# Policies and Procedures
## Competitive Proof of Concept Procurement

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## I. SCOPE AND APPLICABILITY:

This guidance is supplemental to the requirements in Section 3.4.12 of the Maryland Procurement Manual.

## II. POLICY:

A Competitive Proof of Concept Procurement is a procurement approach that allows the State to test potential solutions before committing to a full contract. Agencies issue a solicitation focused on the problem to be solved, rather than detailed technical requirements, which is especially useful for testing new or innovative products or services, a product or service conceived of by a State unit, or a solution to a problem where the requirements are unpredictable. Instead of relying only on completed

proposals, agencies can first observe how different solutions perform in real-world conditions during a proof of concept phase.

Initial proposals are evaluated before potentially multiple vendors are requested to conduct a proof of concept, ideally at no or minimal cost to the State. The proof of concept phase is the portion of the procurement in which vendors are required to demonstrate their proposed solutions through a defined sample, test, prototype, demonstration, or other practical exercise to establish that their solution can perform as described. This is a controlled testing and evaluation stage that the State uses to determine whether the proposed solution works as expected and would address the problem identified by the agency. This helps reduce risk, supports innovation, and allows the State to make better-informed decisions about how to spend public funds.

After completion of the proof of concept phase, agencies may further define requirements through additional subsequent phases of the procurement and downselecting vendors to result in a final pool of vendors reasonably susceptible of being selected for award. Based on outcomes from the proof of concept and subsequent phases, the State can determine, under the same solicitation, whether one or more solutions should move forward to a contract award and implementation.

## III. PROCEDURES:

### Step 1: <u>Deciding when to use a Competitive Proof of Concept Procurement</u>

Agencies and procurement officers must justify in writing why conducting a Competitive Proof of Concept Procurement is preferable to using another procurement method. At the outset, procurement officers should consider:

- How to define the business problem and why ordinary requirements development is not enough,
- Confirming that the need is suitable for a real-world pilot or demonstration rather than a standard procurement, and
- Deciding whether the State is testing:
    - a new, innovative product or service,
    - a product or service conceptualized or conceived of by a unit of State government; or
    - requirements are unpredictable.

<u>Additional considerations when deciding whether a Competitive Proof of Concept Procurement is the appropriate procurement method</u>

- Use a practical threshold test for whether a Competitive Proof of Concept Procurement is appropriate. The agency should be able to explain, in simple and supportable terms, why a Competitive Proof of Concept Procurement is in the State's best interest. For example:

    - the State has identified a real operational need but cannot yet define the best solution with sufficient precision for a traditional procurement;
    - there are potentially multiple ways to solve the problem and the State needs comparative evidence before committing to implementation;
    - a limited pilot, test, or demonstration would materially improve the State's understanding of feasibility, integration, performance, or risk; or
    - the State needs to validate whether a proposed solution can produce a workable minimum viable product (MVP) before moving to implementation.

If the procurement appears to require substantial custom development, repeated phase downselects, or testing in live production systems from the outset, the agency should also consider:

- Is the State testing viability, or does it already know what it wants (if the latter, it should just conduct a standard procurement)?
- Can the unit support performance of multiple proofs of concept operationally and technically?
- Will vendor access to State data or systems create security, privacy, or legal issues? If so, what additional measures would be considered?

Competitive Proof of Concept Procurements should not be conducted when:

- requirements can be reasonably defined;
- performance standards are known;
- only one known solution exists; or
- it is a basic or repetitive procurement.

**Step 2: <u>Conduct targeted market research, if applicable</u>**

Conduct market research before issuing the solicitation. The purpose is to confirm that a Competitive Proof of Concept Procurement is a sensible method, to improve the problem statement, and to help the State avoid drafting a solicitation around a presumed solution.

This may include reviewing available commercial offerings, speaking with internal users, conducting vendor outreach, issuing a request for information, holding a short industry call, or reviewing how other governments approached similar needs.

