

REQUEST FOR PROPOSAL
City of Dublin, Ohio
Information Technology Department

RESIDENT IDENTITY USING DISTRIBUTED LEDGER TECHNOLOGY

EXECUTIVE SUMMARY

The City of Dublin is initiating a project to prove the viability of a Blockchain based personal identity system validated and supported by a local government. The project will implement Distributed Ledger / Blockchain Technologies (Blockchain) for the use cases described below. The successful consultant will aid the City in creating a sustainable Blockchain to achieve the basic functions described below. To begin, the City hopes to prove the viability of Identity, basic voting, opinion survey, and a token of some arbitrary value. It is the City's belief that more robust applications of Blockchain technology may become commonplace and so the City desires to establish a base technical foundation upon which it will build additional functionality. This project will also allow the City to develop skills and expertise around this emerging technology.

Blockchain Technology has the potential of disrupting a number of government service areas. There is potential that citizens may accomplish new levels of data privacy and data security. Local government administration may also transform internal operations as well as service delivery. The potential for these advances is limited due to a lack of proof that the use cases are viable and a lack of trust in the technologies. While proving the viability of a sustainable Blockchain based network platform, the City hopes also to educate a community of users on the technology. By demonstrating a few basic functions of data collection, privacy, security, and use, the City will establish a foundation upon which to build more sophisticated applications.

While significant potential exists for transformative innovations, the City is restricting this initiative to proving the basic technical viability of the platform.

The City of Dublin is focusing on the Digital Government aspect of Smart and Connected Cities with an eye toward eGovernment and the Smart Cities movement in general. The City has established itself as a leader in innovation with numerous current and past initiatives, including the Dublink Fiber Optic network, the Dublink 100gig Project, and the 33 Smart Mobility Corridor. With the formation of the Dublin Blockchain Group, the City has gained valuable insights into the potential uses of Blockchain in local government citizen services, data security, and operational efficiencies.

The City collaborates with numerous Smart City, Intelligent Community, Smart Mobility, and Analytics projects in the region. We hope to be an early adopter of disruptive innovations in an effort to be a leader in digital government innovation. Innovations developed in Dublin are frequently and enthusiastically shared with communities around the State of Ohio and the City enjoys a global reputation. ***The City will enthusiastically share successes achieved by this project publicly and bidders may wish to consider the value of the marketing potential of a success in this early adoption project in their submission.***

As a test lab for the Central Ohio region, the City can generate volunteer users to interact with new technologies and new City business processes. The City will establish a cadre of volunteer users to test and use the proposed solution. The City will provide both official City staff members as well as non-employee residents of the City to work with the Consultant.

The City seeks one or more Blockchain applications that address our use cases, as well as the core technology that supports the application(s). The City can deploy and maintain servers to establish the necessary basic network, or the solution may propose the inclusion of external network participants.

1.0 PROJECT DESCRIPTION

1.1 The City seeks a functional solution that includes a functioning Blockchain network, a mechanism or process of cryptographic “mining”, one or more software applications that demonstrate the use cases successfully. The Consultant will work with City staff to design and develop the solution. City staff will act as Subject Matter Experts, not co-developers. The City desires to own rights to the solution after completion. The City can make direct purchase of equipment or licenses if the solution makes use of third party systems. The proposal should identify any such necessary purchases and their source.

1.2 The Consultant may describe a network that is completely decentralized as an ultimate goal of the initiative. However, it is expected that a Private Blockchain is used to prove the use cases, and this is acceptable. Proposals which include a description of a path to a more Public Blockchain will be considered of greater value. The City will desire the ***description*** of a path to a Public Blockchain as a deliverable of the project, not as part of this proposal.

1.3 The City desires one or more applications to demonstrate the following use cases.

- IDENTITY - Establish and Demonstrate individual identity and elements of identity of a user.
- DISCRETE CHOICE - Collect, record, store, and report discrete choices of a user.
- PREFERENCES - Collect, record, store, and report user preferences.
- TOKEN - Establish a token of value within an enclosed system of credits and debits

The City desires basic applications to prove all four of these use cases. The successful Consultant will propose a solution in consideration of these requirements.

IDENTITY

- Upon proving identity to an authorized representative, the user will have the ability to demonstrate their identity to another authorized representative.
- The user will be able to demonstrate elements of their identity without demonstrating their entire identity. For example, demonstrating one's date of birth or age without revealing one's name. Another example, demonstrating one's status as a resident without revealing one's home address.

DISCRETE CHOICE

- Voting in a simple Yes/No choice. The validated user should be able to vote only once per question and their choice should be immutable.
- The user will be able to record their choice or vote using the application outside of the validation of any authorized representative by using a previously established identity.
- Validated representatives should be able to view recorded choices without being able to view individual identities.
- Validated representatives should be able to view the status of a user with regard to their vote without being able to view their choice.
- This is a high level description that may be elaborated on with the winning proposal.

PREFERENCES

- Selection of one or more choices between multiple options. Essentially a survey of a community of users.
- The user will be able to record their survey answers and have them viewed by authorized representatives similar to the discrete choice.

