<table>
<thead>
<tr>
<th>S. No.</th>
<th>Page No/Para No/ Sr No of EOI Document</th>
<th>EOI Clause/Description</th>
<th>Bidder's Query/Clarification request</th>
<th>Clarifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.0 Scope of work, Page no. 5</td>
<td><strong>Time-based Deliverables (~70% of Scope of Services)</strong>&lt;br&gt;Time-based deliverables may-be identified for a quarter at a time by the Client, in consultation with the Firm. Time-based deliverables are defined as need-based development support and management to be provided by the Firm, including:&lt;br&gt;• Support, management and day-to-day operations of the CMP; including integration with other phases of the program (CITIIS 2.0)&lt;br&gt;• Support and management of CITIIS website&lt;br&gt;• Integration with NIUA website&lt;br&gt;• Other need-based requests such as creating e-forms, building APIs, database actions, content management, etc.</td>
<td>We request you to kindly provide the scope involved in day to day activities and the no. of integrations are required?</td>
<td>Node JS, Angular and Mongo DB are the major technologies amongst others. Terms of Reference including Background and Scope of Work are attached as Annexure - I.</td>
</tr>
<tr>
<td>2</td>
<td>2.0 Scope of work, Page no. 5</td>
<td><strong>Milestone-based deliverables (~30% of Scope of Services)</strong>&lt;br&gt;Two milestone-based deliverables have been identified for the period of the Contract:&lt;br&gt;• Development of Phase 3 modules of</td>
<td>We request you to kindly provide the functionalities and technology of the existing system.</td>
<td></td>
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<tr>
<td>3</td>
<td>3. Qualification Criteria, Page no. 6</td>
<td>Brief profile of the Firm along with relevant projects details and solutions developed and the composition of the team to be deployed (stage wise - conceptualise, design, develop and maintain) for the project with detailed profiling of professional assignments, competencies along with project title, role in this project, etc., are expected.</td>
<td>We understand that in EOI stage, CVs of the resources are not required to be produced. Only Team composition with project details will be given as a part of qualification criteria. Kindly confirm</td>
<td>Only Team Composition is required at this stage. CVs of the resource persons will be required during RFP stage.</td>
</tr>
</tbody>
</table>

| 4 | 4. Other Relevant Information | The EOI should be submitted as electronic copies in English language only, not later than 21 days from the date of publishing. | We understand that the electronic copies of EOI response shall be shared through the mail given in the EOI document. Kindly clarify. | The EOI with all supporting documents shall be sent to the email ID - citiis@niua.org |

**Name of Bidder: Transerve Technologies Pvt Ltd**

<p>| 5 | Pg 6, Point no - 2 | Qualification criteria - Brief profile of the Firm along with relevant projects details and solutions developed and the composition of the team to be deployed (stage-wise - conceptualize, design, develop and maintain) for the project with detailed profiling of professional assignments, competencies along with project title, role in this project, etc., are expected. | Please clarify - Team has to be deployed at NIUA premises or the deployed team can work remotely. | The deployed team can work remotely. However, Team Leader will be required to visit NIUA office frequently for discussions. |</p>
<table>
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<tr>
<th></th>
<th>Pg 6, Point no - 3</th>
<th>Qualification criteria - Previous work experience with government departments and international agencies shall be preferred. The format for submission of previous SIMILAR assignments successfully completed in the last 10 years.</th>
<th>Would request you to consider ongoing IT projects where the work is in progress and 50% of work has been completed.</th>
<th>Qualification criteria is modified as - Previous experience of similar assignments successfully completed with government departments and international agencies shall be preferred. The format for submission of previous SIMILAR assignments successfully completed in the last 10 years.</th>
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<tbody>
<tr>
<td></td>
<td>Pg 5, Point no - 2</td>
<td>Scope of services</td>
<td>API and source code will be provided to the selected firm as they will be required for the customization.</td>
<td>Yes, API and source code will be provided to the selected firm for further customization.</td>
</tr>
<tr>
<td></td>
<td>Pg 6, Point no - 1</td>
<td>Qualification Criteria - The applicant shall be a Public Ltd./Pvt Ltd./Joint Venture/NGO/Society and must be an Indian Resident/Indian Firm/Indian Company with a proven track record and previous experience in designing similar solutions.</td>
<td>The firm signing a joint venture for this particular EOI/ RFP will be entertained or not.</td>
<td>Yes, the JV for bidders is allowed and already mentioned in the qualification criteria.</td>
</tr>
</tbody>
</table>