**Step 3: <u>Build the justification package and obtain approvals</u>**

Prior to issuing a Competitive Proof of Concept Procurement solicitation, the procurement officer shall develop a package justifying that conducting the procurement

is in the best interest of the State, to be approved by the head of their unit. The package shall include:

- the business problem;
- why this procurement method is preferable to a standard procurement at this stage;
- what market research was performed;
- what the State learned from that research;
- whether concept papers vs full proposals will be used at the initial stage;
    - When used appropriately, concept papers may attract more small businesses and be less burdensome on the State. For more information distinguishing concept papers from full proposals see PP - Competitive Proof of Concept Procurement, Attachment 1 Concept Papers;
- whether the proof of concept is expected to occur in a sandbox, test environment, or live environment;
- the extent to which the proof of concept phase will involve a contractor's use of or access to State data; and
- whether the State has the staff, technical support, and evaluation resources to manage the process.

A Competitive Proof of Concept Procurement may be determined to be in the best interest of the State when one or more of the following conditions exist:

- the State cannot reasonably define detailed technical requirements;
- testing is necessary to evaluate feasibility, interoperability, usability, or performance;
- innovation is sought and available solutions are rapidly evolving;
- implementation risk can be materially reduced through testing; or
- the State cannot otherwise determine best value through a traditional procurement approach.

After the procurement officer's unit head approves the justification package, the procurement officer shall email it to dgs.osp-requisitions@maryland.gov with the following:

- Subject line: "[Unit Name] Request for Competitive Proof of Concept Procurement"
- Attachment: Approved justification document

For IT purchases, the Department of Information Technology (DoIT) must first determine whether the State can adopt the proposed solution. Submit the justification package to doit.intake@maryland.gov for review. Include DoIT's determination in the submission to OSP.

If OSP approves the request for an IT-related Competitive Proof of Concept Procurement, the unit must enter into a memorandum of understanding (MOU) with DoIT that requires the following:

- Regular status updates,
- Vendor capacity, and
- Any other information necessary for DoIT to evaluate whether the proof of concept can be successfully deployed and is beneficial to the State.

Determining Small Business Reserve Designations:

For procurements valued at or below the Small Business Reserve (SBR) threshold, the procurement officer shall evaluate whether designation for the SBR is practicable.

If the procurement officer determines that SBR designation is not practicable, they must follow applicable law and policy to request a waiver from the Office of Small, Minority, and Women Business Affairs.

Establishing Minority Business Enterprise (MBE) and Veteran-owned Small Business Enterprise (VSBE) Participation Goals:

The procurement officer shall ensure that the solicitation documents specify the phase at which MBE and VSBE participation goals will be established. For a Competitive Proof of Concept Procurement, goal-setting can occur after the solicitation has been posted.

When deciding at what point to establish goals, the procurement officer shall consider when requirements will be sufficiently defined to conduct market research identifying MBE and VSBE subcontracting opportunities. Any goal recommendations must be reviewed by the Procurement Review Group (PRG) and OSBA in accordance with existing policies.

> *Below is the sample language that may be used for the solicitation:*
>
> *The vendors chosen to conduct a proof of concept are required to provide a Subcontracting Opportunity Assessment at the conclusion of the proof of concept phase, describing any work areas they would subcontract to MBEs and VSBE This Subcontracting Opportunity Assessment will not be evaluated as part of the performance of the proof of concept, but may be used later to assist with establishing MBE and VSBE participation goals on any resulting contract. If there are additional phases to the procurement, vendors may be requested to submit subsequent Subcontracting Opportunity Assessments.*
>
> *Any MBE and VSBE goals will be established prior to submission of the final proposal or best and final offer, once the procurement officer has identified requirements specific enough to result in a potential award recommendation. At this phase, the procurement officer will conduct market research to establish MBE and VSBE goals according to existing guidance, to be reviewed by the Procurement Review Group, and may use any Subcontracting Opportunity Assessments to assist with this effort.*
>
> *Once MBE and VSBE goals have been established for the procurement, vendors reasonably susceptible for award from the immediately preceding phase will be*

*provided an opportunity to submit the relevant forms within the timeframe specified by the procurement officer, or otherwise request a waiver. Vendors must provide MBEs and VSBEs no less than five business days to respond, and are advised to begin outreach to potential MBEs and VSBEs in advance of specific goals being established to facilitate the timely submission of these forms.*

**Step 4: <u>Draft the solicitation</u>**

The solicitation must include, as applicable:

- a statement that all stages are covered by one solicitation, and that any vendor wishing to remain eligible for any later implementation stage must submit the required initial response at the beginning of the procurement, whether that response is a concept paper, proposal, or other initial submission identified in the solicitation;
- the problem statement, statement of need, or project description, including the desired outcomes;
- the intended use, quantity, and estimated time frame for the proof of concept;
- the anticipated number of proof of concept awards, including whether the State may make one or multiple awards;
- whether proofs of concept will be conducted sequentially or simultaneously;
- that the State reserves the right to increase or decrease the number of proofs of concept or otherwise discontinue the process without making an implementation award;
- whether the proof of concept is paid, unpaid, or minimally compensated;
- the clear phase structure of the procurement, including what must be submitted in each phase; the solicitation should state what the State expects to learn in each phase, the acceptance criteria for moving forward, and who has authority to decide whether to continue, stop, or invite additional submissions;
- a statement of what will be required in response to the solicitation (e.g. the State may request short concept papers first; where for later stages the State may request demonstrations, oral presentations, product samples, implementation proposals, discussions, or best and final offers);
- the evaluation factors, including price where applicable, and the relative importance of those factors for each phase;
- the criteria for evaluating proof of concept success;
- whether successful proof of concept participants may be invited to submit a proposal for full implementation;
- the criteria for transitioning from the proof of concept stage to implementation;
- whether the State-furnished resources, data, systems, or testing environments will be provided;
- if applicable, whether the proof of concept may involve vendor-owned tools, State-furnished data, test environments, or newly developed artifacts, and what rights each party will retain;
- the treatment of data rights, intellectual property, and confidentiality; and

- the anticipated number of implementation awards, if known, including whether the State may make one or multiple awards;

Consider adding the following to the solicitation:

- a statement that phase reviews are State decisions based on the solicitation and the record, and that advancement is not automatic.
- a statement that the State may use a minimum viable product (MVP) concept as the baseline for deciding whether phases of the procurement have produced enough evidence to justify moving forward. In this context, MVP means the simplest workable version of the solution that demonstrates the required functionality, performance, and operational fit well enough for the State to determine whether implementation should proceed.
- if the proof of concept may require significant vendor effort, a longer performance period, or meaningful expense, the solicitation may provide for milestone payments tied to stated deliverables or demonstrations of progress. This can be particularly useful to attract small businesses that may be unable to absorb the cost of extended unpaid pilots.
- the solicitation should state that the prime contractor remains responsible for contract performance, including the acts and omissions of subcontractors, and that the State may require the prime to identify key subcontractors and explain how subcontractor performance will be managed.

Additional considerations when drafting the solicitation

- This is the most protest-sensitive stage. The solicitation needs to carefully describe:
    - what problem the State is trying to test,
    - what counts as a successful proof of concept,
    - how solicitation responses will be evaluated for entry into the proof of concept stage,
    - how the actual proof of concept performance will be evaluated, and
    - what happens after a successful proof of concept.

  Note: The solicitation should define the operational problem, mission need, user environment, and performance outcomes sought, while avoiding unnecessary design specifications that would suppress innovative approaches.

- The solicitation should distinguish between:
    - proposal evaluation factors,
    - Proof of concept performance success factors,
    - phase-review or continuation factors, if applicable, and
    - any later full implementation evaluation factors.

  Blurring these categories is a significant protest risk.

- If live-system testing, sensitive data access, milestone payments, or a multi-step continuation structure are contemplated, the approval package should expressly identify those features.

**Step 5: Post the solicitation and solicit competition**

- The State should foster broad competition and avoid any appearance that the procurement was designed around a known vendor.
- All identified vendors should be notified to register on eMMA with direct solicitations.
- Any Competitive Proof of Concept Procurement solicitation must be posted on eMaryland Marketplace Advantage for a minimum of 20 days, regardless of estimated value.
- To ensure adequate competition, based on the complexity of the proof of concept proposals, solicitation publications may be required to remain open for 45-60 days.

**Step 6: Evaluate initial proposals and select proof of concept participants**

- The unit evaluates initial proposals and ranks responsible offerors.
- The unit may conduct discussions to ensure full understanding.
- The procurement officer may request product samples or demonstrations, but these must be issued to all offerors deemed reasonably susceptible of being selected for award at the time.
- Several offerors may be selected to perform the proof of concept.

  Note: Any proof of concept contracts awarded in excess of the Small Procurement Amount specified in SFP §13-109 ($100,000, as of September 2026) must be published in eMaryland Marketplace Advantage.

