



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

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**ADDENDUM #4**

**Date: June 21, 2019**

**RFP #7598824**

**Title: BLOCKCHAIN TECHNOLOGY – PROOF OF CONCEPT**

**Bid Closing Date & Time: MONDAY, JULY 8, 2019 11:00 AM (Eastern Time)**

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**ATTACHED ARE THE VENDOR QUESTIONS WITH STATE RESPONSES.**

**NO FURTHER QUESTIONS WILL BE ANSWERED.**

*Interested Parties should monitor this website on a regular basis, for any additional information that may be posted.*

**Robert DeAngelis**

**Senior Buyer**

The following questions were received regarding RFP #7598824 Blockchain Technology – Proof of Concept.

## Vendor A

Section 1 Introduction states that proposals will be evaluated on “merits of the proposal; in addition to cost” whereas Section 4.C. states that cost is not factored into scoring. Which is correct?

**Response:** Essentially, a right set of “POC Use Case” and the proposed approach to deliver the POC is key. The cost, as it relates to the POC, will not be factored.

Can the State clarify the intent behind language around pricing in Section 4.C.1? Also, what is the purpose of the cost table in Section 4.C.1 and its relationship to the cost table in Section 4.C.2?

Can the State describe what they mean, specifically, by "Proof-of-Concept implementation" in Section 1 Introduction?

**Response:** The table in C.1 is meant for vendors to supply an overall cost for implementing the proof of concept detailed in this RFP, including all the phases listed in Section 3 (Discovery, Rollout, etc. on to Wind-Down). The table in C.2 is a non-binding bit of guidance for the State as to what the cost of a full production implementation would be for the vendor’s technology. Any responses from vendors related to C.2 will also not be considered in scoring.

Are the PoCs intended to be typical demonstration PoCs using simulated integrations? Or does "implementation" mean the State expects a live integration, fully functional operating Pilot network?

**Response:** The State does not expect integration with an existing production system. Depending on use case, the State may make available a regularly updated dataset/integrations consisting of either de-identified or otherwise public data from existing systems. The intent is to make the Proof of Concept as close to practical use as possible.

Given the request of services, it seems the PoCs could be more than just showing it can work, since work extends to training individuals to use it. Can the State please clarify how it envisions the PoCs will be used once demonstrated to stakeholders and for how long?

**Response:** The State does expect an appropriate amount of training for State subject matter experts such that they can interact with the proof-of-concept system along the lines proposed in responses. Those interactions should be outlined in responses and will be defined more granularly during both contract negotiations and discovery.

As for “how long,” the duration of running this proof-of-concept is dependent on the selected use case(s).

Does the State have a preferred timeframe for all defined activities/tasks?

**Response:** While the absolute total timeframe will be dictated by the selected use case, the State does not foresee the entire proof-of-concept project being a multi-year endeavor.

What is target date expected for the Presentation Demonstration/Interview conducted before the ETSS Technical Evaluation Committee (“TEC”) as described in Section 4.B?

**Response:** The Presentation Demonstration/Interview will be scheduled after the RFP has closed. The State expects to schedule them within a matter of weeks after proposals have been received.

The contract period will be determined based on the use case chosen. Does the State have a minimum and maximum range it expects for the Period of Performance of the PoCs?

**Response:** The intent is to validate the use case and technology for future practical use. The State will decide post-use case selection. However, it will encourage vendors to give suggestions based on their technology and experience.

What is the maximum number of vendors the State could potentially target for award and performing the Blockchain PoCs across the various categories referenced? How many PoCs is the State looking to manage in parallel and within which specific categories?

**Response:** The State is not going to limit itself to a single number of proofs-of-concept it will pursue through this RFP, but concedes that there are obvious limitations to how many could be run in parallel. There are no limits on which categories of potential application the State may pursue, or how many proofs-of-concept it may pursue per category. As the RFP states on Page 8: “The State reserves the right to select one or more proposed solutions from same or different vendor(s) for Proof of Concept implementation.”

