- Overall waiting time for the service would be reduced

Department Relevance

- Service levels would be revised and reduced over a period of time which would result in the overall productivity of the staff
- Departmental operational cost would come down as the paper work involved would come down substantially
- Overall working would bring a whole new perspective of participative working

3.1.13 Payment/SMS/email Gateway

For the Application, the payment gateway should be designed keeping the following factors in perspective. System should,
- Be able to accept online payments towards fees, tax, deposit etc.
- Be able to accept debit, credit cards Allow individuals to make payments directly using their internet banking facility

      ☐ Be able to update the record of payments

      ☐ Be able to send the requisite information to the payment gateway/bank: Service code and payment required

      ☐ Be able to credit back the account in case the payment is debited twice by credit card

      ☐ Generate and print payment receipts

      ☐ Send notification by email, SMS, letter towards acknowledgement of receipt of payments

      ☐ Capable of supporting appropriation of funds between various participating agencies, departments and stakeholders

3.1.14 Integration of Various Existing and future Citizen Services Modules

Bidder has to perform seamless integration of existing inbuilt and third party modules in revamped web portal such as Health Department, Property Tax, Birth/ Death Department, Water Supply, Building Permission, etc.

Bidder has to integrate RTS modules in revamped web portal such as Water Departments (Connection/ Services/ LOI/ Service Work Order/ Bills), No Due Certification for candidate, Online Nomination for MBMC General Elections (Linked with State Election Commission), Real Time Monitoring, etc.

3.1.15 Development of new modules as required

In case MBMC requires to develop a new module which is not under the scope, MBMC may ask for the services of the bidder's staff as per the requirement of the Change. This change would form the part of change request management process as per Section 3.15. Bidder will be asked to submit a formal change request note along with the man-month effort estimation and schedule of deployment of resources. Commercial rates specified by the bidder for various categories of resources will be taken as base for reviewing the change request submitted by the bidder. Post the approval of MBMC the Change request will be processed and the activity can be completed. Any change request would be mutually agreed between the selected bidder and MBMC as per the manpower rates mentioned in the RFP.

3.2.   Project Planning and Management : Initial Phase

In this phase, Bidder shall do the following activities:

A) Report on detailed Workflows, Gap Analysis and Value Engineering for the NOCs, Licenses and Permissions Approvals Processes for proposed portal

The bidder is required to understand the current workflow of NOC, Licenses & Permissions approval processes in MBMC. Bidder has to do the gap analysis. MBMC will arrange discussion session with relevant employee(s) of The MBMC. After identifying deficiencies, Bidder is required to provide recommendations in the form of report to overcome these deficiencies with best available solution to develop a more attractive, interactive & informative portal.

B) Development Tools

The bidder shall prefer to use open source development tools for permission approval

portal. The development tools shall be discussed with relevant MBMC authority for the

final approval.

C) Prototype of Permission Approval Portal

After a final go-ahead is provided by MBMC, the Bidder is required to present wireframes followed by Min. 5 browser enabled prototype of permission approval portal. Once the prototype is approved by relevant MBMC authority, Bidder shall start work on development.

D) Hosting Solution

It is the responsibility of the bidder to host the application on a Cloud platform on a certified Tier III Data Center Situated in India. Bidder is expected to host server side applications/ CMS/ Admin panels at their premises during the period of development and security audit and thereafter it has to be transferred to DC of MBMC or any other place as directed by MBMC after one year. The sizing should be given by the bidder.

3.3. Development Phase

In this phase, Bidder shall develop the portal as per report & prototype. The bidder shall include but not limit to the following elements and/or as decided in initial phase.

Content Management System

The permission approval portal must be developed/ revamped on the concept of Web Content Management System (WCMS) keeping in consideration so that each section, page & content of the permission approval portal is preferably managed through Admin Panel.

It should simplify the publication of content on portal so that creators/publishers of the web content can create, submit & manage the content without knowing any technical knowledge of web programming.

The revamped solution must be capable of creating multiple users credentials with the privilege to modify/update contents.

Easy Navigation

The permission approval portal should be designed in such a way so that user level navigation is easier. Links & sub-links provided in current website should be grouped in two or three layers (as required) of Navigation on top or/and left side of the web pages. The navigation and landing page should meet the international web standards.

CMS shall support creation of navigation, breadcrumb and sitemap that will be published and rendered on Portal.

Design Interface

The content in permission approval portal should be a mixture of text, images, downloads & videos (where needed) and have symmetry in look & feel based on Themes & Navigation strategy.