**Name of Bidder: Monday ventures Pvt Ltd**

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<tr>
<th></th>
<th>General</th>
<th>How are annexure 1 and 2 to be submitted ? Online or via courier also are we to provide all the company related documents?</th>
<th>The EOI with all supporting documents shall be sent to the email ID <a href="mailto:citii@niua.org">citii@niua.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
<td>Is there a fee that applies for the EOI ?</td>
<td>No, There is no fee for the EOI.</td>
</tr>
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</table>
CONSULTANCY SERVICES FOR:
HIRING OF TECHNOLOGY AGENCY FOR THE CITIIS PROGRAM

______________________________
TERMS OF REFERENCE: BACKGROUND
AND SCOPE OF WORK
______________________________
1. BACKGROUND

1.2 The CITIIS (City Investments to Innovate, Integrate and Sustain) program is conceptualised to assist Indian cities in implementing urban infrastructure projects that are integrated, innovation driven and sustainable. The 12 selected projects will improve sustainable mobility, increase the amount of public open spaces, implement technology to improve e-governance and drive social and organizational innovation in low-income settlements. For more details on the program and each project visit: www.niua.org/citiis

1.3 CITIIS is supported by the Ministry of Housing and Urban Affairs (MoHUA), Agence Française de Développement (AFD) and the European Union (EU). The project is being coordinated and managed by the Program Management Unit (PMU) at the National Institute of Urban Affairs (NIUA) in New Delhi.

1.4 The program combines financial assistance through loans and grants, and technical assistance through mentorship to its projects. This assistance focuses on strengthening institutions by committing resources to systematic planning (Maturation Phase) before implementation, by developing results-based monitoring frameworks and by adopting technology for program monitoring.

1.5 The second iteration of the program (CITIIS 2.0) will be launched in 2022. It shall be supported by AFD, German Development Bank (KfW) and the EU, and will involve the participation of up to 15 SPVs of the Smart Cities Mission.

1.6 To support the CITIIS program, two core digital platforms were developed: the CITIIS website for external users and wide dissemination; and the CITIIS Management Platform (hereinafter “CMP”) for program stakeholders and project management.

A. CITIIS Website

1.7 The CITIIS website (www.niua.org/citiis) has been developed on the Drupal platform, and is aligned with organisational and program requirements. The website is a key source of information, engagement, and enabling a diverse group of teams to learn from each other’s experiences shared on the website. The website also focuses on establishing and maintaining the brand values and external outreach for the program.

1.8 However in the last year, the need to completely revamp the website has been realised. It is intended that the CITIIS website be more accessible, have a wider reach, provide better integration with third-party platforms and showcases program information and resources through an advanced content management framework with better UI and UX. Prospective respondents to this RFP are encouraged to go through the website to understand the basic technology architecture, features and limitations of the website currently.

1.9 Expectations from the revamped website:

- Tell the CITIIS story in an innovative, intuitive way
– Creating a personalised user experience for the diverse range of stakeholders with easy navigation and visually appealing
– Attracting new users by optimising the website for search engines
– Ensuring the website adheres to universal accessibility principles
– Maximising positioning of the website as a destination for innovative solutions in urban infrastructure projects
– Compatible with both desktop and mobile users across Windows, iOS and Android platforms
– Creation of standalone e-forms and simple webpages for the use of surveys, knowledge exchange, audience interactions, etc. (miscellaneous development to be defined on a need-basis)

B. CITIIS Management Platform (CMP)

1.10 CITIIS Management Platform (CMP) has been developed as a digital project management tool that allows users (projects, funders, program management unit of CITIIS, and other program partners) to plan, record, monitor and manage all project-level tasks and activities. The CMP would facilitate a common understanding of selected projects across stakeholders and enable functions of resource management, communication, reporting, monitoring and evaluation at both project and program level.

1.11 CMP is a role-based platform. All users are assigned pre-set roles based on which their access to the platform is defined. Each module of the platform is controlled by a set of permissions and notifications, and enabling of these permissions allows users to access functionality of the platform.

1.12 CMP was developed in a two-phase approach. Phase 1 was made live in July 2020. In Phase I, five application modules were developed: User Management, Role Management, Task Management, Messages and Document Hub. The architecture of the platform, conceptualized during the initial development of Phase 1, is captured in the following graphic:
1.13 Phase 2 was developed on top of Phase 1, and comprised other application modules, namely: Monitoring and Evaluation (M&E); Environmental and Social (E&S); Contract Management; Dashboard.