## Vendor B

General Question - To provide sufficient time to propose the most cost effective and complete proposal for this project, would a two-week extension be granted to the current June 21st due date?

**Response:** Yes, the State will extend this deadline to July 8<sup>th</sup>.

Section 1, Introduction, Item 8, pg. 4 - This section states, "The vendor should provide a brief explanation as to why each portion of information that is marked should be withheld from public disclosure." May vendors include this information in the Original proposal ONLY, immediately following the two required forms—RIVIP Bidder Certification Cover Form and the Rhode Island W-9? If not, where would the State prefer vendors include this information?

**Response:** Vendors are asked to provide this information as part of their technical proposal. The specific location of information being marked can be determined by the vendor, either in the location where the information is discussed in the proposal, or on a separate summary sheet(s).

Section 2, Background, Goals, pg. 7 - Is the State considering partnering with other states and sharing their Blockchain networks (e.g., with another ongoing POC/Pilot)?  
As an example, joining an existing permissioned network with the State's own use cases or smart contracts could enable cross-state workflows over a larger shared infrastructure and network.

**Response:** The State has not explicitly considered a multi-state partnership as part of this RFP, but vendors should feel free to discuss this possibility as part of their proposal. At present, given the nascent nature of the technology, the State doesn't have enough information to decide how viable such an approach would be, but would not rule it out explicitly.

Section 3, Scope of Work and Requirements, Implementation of Proof of Concept, pg. 8 - Are there key metrics and benchmark values available, or expected, that can be used as a reference for implementation of Blockchain enabled processes?

**Response:** Due to the nascent nature of this technology, the State be largely open-ended with this process. The State has not requested proposals for specific use cases, and therefore, metrics and benchmark values are not available, Vendors should include suggested success metrics and benchmark values pertinent to the described use case(s) in their proposal.

Section 3, Scope of Work and Requirements, Implementation of Proof of Concept, pg. 8 - Are the deliverables (e.g., source code, scripts, images, etc.) to be delivered/pushed into any

State's code repository?

**Response:** The State will be able to provide server to store final deliverables. However, the State also understands that some vendors will have proprietary solutions & code that are unable to be transferred.

Does the State provide project tracking tools (JIRA or similar) or would it be the vendor's responsibility to provide tracking tools?

**Response:** The State presumes that selected vendors would provide project management and DevOps technologies appropriate for their workflow during the implementation and management of a proof-of-concept. The State understands this is a proof of concept and not a full implementation.

Section 3, Scope of Work and Requirements, Implementation of Proof of Concept, pg. 8 - Are there specific State standards or guidelines for code, user interface, data security, regulatory requirements, etc. that need to be adhered to?

**Response:** The State intends this proof-of-concept system to be largely standalone. The State expects to provide "seed" data that is either de-identified or that is already provided to the public at large, therefore limiting the risk.

All web-based initiatives must follow the W3C Web Content Accessibility Guidelines 2.0, Level AA (WCAG 2.0 AA), the international standard of technical requirements for making websites, mobile apps, and other digital content accessible to people with disabilities. To learn more, please visit <https://www.w3.org/TR/WCAG20/> or review their quick reference guide "How to Meet WCAG 2.0" at <https://www.w3.org/WAI/WCAG21/quickref/>.

Please note that WCAG 2.0 is now the official benchmark for Section 508 and has been used as a major compliance factor for the Americans with Disabilities Act (ADA). For details, please read the revised guidelines published by [the U.S. Access board on January 18, 2017 and corrected January 22, 2018](#).

[WCAG 2.1 builds upon the principles and guidelines found in WCAG 2.0 by adding 17 additional success criteria and helps bring accessibility standards up to speed with more modern digital interactions and devices. However, compliance with Web Content Accessibility Guidelines 2.1 is optional at this time and is included for reference purposes only.](#)

Section 3, Scope of Work and Requirements, Rollout, Training, Monitoring, pg. 9 - Post implementation and training, will the vendor play any role beyond technical support and monitoring?