Sections Wise Distribution of Contents

All content in permission approval portal should be distributed in sections and sub-sections. Each section and sub-section should carry specific content type and should have easy navigation within that section and other related sections.

Dynamic Updates of Contents

The content in each section of the portal should be able to dynamically update without updating the entire page.

Administrator's Control Panel

A web based control panel is required to centrally administer the content, theme, navigation, design, sections, pages, users and database(s) of the Portal.

3.4. Testing

A) Stress and Performance Testing

1. The Bidder shall set up the performance environment and deploy the applications on this environment for testing.
2. The Bidder shall load test the portals to enable understanding of performance and behavior of the portals simulating large number of users and high-load conditions.
3. Appropriate reports indicating the performance results done using performance testing tools to be made available to the satisfaction of MBMC.

B) Security Testing

1. The portals should comply with the security guidelines published by OWASP (Open Web Application Security Project).
2. Appropriate reports indicating security testing results done using web security and penetration testing tools to be made available to the satisfaction of MBMC.
3. Modules being developed for the portals must go through mandatory Quality Control and QA testing. Security audit be cert-in empaneled agencies

C) User Acceptance Testing

As part of the User Acceptance Testing, the MBMC expects the following from bidder:

1. Share the project plan well in advance with MBMC and accordingly the team should work to complete the UAT on time.
2. The successful bidder is expected to assist the MBMC in performing UAT of the solution as part of deployment and subsequent changes. The successful bidder will prepare test cases and shall be responsible for securing necessary approval from stakeholders on acceptance of the test cases.
3. The successful bidder would also be responsible to independently test the CMS and portals for its working and also assist the MBMC's core team in the testing post the installation on the new hardware.

4. Bidder to provide dedicated team for UAT.
5. UAT to be done at MBMC's premises where the infrastructure is available; it can be either at Data Centre location of the MBMC or the MBMC"s IT development location.
6. Bidder's team should request for all necessary infrastructure two weeks in advance to the MBMC, so as to give MBMC required time to create the infrastructure.
7. Customization of the application software, if required has to be done by the bidder at no additional cost to the MBMC based on the UAT observations and GIGW guidelines to meet the functional requirement.
8. The team should report daily status to the MBMC's IT head or the person responsible for the rollout at MBMC end.
9. Any deviation in the scheduled UAT plan has to be immediately communicated to the MBMC.
10. Vendor team should co-ordinate with the MBMC IT team whenever required for any input from the MBMC in regard to UAT, MBMC will designate resources from IT team for the same.

3.5. Delivery Phase

1. In delivery phase, the solution provider shall be responsible to publish the permission approval portal and all of its content.
2. In delivery phase, Solution Provider shall also be responsible to hand over in writing all development components like source code, passwords, databases, text, graphics or any other relevant material to MBMC.
3. At the time of handing over, Development Components shall become the sole property of the MBMC.
4. At the time of the delivery phase, a Service Level Agreement (SLA) would be signed by both parties. The duration of SLA would be of initially 1 years after handing over the said project.
5. The solution provider shall provide 1 month free technical support (Stabilization period) after the delivery of the portal. The SLA will become active after the completion of 1 month period of free technical support.
6. Technical support includes but not limited to the following:

    i. Source code and database update and support
    ii. Bugs Fixture
    iii. Malfunction Errors

3.6. General Requirements: Online License Management Portal

MBMC envisages providing multiple services to the stakeholders through the portal.
These will include:

3.6.1 Integrated NOCs, Licenses & Permission Approval Portal:

1. It should have seamless integration of for NOCs, Licenses & Permission Approval Portal.

3.6.2 Search:

1. The portal should provide metadata and 'full text search' based on elastic search functionality.

2. For providing search functionality the portal should comply within defined processes for defining metadata, managing metadata schema changes and master data changes.
3. Search must allow the archived content to be included (or excluded). Advanced search facility based on multiple filters should be provided.
4. Advanced search facility based on multiple filters should be provided.

3.6.3 **Portal front:**

1. Should have options for online filling the feedback form. Necessary field such as: contact detail i.e. Name, ward no, address, City, Pin code, State, e-mail, Phone no. & Comment Box should be available.
2. It should be Bilingual, Printable with Logo & as a letter head, e mail facility, Report generated.
3. Social Networking & Collaboration Module:

    i. Do: - Where citizens can do/submit various tasks like "Design a logo" for an upcoming competition etc. Portal should be compatible with various media forms like image, video, documents etc.
    ii. Polls: - Polls are a great way to boost engagement. Portal should allow hosting polls pertaining to various topics, it can be attached to any page or article as well. Administrator should be able to view results of archived as well as current poll.
    iii. Forms: - The solution should easily create and publish online forms.
    iv. Controlled Bulletin Board: - Key information related city services water supply, drainage, roads, street light, etc.