1.14 Phase 2 was made live on 1 June 2021, and the developers are currently performing post-production / O&M services as per the SLA agreed with them. The 9 application modules developed so far have been briefly explained briefly.

1.15 CMP is intended to encapsulate a common understanding of projects across stakeholders and enable management of resources, communication, and reporting. The platform was developed to enable management of all program activities, including and especially:

1.16 Task Management (Project Management)
Conforming to the basic structure of most project management tools, ‘Projects’ in CMP are the functional super-units for users to operate within. Certain users are added to Projects as Core Team Members, and other users are given project viewing rights based on their responsibilities. Users can be given access to multiple projects depending on their roles. Projects are composed of ‘project tasks’, which are the
functional sub-units of the platform, and all project management activities, e.g. planning, documentation, financial management, etc. are recorded through the claiming, updating and completion of these tasks.¹

¹ All screenshots inserted in these Terms of Reference (TOR) are taken from an instance of the Citiis Management Platform (CMP). This data is demonstrative, and attached here only for the purposes of respondent understanding. No confidential information has been shared, and all names, dates, data, etc. are either in the public domain or representational only. These screenshots are not to be used to infer the real-time progress/situation of the Citiis program.
1.17 Dashboard

The Dashboard is the workspace of the project and program. All project ‘Core Team Members’ are given access to this space, and they can accordingly upload / update / edit / delete data and documents based on the permission granted to them. The Dashboard maintains an overall project progress tracker that is calculated from the average completion of all project tasks.
1.18 Document Hub and Messages

CITIIS is a multi-level, stakeholder-heavy project, with stakeholders ranging in their roles and expertise across management, technology, implementation, thematic and transversal expertise, capacity building, compliance, monitoring and evaluation etc. One of the key value propositions of the program is knowledge creation by and sharing documents, messages and other communication, via:

i. **Document Hub** required by cities throughout implementation

![Image of Document Hub]

ii. **Public Communication Material space** for newsletters, multimedia content etc.
iii. **Personal messaging between stakeholders and stakeholder groups** (done through the Messages module – which enables access-controlled and mail-integrated personal communication features)

1.19 **User Management**

The User Management module allows CMP administrators to manage users on the platform, including inviting users to the platform; registering them; changing their credentials; giving them project access; and deactivating/reactivating user profiles. Each user is given a role when an invitation is sent, thus assigning the user specific role-based permissions to operate on the platform.
1.20 Role Management

The Role Management module is at the heart of the functioning of CMP, and allows CMP administrators to manage ‘permissions’ (module access and operability) for every role. Some roles, e.g. Program Coordinator and Technology Lead, have almost all permissions as these roles are primarily responsible for the overall management of the CITIIS program and CMP platform respectively. Other roles, such as the role of the ‘Expert’ is restricted to in-project activities, e.g. approval, commenting, documenting, etc.

1.21 Monitoring and Evaluation

Recently pushed to the live instance, the Monitoring and Evaluation (M&E) module is intended to be a periodic review of interventions (tasks) conducted for the successful design and implementation of the CITIIS program and its projects. This module will enhance the transparency and accountability of the primary users (SPVs). The module is also used by the NIUA (CITIIS) to undertake performance and
outcome-based reporting, for which a pre-set reporting template has been defined that produces PDF reports in quarterly/bi-annual frequencies.

1.22 Contract Management

Recently pushed to the live instance, the Contract Management module is intended to be a comprehensive contract management resource for the NIUA (CITIIS) to manage its existing relationships with third-parties who are contracted to do program-level work. It allows for the creation of a contract, the management of timesheets, and the recording of invoicing information.

1.23 Environmental and Social (E&S) Compliance Management

Recently pushed to the live instance, the E&S module is intended to be a dynamic, modular and interlinked Environmental and Social Safeguards tracker for each project with role-based access. It would allow a task-based management of impact assessment and screening, mandated Central and State
Government compliances, scheduling (training sessions), design, implementation, budgeting, monitoring aspects of E&S in the projects.

It is linked with the Document Hub, and therefore acts as a documentation repository to cover all the templates, procedures and checklists to facilitate field assessments and undertaking required E&S processes throughout the project lifecycle. The E&S module has the same architecture as the Tasks module.

2. **SCOPE OF SERVICES**

   - **Time-based Deliverables (~70% of Scope of Services)**

Time-based deliverables may be identified for a quarter at a time by the Client, in consultation with the Firm. Time-based deliverables are defined as need-based development support and management to be provided by the Firm, including:

- Support, management and day-to-day operations of the CMP; including integration with other phases of the program (CITIIS 2.0)
- Support and management of CITIIS website
- Integration with NIUA website
- Other need-based requests such as creating e-forms, building APIs, database actions, content management, etc.