**Response:** At the end of Section 3 of the RFP, the State noted that it will request selected vendors to submit a formal post-mortem report on the project after the “wind-down” period has completed.

If vendors have value to offer while the system is running in addition to technical support and training, they should describe this in their proposals.

Does the State expect any assistance from the vendor evaluating the POC (e.g., formulating test plans, test personnel, data etc.)?

**Response:** Yes. What form this assistance takes is dependent on the scope of the selected use case and the particulars of its application. Vendors should outline their general approach to quality assurance, testing, and evaluation in their proposals, particularly if the nature of the blockchain-based solution may present novel differences compared to traditional software testing.

Section 3, Scope of Work and Requirements, Rollout, Training, Monitoring, pg. 9 - Does the requirement for system training include functional training for users of the system along with technical training to IT personnel to maintain the Blockchain network?

**Response:** The scope of training is dependent on the service delivery model the vendor proposes. If the service delivery model relies upon assets within the State Enterprise Operations Center (data center), and the monitoring of said assets by State technology staff, then the State would expect an appropriate degree of technical training for them. If the service delivery model is closer to a Software-as-a-Service model with little need for State technical involvement, then the need for granular technical training would probably be much reduced. Regardless, vendors should outline how their proposed service delivery model impacts the proposed proof-of-concept as a whole, including implications for training. Additionally, the State wants to reiterate that this proof-of-concept system is not intended for continuous use, thus the explicit requirement that vendors detail their wind-down plan.

Section 4.A., Technical Proposal, pg. 9 - Does the State have any preference against the use of existing Public Blockchains (like Bitcoin or Ethereum)? This is important considering privacy factors like Geo-Containment of data linked to the Blockchain transactions and any future data privacy expectations (similar to EU’s GDPR).

**Response:** The State does not have an explicit preference against the use of a public blockchain. This is an opportunity for the State to gain insight into the implications of blockchain-based technologies, based on both public and private blockchains, particularly in the areas of possible risk, possible intersection with laws and regulations, and how it may inform future investments in State infrastructure.

Section 4.A., Technical Proposal, pg. 9 - Does the State have any preference to avoid Blockchain platforms having a native network token or transactions costs (like gas prices or transaction fees)? Can the vendor assume that even if a token-based network is considered, the POC would be executed within a Test network without the need of actual tokens to transact?

**Response:** The State does not have an explicit preference against platforms that have “gas” prices or transaction fees. Given that these are cryptographic underpinnings of certain flavors of the technology itself, if a vendor proposed a solution that required them, this would be an additional opportunity to learn the mechanics and dynamics of these transactions.

If such fees/transactions costs underpin a vendor’s technologies, vendors should note that clearly as part of their proposal. While the State will not require this proof-of-concept to be conducted in a disconnected test network that duplicates a real public chain, vendors should be explicit (including with estimated costs) about the implications of their technology if the proof-of-concept had been conducted on one and of the implications to an actual full-fledged implementation.

Section 4.A., Technical Proposal, pg. 9 - Would the POC application be hosted in Rhode Island’s State data centers or the vendor’s infrastructure? If hosted in Rhode Island’s State data centers, is the environment cloud or on-premises?

**Response:** The State is open to both hosting orientations, as well as a cloud service provider controlled by either the vendor or the State.

Section 4.A., Technical Proposal, pg. 9 - Does the State expect a closer integration of the POC system with its traditional infrastructure in areas of Identity & Access Management, Data Services, etc.?

**Response:** This depends on the use case. Vendors should outline their standard approach to IAM, etc. in their proposals, as well as their overall capabilities. If the POC were to move, after wind-down, towards a future, full production implementation, this would be obligatory.

Section 4.A., Technical Proposal, pg. 9 - Is the POC system intended to be evaluated using real-world data (as the events happen) or “test” data that the State will help determine during the discovery phase.