3.6.4 **Integration with email, SMS and payment Gateway**
The solution should be integrated with the email, SMS and payment gateways. SMS gateway subscription and payment gateway will be provided by the corporation. Payment module shall have been integrated with payment gateways and shall be PCI-DSS (Payment Card Industry Data Security Standard) complaint.

3.6.5 **Integration with existing/envisaged services and Open API's**
The proposed portal/ solution must be able to integrate with existing as well as envisaged e-governance applications, Mobile Applications, Web Applications etc. The system should expose API's to interact with the third party systems to enable seamless integration with the third parties. This would enable to be future proof allowing for integrations with solutions that are not currently available with the department. It should have ability to integrate with legacy databases. It should Support for both native and hybrid mobile apps and other front-ends connecting through APIs.

3.6.6 **User Administration**
Provide web-based administration interface. Allow portal administrator to delegate the administration function. Reduced server-side coding so that the focus can be more on front-end development and faster roll-outs.

3.6.7 **Development of any new functional application module / services as required by MBMC in future.**

The bidder should have to Design, Develop, Customize, Configure, Integrate and deploy envisaged modules as per the requirements proposed by of MBMC time by time in future. It would become a part of change request management as per Section 3.15.

3.6.8 **Security Audits**

NOCs, Licenses & Permission Approval Portal to be Security Audited by the Cert-In empaneled Security Auditors or Government of Maharashtra empaneled Security Auditors. Cost for Security Audit of portal should be part of the proposal as cost of the same will be borne by bidder.

The service provider needs to update the system in response to any adverse findings in the report, without any additional cost to MBMC ensure complete security audit done successfully. MBMC may also depute auditors to conduct security check/ vulnerability test/penetration test.

The portal must have necessary security measures in place and should not have any loopholes that can be exploited. Portal should also support latest security certificates like SSL 3.0. If required, portal should have the ability for integration with any active directory server (supporting LDAP).

3.6.9 Compliances for Standards

The Portal shall be fully compliant as per the following Guidelines:

   i.   e-Governance Standards of GoI
   ii. e-Governance Policies of GoI and GoM / DIT
   iii. GoI Guidelines of Portal
   iv. W3C Standards
   v.   WCAG standards like 2.0 AA, xHTML1.0
   vi. Portal Guidelines by DIT, GOM
   vii. Unicode compliance

3.6.10 Site Logs

The Solution Provider shall be responsible to provide following features in portal for tracking & logging. These features must be capable enough to produce both graphical & text based reports & must have export capabilities in spreadsheet.

1. Portal Traffic (Hourly, Daily, Weekly, Monthly & Yearly) via Google Analytics
2. Page wise web traffic via Google Analytics
3. Browser Identification
4. Top most visited pages via Google Analytics
5. Least most visited pages via Google Analytics
6. Length of stay on each page via Google Analytics
7. Site counter
8. User Installation Analytics
9. Bandwidth usage
10. Disk space usage of web hosting

3.6.11 Technical Documentation

The Bidder must deliver, at the minimum, the following documentation:

1. Detail Project Plan
2. Business Requirements Document
3. Detailed functional and technical scope document
4. System Requirement Specification document
5. Solution Architecture
6. Report on compliance to all standards and guidelines
7. Source code and customization documentation
8. Unit, Integration, Security Testing Plan
9. User Acceptance Report

10. User Manuals and Developer manuals
11. Fortnightly progress reports
12. Systems Administration Manuals
13. Code repository handover

3.6.12   Scalability & Extendibility

1. The Solution shall provide a scalable architecture. It should be compactible for integration of existing as well envisaged modules.
2. The Solution shall support both horizontal and vertical scaling.
3. The Solution shall provide for expansion of data storage as needed to accommodate increased volume of databased on approved Capacity Plans by MBMC.
4. The Solution should also make use of a distributed cache to enhance the scalability of the system.
5. Portal should be able to expose its services to third party
6. Systems/applications with REST/SOAP services or APIs. Portal applications should be able to integrate seamlessly with any other application.
7. Portal should extend its capability to easily integrate with existing MBMC Citizen Services.
8. The CMS/ Portal shall have a well-defined framework for extending the functionality of the core product, by adding more modules. This will enable MBMC to request an additional module or set of modules without impacting either the core CMS application or other modules already in service.