Time-based deliverables will be initiated from the first quarter of the year 2022 (i.e. Jan – Mar 2022) till the end of the contract period on a prorate basis (maximum 70% of the total Contract value, inclusive of taxes). Time-based deliverables will be documented in a ‘Quarterly Work Plan’ to be submitted by the Firm by the 5th date of the particular quarter. The Quarterly Work Plan will be prepared in consultation with and approved by the Client. Time-based deliverables will correspond closely with the milestone-based deliverables, including all post-production support as per the agreed SLA. It will also involve change requests and other development related to the CITIIS project, such as:
Demonstrative example of time-based deliverable (part of Quarterly Work Plan)

Developments in certain modules of CMP are still needed. For instance, a table needs to be added in the Financial Information Work Area in the Projects module. Similarly, another field needs to be added to the ‘Create Folder’ functionality in order to segregate viewing rights. These changes have been observed after months of system use by users; the intention is to make minor developmental changes, mostly to the UI, and in some cases, the backend. No major retrofit or overhaul is expected or encouraged. A final list of such miscellaneous activities will be decided in due course of time, and conveyed to the Firm on a quarterly basis. Similar requirements can be identified for the CITIIS website, such as creation of standalone e-forms, application forms, simple webpages for surveys, knowledge exchange platforms, etc.

- **Milestone-based deliverables (~30% of Scope of Services)**

Two **milestone-based deliverables** have been identified for the period of the Contract:

- Development of Phase 3 modules of CMP (20%)
- Revamping of CITIIS website (10%)

The Scope of Services for the three identified Milestone-based deliverables is given below.

## 2.1 CITIIS website

2.1.1 **As a typical website user**, it is the expected that the website will provide:

- Dynamic and interactive response-oriented website, especially the ‘Home’ page
- A micro-site of the NIUA website
- Compatibility and integration of third-party platforms
- Accessibility, adhering to universal accessibility principles
- Effective communication capabilities using the content base of the website, including customized integration with various social media platforms

2.1.2 **As a backend user**, it is expected that the website will provide:

- An easy and accessible CMS platform
- Options to add/remove users, website pages, text content, images, audio, video, documents in various formats
- Options to customises updates shown on ‘Home’ page
- Effective communication with search engines to improve traffic to the website using metadata, SEO, content promotion, and indexing technologies
- Use of ‘tag’ system or internal search engine to ensure all possible content similar to the one originally accessed is prompted to the users
• Ability to edit every aspect of the pages to customise the information (including text, images, audio, video, documents, slideshows etc.) as needed

• Customisable social media feed panel on the landing page that allows for dynamic search and promotion of tweets, images, etc. of particular hashtags, strings, web links, etc. depending on the need of the CITIIS program

• Basic form development features for standard website functionalities such as event registration, user surveys, content generation, etc. through e-forms and APIs

• Low-bandwidth usage, and state-of-the-art security and encryption features

• Easy migration and customised archiving of existing content from current to new CMS

• Easy troubleshooting and website maintenance

• Standard analytics (reports on usage, visitors, broken links, failed searches, etc.)

2.1.3 Engagement of the Firm for the development of the CITIIS website (according to the requirements specified above) is explained in the following process chain:

• **Planning:** Developing a strategy for the website, including details on goals, audiences, objectives, graphic look and feel, navigation, site marketing, technology issues and assumptions, required functionality, phasing, and budgetary constraints.
  – Expected output: Creative brief by selected agency

• **Wireframe development:** Propose website information architecture, graphic look and feel, user navigation, home page, and main navigation templates for each of the main navigation links.
  – Expected output: At least three-five wireframes following the creative brief

• **Development and Testing:** Revamping of website in various phases/sections and simultaneous testing of sections developed. Testing will include use by actual users to report bugs, glitches, user experience etc.
  – Expected output: Phase/Section-wise revamping of the website

• **Migration and Archiving:** Undertaking migration and customised archiving of existing content to the revamped website.
  – Expected output: Existing content available on revamped website.

• **Training:** Undertake training of CMS users of revamped website.
  – Expected output: Multiple training sessions for CMS users

• **Documentation:** Provide succinct documentation about the website as developed.
  – Expected output: User Manual of CMS; and reports on process, key configurations, and summaries of any custom code, plug-ins, or modules created
• **Post-production development support**: Provide post launch support for bugs, glitches, search optimisation and further improvement of user experience at both stakeholder user and backend user levels. **This activity will be billed as a time-based deliverable.**

  –Expected output: Post-launch support till end of Contract period

Proposals that show specific use cases as part of the ‘Approach and Methodology’ section in accordance with the current limitations of the CITIIS website will receive more favourable evaluation.