**Response:** The State is open to both possibilities, depending on the use case. Again, real-world data from existing production systems will either be rigorously de-identified prior to being placed on any blockchain, or it will consist of data that the State already publishes to

the public today.

Section 4.A.2, Capability, Capacity, and Qualifications of the Offeror, pg. 10 - We have a number of current clients around the globe that are utilizing or experimenting with Blockchain technology. However, since this is such a new and emerging technology, these clients are not prepared to be publicly listed and named at this time.

We would respectfully request, therefore, that we be allowed to provide de-identified information about our Blockchain clients with full descriptions of our work but without a name, email, or phone number. We would be willing to make these clients available to Rhode Island upon request.

Alternatively, we would request that we be allowed to provide named client references for work related to digital transformation and not just clients with whom we are working on blockchain related projects.

**Response:** The State will accept de-identified, existing blockchain clients to be listed as part of the RFP response.

If the vendor's use case is selected, the State may wish to contact these de-identified blockchain clients as part of its due diligence.

Such contact would be mandatory if, in the future, the State wished to pursue a full, production implementation of the vendor's technology.

The State is not interested in references relating to general, non-blockchain digital work performed previously by the submitting vendor.

Section 4.A.4, Approach, items #3 and #4, pg. 10 - These two requirements state, "3. Details on whether the blockchain technology outlined in a) is already anchored to, or is projected to integrate with, one of the global, public blockchains; 4. If b), does the proposed Platform leverage any off-shoot blockchain approaches, such as Layer-2 or Sidechains;" Should this requirement be written as one requirement that states, "Details on whether the blockchain technology outlined a) is already anchored to, or is projected to integrate with, one of the global, public blockchains; or b) does the proposed Platform leverage any off-shoot blockchain approaches, such as Layer-2 or Sidechains;" If so, should the remainder of the requirements be renumbered so that there is a total of 12 requirements?

**Response:** The requirements will not be renumbered.

Section 4.A.4, Approach, item #13, pg. 10 - This requirement refers to "An attached Voluntary Product Accessibility Template." Since the template was not attached to the



RFP, please provide information on where vendors are to access this template.

**Response:** All web-based initiatives must follow the W3C Web Content Accessibility Guidelines 2.0, Level AA (WCAG 2.0 AA), the international standard of technical requirements for making websites, mobile apps, and other digital content accessible to people with disabilities. To learn more, please visit <https://www.w3.org/TR/WCAG20/> or review their quick reference guide "How to Meet WCAG 2.0" at <https://www.w3.org/WAI/WCAG21/quickref/>.

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WCAG 2.1 builds upon the principles and guidelines found in WCAG 2.0 by adding [17 additional success criteria](#) and helps bring accessibility standards up to speed with more modern digital interactions and devices. However, compliance with [Web Content Accessibility Guidelines 2.1](#) is optional at this time and is included for reference purposes only.

Section 4.C, Cost Proposal, pg. 11 - This section states, "Vendors are asked to provide replies in excel spreadsheets, in the formats listed in C.1 and C.2, as part of the Cost Proposal."

Was there a specific Excel spreadsheet that the State intended to use or are vendors to provide a standard Excel spreadsheet with the information notated?

Would it be acceptable for vendors to answer the requirements listed in C.1 and C.2 ONLY in narrative format in the Cost Proposal and NOT attach an Excel spreadsheet with the same information?

**Response:** The State requests vendors to provide a standard Excel spreadsheet with the information notated. Narratives can be provided, so long as they are supplements to the data in the Excel spreadsheets.

## Vendor C

What are the success parameters for the selected POC from the business perspective? Would it help reduction in paperwork, process and customer/Citizens Experiences?

**Response:** All these listed factors would be relevant. Specific, additional success criteria will be defined appropriately for the selected use case(s). Overall, the State is looking to learn, and vendors should describe, how blockchain-based technologies provide value,

how they can deliver return on investment, and how mature and appropriate they are for the public sector.

What are the success parameters for the selected POC from the Technology perspective? Prove the value and impact of Blockchain in Govt etc.