3.6.13   Design

The bidder is expected to adopt any of the following approaches for NOCs, Licenses & Permission Approval Portal:

a. Configure / Customize an existing application that may be either Commercially available Off-the-shelf product (COTS) OR
   Configuration/Customization of an application that might have been developed for deployment in another similar organization.
b. Irrespective of the option above chosen by the bidder, the bidder is required to meet all the requirements of the signed off SRS and the activities listed, timelines and deliverables mentioned in this RFP.
c. The bidder should submit the solution design document to MBMC officials prior to the submission of the product for the UAT.
d. The bidder should also submit a high level design document for the entire solution consisting of deployment design, Coding standards, architectural requirements etc.

3.6.14   Training

1. The successful bidder will be responsible for training the designated MBMC employees in the areas of parameterization, operations, management, error handling, system administration, etc. with respect to Web Content Management System (WCMS). End users would be trained through the train the trainer model.
2. The core team training will include functional as well as technical training and shall be considered within the scope of the bidder. The core team is expected to include 1 batch of 5 personnel from the MBMC. These personnel would include core technical team, core functional team and the trainers for the proposed solution landscape.
3. With regard to activities under the scope of the bidder in this Tender; the bidder needs to provide a comprehensive training methodology document and the training should cover at least the following areas:
     i. Functionality available in the solution

     ii. Techniques of generating various MIS reports from the solution provided

4. The bidder needs to provide the minimum qualifications, experience and time frame for which the people will be required from the MBMC and the MBMC will be responsible for identifying the appropriate personnel for all the training requirements.

5. The training will be held at MBMC office. It should be given department wise as well as user wise as and when required.

6. The successful bidder can use the existing infrastructure and IT infrastructure available at the MBMC office.

7. The successful bidder will be responsible for providing the users with the requisite training material (for functional training, technical training, and end user training material, job card and other relevant material) in both hard and soft copies at least for the core team and to train the trainers. The onus of preparing the training material will be on the Bidder.

8. The successful bidder will be responsible for preparing, circulating and collecting training feedback forms from the participants.

9. The feedback forms will be prepared by the bidders, reviewed and given to the MBMC. The changes, if any, suggested by MBMC or its consultants, should be incorporated and implemented by the bidder.

10. The successful bidder will provide a detailed training methodology & schedule to the MBMC for review and sign – off prior to commencement of the training.

11. The successful bidder will be responsible for providing ongoing training at defined intervals to the identified MBMC personnel.

3.6.15 Data Migration

Data Migration in the context of this RFP shall be to entail migration of existing system to the new system.

3.7. Operations and Maintenance

The Successful bidder shall maintain and Support the NOCs, Licenses & Permission Approval Portal for a period of 1 year which can be further extended to another 2 years on an Onsite-offshore Model after the successful operational acceptance which would start after Go-Live.

The team shall perform but not limited to the following activities during O&M period;

1. Upgrades, which would include version releases made by the Bidder to incorporate technological changes, consolidating all bug fixes, consolidating all enhancement requests made by MBMC

2. Modifications would include minor changes, bug fixes, error resolutions and minor enhancements that are incidental to proper and complete working of the portals. Any UI / UX change shall be considered as part of the maintenance activity.

3. Enhancements would include changes in the software due to Statutory and Regulatory changes and changes required due to changes in industry and other Governance practices in India. Any change request would be mutually agreed between the selected bidder and MBMC as per the manpower rates mentioned in the RFP.

4. Provide handholding support and training services as part of the post implementation services, on a scheduled basis as well as on a need basis.

5. All incidents that occur as part of ongoing operations must be addressed and resolved within a reasonable time frame as per the SLAs described in this RFP.

6. Changes to the NOCs, Licenses & Permission Approval Portal will go through all phases of testing by the Bidder. The test results must be documented and provided to MBMC for approval before a decision is made to put the new release into Production. All relevant system documentation should be updated and provided to MBMC at the conclusion of any system changes.

7. Perform system administration tasks such as managing the user access, creating and managing users, preparing MIS reports etc.

8. Performance tuning of the Portals to ensure adherence to SLAs and performance requirements

as indicated in the RFP.

9. User support in case of technical difficulties in use of the software solution, answering procedural questions, providing recovery and backup information, and any other requirement that may be incidental.

10. Prompt receipt, analysis and reporting of reported deficiencies in the operation of the software solution and supply of information and advice on such deficiencies.

11. Installing/commissioning the software solution at the designated locations/changed designated location at no additional cost or fees or expenses to MBMC. Installing/commissioning the upgrades / new versions/ new releases of software at the designated locations/changed designated location at no additional cost or fees or expenses to MBMC.