TOKEN

- Authorized representatives will be able to grant to users a digital token of some arbitrary value. The Consultant may propose a schema of value and work with the City to refine their proposal after winning the bid.
- While the token of value is undefined, the Consultant can compare it to a coupon or barter system, where a certain amount of value may be granted for some service or transaction performed by the user, and redeemed by the user for some tangible asset, such as a discount at a store. We believe this will be accomplished with some sort of “Utility Token”, and the consultant may make a recommendation as to the means of accomplishing this.
- The solution will simply demonstrate the ability of an authorized representative to grant a token and of the user to receive and secure it, further distributing it “back” to an authorized representative in exchange for a tangible asset irrelevant to the proof of the use case.

2.0 DELIVERABLES

2.1

- Design document for each use case
- Architecture document for the underlying private (assumed) blockchain
- Detailed description of the solution
- Presentation of the Proposed solution to the City’s Management Staff
- Presentation of the completed solution to the City’s Management Staff
- Satisfactory demonstration of the successful function of each of the four use cases.
- Assignment of the total solution to the City for rights of use.
- Verification document of the successful function of the four use cases signed off by the City’s Project Manager.

3.0 TIME OF COMPLETION

The consultant will describe a proposed project timeline. Proposals will be evaluated on the basis of both speed and the quality and completeness of the solution and its full documentation.

4.0 PROPOSAL CONTENT

Evaluation of the Proposals and selection of the Consultant will be based on the following criteria.

4.1 QUALIFICATIONS

- The Consultant should describe their organization, addressing what qualifies them to work with Distributed Ledger technologies, as well as any relevant projects or experience they may have in this area.

4.2 CAPACITY

- The capacity of the firm to perform the required services competently and expeditiously to meet proposed schedules as indicated by the firm's size and availability of necessary personnel, sub-consultant(s) availability, current workload, and equipment and facilities should be adequately described.

4.3 SCHEDULE AND TIME OF COMPLETION

- The Consultant shall present a schedule and date of completion in the proposal with milestones.

4.4 COMPENSATION

- Fees for additional items, as requested and authorized, will be established separately. The proposed fee will be based on completing all tasks, on-time or in advance of the Consultant's proposed schedule. Failure to submit a fee proposal may cause the City to reject the Proposal for this project.

4.5 BUSINESS OPERATIONS LOCATION

- The City values opportunities to support local businesses, with a particular preference for companies that have Dublin based employees, or preferences for business operations in the Columbus region, the State of Ohio, in descending order of preference.
- While business location in the City of Dublin is not a requirement of the proposal, the Consultant is invited to describe the locality of their operations in such a way as addresses the City's preferences.

4.6 COMMITMENT TO DIVERSITY

- The City of Dublin is committed to promoting Diversity and Inclusion in its operations, and values business relationships with companies that engage in practices that display their own commitments.
- While Diversity and Inclusion are not requirements of the proposal, the Consultant is invited to describe any practices that promote diversity in hiring, contracting, or operations that demonstrate commitments to the principles or Diversity.

5.0 PROPOSAL REQUIREMENTS

5.1 Responding firms shall include in their Proposals all the information that is requested in Section 4, Proposal Content. Firms are encouraged to provide any additional information they feel will further demonstrate the firm's qualifications and abilities to acceptably complete this project but are hereby instructed to limit such additional information to that which is directly relevant to the services being requested.

5.2 Any superfluous information included not relevant to the services being requested only lengthens the review of a Proposal and could certainly detract from the true merits of the Proposal.

5.3 Electronic submissions will be required. The submission must be compatible with Adobe Acrobat, in a single file, and be formatted to print on standard office paper sizes. No pages shall be larger than 11x17. Fax submissions will not be accepted.

5.4 All material submitted in accordance with this RFP becomes property of the City and will not be returned.

5.6 If you have any questions regarding this RFP, please contact the Project Manager, Cyndy Barney, +1-614-410-4609; cbarney@dublin.oh.us. Answers to questions submitted by email may be shared with others in the form of one or more Addendums to the RFP. If you would like to be informed via email of the posting of any Addendums to this RFP, you may request updates by sending an email to cbarney@dublin.oh.us. Any other contact with City personnel related to this RFP, prior to the formal selection of the consultant, is expressly prohibited without the consent of the Project Manager. The City will hold at least one conference call for bidders to ask questions of the project team regarding this RFP. Any bidder who would like to join will be welcome, and all bidders will hear both questions asked and answers provided. Questions asked and answered during the conference call will not be documented and shared via email. Bidders may use either method to get questions addressed. The date and time of the conference call will be sent to those parties who request an invitation via email to the Project Manager, Cyndy Barney, +1-614-410-4609; cbarney@dublin.oh.us by Thursday August 16, 2018.

The Proposal should be submitted to the following address no later than 4:00 PM on Friday, September 7, 2018. Proposals received after this deadline will NOT be considered.

Consultants should submit their proposal to:

Cyndy Barney
The City of Dublin Ohio
Department of Information Technology
5800 Shier Rings Road
Dublin, Ohio 43017

And

dmccollough@dublin.oh.us