### 2.2. CITIIS Management Platform (CMP)

The Firm will be responsible for the entire Software/Web Development Lifecycle management of the following modules on the CIITIS Management Platform (CMP):

#### 2.2.1 Event Management for CMP

The CITIIS program conducts various trainings, workshops and other events (both online and offline). It is desired that CMP house an ‘Event Management’ module that shall act as an access-oriented dynamic calendar of events, enabling the scheduling and management of offline/online events. The module is primarily going to act as registry of information and contacts, while also acting as a registration platform for online events. The events, in themselves, will not be hosted on the platform, but registration and other logistical management should be managed in the platform itself.

Outside users with no previous CMP registration should also be able to use the platform to register for such events. The landing page of the module must also have a simple dashboard to track and manage various events. A separate task-based page should also be created to manage communication plan activities between the Client and various stakeholders.

#### 2.2.2 Budget Management for CMP

The budget management module is envisaged to enable the Client (and other stakeholders, if deemed necessary for operations) to effectively administer and manage program (and project) finances by regularly tracking costs and reporting them. Acting like a financial management tool, the module should allow for budget allocation exercises using pre-set conditions and rules; tracking and dashboarding of expenditures by various Client members; project financial management; and auto-reconciliation based on basic principles of accrual-based accounting.

The dashboard should also include a comparison of ‘actual vs budgeted’ costs and a continuously updated forecasting of final program costs. The data entry for this will be controlled by the Client and it is the hope of the Client that the Firm develop a dashboard that allows for disaggregation across various parameters, including time, staff member, cost head, etc.

#### 2.2.3 Procurement module for CMP

The CITIIS program (and its second iteration, CITIIS 2.0) use many third parties (contractors, service providers and consultants) to provide support and assistance to program activities. The Procurement module should allow the end-to-end management of these third parties. Right from submitting a TOR to drafting an RFP to bid management to vendor selection to contract management to contract closure/amendment, the module must provide end-to-end support to the Client’s Procurement Officer.
This module will primarily incorporate a task-based workflow and should integrate well with the already developed Contract Management module.

2.2.4 Engagement of the Firm for CMP development (as listed above) is explained in the following process chain of the dev cycle:

- **Use case development**
  - Wireframe design and functionality development, in consultation with the Client and other stakeholders

- **Responsive UI design**
  - Elaborating user journeys to finalise scope of functionalities and interlinkage with other modules
  - Coordination with multiple stakeholders to test scope different functionalities and content types

- **Backend development and design**
  - Module development, based on final wireframe designs and functionalities
  - Ensuring data security and encryption best practices (such as secured hypertext on all pages, SSL, API authentication, secured back office access regular updates of suite application, additional framework and plugins, etc.)
  - Maintaining scope to enable web-services/APIs in future
  - Database management
  - Maintaining online repository for source code, e.g. GitHub, Bitbucket

- **End-to-end testing**
  - Conducting full UAT lifecycle testing, in both test and live environments
  - Developer testing as well as user testing
  - Developing user guides and conducting training exercises for the Client users as well as other users (if needed by project users)

- **Deployment on live server**
  - AWS server: Hosting server to be provided by NIUA, relevant services to be identified and managed during the design and development stage

- **Handover**
  - 30 days of hands-on training, production monitoring, hand-over of commented code, and preparation of User Manual

- **Post-production support** *(part of time-based deliverable)*
  - Hands-on training to in-house on all aspects of development
  - 6 months of post-production support, according to following SLAs:
    - Within 48 hours resolution for issues highlighted as ‘High Impact’ by Client
Within 1 working week resolution for issued highlighted as ‘Low Impact’ or ‘Medium Impact’ by Client

2.2.7 Principles of design and development

The design and development of CMP is based on the stack approach, and in accordance with the design architecture adopted in the development of the CMP. In order to distribute the ability to solve problems, the NUIS provides guiding principles for ecosystem actors as they develop solutions to urban challenges. The design principles to be followed are that the new modules must be developed in alignment with the existing nature of the platform, i.e. interoperable, evolvable, modular, open, scalable, private and secure, data-driven, and keeping federated architecture. Following these principles should result in the evolution of the necessary standards, specifications and certifications.