12. Unscheduled, on call, corrective and remedial maintenance and support services.

13. Integration of existing and envisaged 3rd party, software modules, API's, web-views as per the requirement of MBMC.

14. In case MBMC requires any enhancement or a new module development which was not a part of scope, MBMC may ask for the services of the bidder's staff as per the requirement of the Change. This change would form the part of change request management process as per Section 3.15. Bidder will be asked to submit a formal change request note along with the man-month effort estimation and schedule of deployment of resources. Commercial rates specified by the bidder for various categories of resources will be taken as base for reviewing the change request submitted by the bidder. Post the approval of MBMC the Change request will be processed and the activity can be completed.

15. Any change request would be mutually agreed between the selected bidder and MBMC as per the manpower rates mentioned in the RFP.

16. At the end of the initial term of 3 years, MBMC may continue the services and extend the term of the contract for another 2 years depending upon the performance of the Bidder and approval from competent authority. However, in case the MBMC wishes to engage a new Agency for support/maintenance or any other enhancements, the Bidder should give the handover to the new Agency appointed by MBMC within a period of 2 months with all necessary documentation and project understanding.

3.8. Hosting

☐ Hosting shall be provided by MBMC from the date of Go-Live. Till that time, it is the responsibility of the bidder to host the application.

☐ The Bidder should share the expected sizing requirements for a period of 3 years during submission.

☐ The hosting shall include the following:

➢ All compute infrastructure like web servers, application servers, database servers, etc.

➢ Software Licenses (Database, Application, etc.)

➢ SAN storage space

➢ Backup Services (including file system and database)

➢ Networking components like high availability switches, routers, firewalls, etc.

➢ Load Balancers

➢ Any other components required for functioning of the proposed solution

3.9. Operational Acceptance

Successful completion of the contract will be gauged through a series of formal acceptance tests performed on all aspects of the system/sub systems:

1. Operational Acceptance will only be provided after Go – Live of NOCs, Licenses & Permission Approval Portal and provisioned and switchover testing (as applicable) has been completed.

2. The integration should be completed before the official launch of the application.

3. In the go-live phase, Bidder will have to manage and roll out a beta stage where the system will be made available and restricted only to the users in the department through an appropriate mechanism on the web, and conduct user acceptance testing of the System based on test cases developed by the Bidder in consultation with MBMC and validated by MBMC.

4. It is the responsibility of the Bidder to provide for UAT environment. The service provider will have to facilitate the operational acceptance tests. Operational acceptance tests will be performed by MBMC; however bidder will have to facilitate operation acceptance during commissioning of the system (or subsystem[s]), to ascertain whether the system (or major component or Subsystem[s]) conforms to the scope of work, including, but not restricted to, the functional requirements. The service provider will have to facilitate the testing of all applications from MBMC users during the operational acceptance.

5. After the Operational Acceptance has occurred, the Service provider may give a notice to MBMC's Project Manager requesting the issue of an Operational Acceptance Certificate. Within fourteen (14) days after receipt of the Service provider's notice, the Project Manager shall:

    a. issue an Operational Acceptance Certificate; or
    b. notify the Service provider in writing of any deficiencies or other reason for the failure of the Operational Acceptance Tests;

6. Once deficiencies have been addressed, the service provider shall notify MBMC, and MBMC, with the full cooperation of the service provider, shall use all reasonable endeavors to promptly carry out retesting of the System or Subsystem. Upon the successful conclusion of the Operational Acceptance Tests, the Service provider shall notify MBMC of its request for Operational Acceptance Certification; MBMC shall then issue to the service provider the Operational Acceptance Certification, or shall notify the Service provider of further deficiencies, or other reasons for the failure of the Operational Acceptance Test. The procedure set out in this clause shall be repeated, as necessary, until an Operational Acceptance Certificate is issued.

7. If the System or Subsystem fails to pass the Operational Acceptance Test(s), then either:

    a. MBMC may consider terminating the Contract, or
    b. If the failure to achieve Operational Acceptance within the specified time period is a result of the failure of MBMC to fulfill its obligations under the Contract, then the Service provider shall be deemed to have fulfilled its obligations with respect to the relevant technical and functional aspects of the Contract.

8. If within fourteen (14) days after receipt of the Service provider's notice the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Service provider in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the System or Subsystem shall be deemed to have been accepted as of the date of the Service provider's said notice.

9. Based on the test results, required changes will be carried out and tested. Post this, MBMC website will officially launch and operational acceptance will be complete.

3.10. Functional Requirement Specifications (FRS) of Portal