**Response:** Specific success criteria will be defined appropriately for the selected use case(s). Overall, the State is looking to learn, and vendors should describe, how blockchain-based technologies provide value, how they can deliver return on investment, and how mature and appropriate they are for the public sector. The State also wishes to learn why a vendor suggests blockchain technology to solve a particular problem vs. traditional IT architecture and solutions.

What are the parameters/boundaries under which they have to operate for the POC? Does it involve any integration with the existing application? Any data requirement from the legacy application could be mapped to a sample data set within the POC environment.

**Response:** The State intends this proof-of-concept system to be largely standalone. The State expects to provide “seed” data that is either de-identified or that it already provides to the public at large, therefore limiting the risk of whatever data was transmitted on the proof-of-concept blockchain.

Under section C Cost Proposal, does C.1 (Proof of Concept Project Cost) refer to the Discovery phase (as mentioned in Section 3: SCOPE OF WORK AND REQUIREMENTS). How much do they expect us to support it?

**Response:** The State does not believe that an experienced, well-prepared vendor with a targeted use-case will need extensive discovery to tailor the proof-of-concept to Rhode Island Government. If a vendor’s proposal is clear, with clearly defined objectives, scope limitations, and obligations from State resources, discovery sessions should be minimal compared to any full production implementation. However, discovery must, of course, take place, and the State would expect any vendor to be a full participant and guide during this process.

Under section C Cost Proposal, does C.2 (Implementation Cost Estimates) refer to the other 3 phases Implementation of Proof-of-Concept, Rollout, Training, Monitoring and Wind-Down phase (as mentioned in Section 3: SCOPE OF WORK AND REQUIREMENTS). Our assumption is for the Cost Neutral POC only.

**Response:** The table in C.1 is meant for vendors to supply an overall cost for implementing the proof of concept detailed in this RFP, including all the phases listed in

Section 3 (Discovery, Rollout, etc. on to Wind-Down). The table in C.2 is a non-binding bit of guidance for the State as to what the cost of a full production implementation would be for the vendor's technology. Any responses from vendors related to C.2 will also not be considered in scoring.

Would you consider the suggested solution infrastructure for the POC to be deployed on a Cloud environment? Use of Cloud infrastructure would be more cost effective for a POC.

**Response:** Deployment of the selected proof-of-concept on a cloud service provider is acceptable.

Please let us know in case you have any specific Nonfunctional Requirements for the desired Proof of Concept Implementation.

**Response:** This is a new technology on the market. Vendors should detail why their proposed use case would not work, or would not work as well, on a traditional infrastructure.

Are you open to use of any proprietary or licensed software package as part of the solution?

**Response:** Yes.

"Section 4: PROPOSAL", page 10, point 13 has a specific requirement for Voluntary Product Accessibility Template (VPAT).

- Could you please specify the specific requirements you are expecting regarding the accessible services?
- Would you be able to specify if you have any desired format for the Voluntary Product Accessibility Template?

**Response:** The State expects a WCAG 2.0, AA-compliant solution, as a minimum standard.

Bids to the State of Rhode Island for web-based products or related services must demonstrate compliance with the accessibility principles of Section 508 of the Federal Rehabilitation Act ( [Revised Section 508 standards published January 18, 2017 and corrected January 22, 2018](#) ) and the standards documented in the W3C [Web Content Accessibility Guidelines 2.0](#), Level AA (WCAG 2.0 Standards).

Please note, compliance with [Web Content Accessibility Guidelines 2.1](#) is optional at this time but is included for reference purposes.

In addition, Offerors should submit an annual Voluntary Product Assessment Template OR “VPAT”. Please download [Version 2.3 \(Revised\) - April 2019](#) for the current, preferred version. For additional information, please visit <https://www.itic.org/policy/accessibility/> and <https://www.section508.gov/sell/vpat> for details.

The RFP does not specify a Limitation of Liability, which exposes the teams bidding for “Unlimited Liability”. This might be too much of a risk for any vendor, can we please add Limitation of Liability into the contract in case we are the winning bid?

**Response:** The Rhode Island Office of Legal Services within the Department of Administration offers the following guidance: “Vendors should assume that there is no limitation on liability and they will be held accountable for their negligence, breach and/or intentional acts. However, any conditional offer which imposes a limitation on liability will be considered under the General Conditions of Purchase 220-RICR-30-00-13.3(C)(3), which provides:

Qualified or conditional offers which impose limitations of the Vendor’s liability or modify the requirements of the solicitation, offers for alternate specifications, or offers which are made subject to different terms and conditions, including form contracts, other than those specified by the State may be, at the sole discretion of the State Purchasing Agent:

- a. Rejected as being non-responsive; or,
- b. Set aside in favor of the requirements set forth in the solicitation (with the consent of the Vendor); or,
- c. Accepted, if the State Purchasing Agent determines in writing that such acceptance is in the best interest of the State.
- d. Acceptance or rejection of alternates or counter-offers by the State Purchasing Agent shall not constitute a precedent and shall not be considered to be binding on successive solicitations or procurements.”

## Vendor D

**Section - 2 ->Goals : Point 1** - The goal of the project states that the purpose of this project is to study the maturity of the blockchain frameworks - What are the key indicators against which the maturity will be measured?

**Response:** Vendors, presumably, will outline how their proof-of-concept can deliver value to the State in the area of the proposed use-case. Vendors should describe what it is about their technology, and what it is about the nature of being based on blockchain technology, that will deliver this value. For mature products, this should be a tight, intrinsic argument. Additionally, vendors should outline how their systems are secure, reliable, easy-to-use, and provably immutable. In addition, vendors should detail the maturity level and potential restrictions of any underpinning dependencies, particularly blockchain-related ones, on which their solution is built.

**Section -2 ->Goals: Business areas** - Are there any more information on the problems faced by the state on the broad issues provided? This will help us under the effectiveness of a blockchain solution.

**Response:** The State is looking for vendors with public sector experience or at least experience in the area of their proposed use-case to craft an effective proof-of-concept.

**Section-3 -> Discovery** - What is the duration that we can plan for discovery? And, how will the state support us during this phase?

**Response:** This is dependent upon the selected use-case and the agreed-to scope thereof. The State will have a project lead to assist implementation, liaise with relevant State agencies and subject matter experts, coordinate the provision of “seed data” or any relevant data feeds, and validate the use case.

## Vendor E

A mandatory pre-bid conference is mentioned in the RFP. Is the exact date at a minimum a general time frame for that meeting set?

**Response:** At the appropriate time, the State will provide as much notice as possible, so vendors can make plans to attend. It is always the State’s goal to ensure a competitive bid process takes place.

What is the state of RI currently using to perform tracking services for its medical marijuana program?

**Response:** The State currently uses a Seed-to-Sale tracking platform from KIND Government Solutions, Inc. Compassion Centers (called “dispensaries” in other states) use several different retail point-of-sale and inventory tracking systems to which the State has access.

What, if any, problems currently exist in the medical marijuana programs that the state thinks can better handled with a blockchain tracking system.

**Response:** Vendors should, given their public sector experience, detail for the State what problems their solution can solve.

## Vendor F

**Section-3 -> Discovery** - Is it necessary for the vendor to specify the type of documents and knowledge transfer sessions to be provided by the state during the discovery phase?

**Response:** Vendors do not have to specify this information in detail in their RFP responses, but should outline their expectations of State responsibilities during discovery and implementation.

**Section-4 -> Technical proposal** - Can we assume the final deployment of the solution will be in the cloud? Such as AWS, Azure, Google Cloud Platform.

**Response:** The State approves of a final deployment of the proof-of-concept on a cloud service provider. Vendors should outline the details of this infrastructure, what services are used, whether the cloud service provider is FedRAMP-certified or not, etc. in their proposals.