Additional considerations when evaluating initial proposals and selecting proof of concept participants

- If concept papers are used, the agencies shall evaluate them using the disclosed initial-stage factors to decide which vendors, if any, advance to fuller proposals, demonstrations, or proof of concept performance.
- If the solicitation includes phases, the procurement officer should document the basis for deciding which vendors advance and why. This does not need to be a rigid downselect model, but the decision should be linked to the solicitation and contemporaneously recorded.
- If oral presentations, demonstrations, product samples, clarifications, or discussions will be used, the solicitation should state when they may occur, who

may be invited, how they will be evaluated, and whether they are mandatory or optional.
- The procurement officer shall document which offerors were invited, the purpose of the exchange, and how the exchange affected evaluation, if at all.
- Samples/demonstrations must be requested on an evenhanded basis.
- If multiple vendors are selected, the procurement officer shall ensure equal testing conditions to the extent feasible.

**Step 7: <u>Conduct and manage the Proof(s) of Concept</u>**

Evaluate the proof(s) of concept using disclosed criteria, such as:

- feasibility,
- performance,
- integration,
- usability,
- risk,
- cost/benefit,
- stakeholder feedback,
- alignment with business goals,
- Security, and/or
- legal/compliance.

<u>Additional considerations when conducting and managing the Proof(s) of Concept</u>

- The agency should use the disclosed evaluation criteria as a best practice to support a consistent and well-documented selection process.
- Actual testing conditions shall be consistent across vendors unless differences were disclosed and justified.
- Performance records shall be retained carefully because the line between “proposal evaluation” and “proof of concept performance evaluation” may later matter in a protest.
- If the procurement has multiple phases or checkpoints, the agency shall perform a documented review at the end of each phase or major milestone before authorizing continuation. The review should address, at a minimum:
    - whether the contractor met the disclosed deliverables for that phase;
    - whether the solution remains promising enough to justify continued investment or testing;
    - whether any material risks, integration concerns, or resource issues have emerged;
    - whether the testing environment should remain the same or change; and
    - whether the State should continue, pause, narrow, revise, or stop the procurement.

These records do not need to be lengthy, but they should be clear enough to show what the State reviewed and why it decided to move forward or not.

- If the vendors are to be paid, how? Milestone payments should be tied to the successful completion of stated deliverables, demonstrations, or review points. Multiple points of payment may be especially appropriate where:
    - performing the proof of concept requires significant technical effort;
    - the pilot lasts more than a short period;
    - the State wants meaningful vendor participation from small businesses or other firms with limited ability to absorb pilot costs; or
    - the State wants to align payment with demonstrated progress rather than making a single payment at the end.

Note: in these situations, the Proof of Concept stage may result in separate awards. However, competition for the entire process is addressed in the solicitation; no new solicitation for the next stage or full implementation, or a justification for a limited competition is necessary.

- If the Proof of Concept is performed in a sandbox or test environment, that should be documented. If live-system use becomes necessary, the State should make a conscious written determination explaining why live testing is needed, what safeguards apply, and whether that need suggests the procurement is moving beyond the anticipated Proof of Concept performance.

**Step 8: <u>Decide next steps after the Proof of Concept</u>**

After the Proof of Concept phase, the unit determines next steps, which may include:

- Establishing MBE and/or VSBE participation goals;
- Inviting successful Proof of Concept participants to submit detailed proposals for full implementation;
- The unit may conduct discussions, request BAFOs; or
- Award to the responsible offeror whose proposal is most advantageous to the State.

<u>Additional considerations when deciding next steps after the proof of concept</u>

- The agency should not treat a successful Proof of Concept as an automatic implementation award unless the solicitation expressly provided for that next-stage process.
- If moving into a subsequent stage, the State should be scrupulous in following the process disclosed in the solicitation.
- Before moving to implementation, the State shall determine whether the Proof of Concept and subsequent proposals produced an MVP or otherwise enough evidence of a workable MVP to justify implementation.
- The MVP should serve as the practical baseline for the implementation decision. In other words, the State should be able to identify what was actually proven, what core functionality was demonstrated, what limitations remain, and what the State would be buying if it proceeds.

- If no vendor demonstrates a workable MVP or equivalent level of proof, the State should not move forward simply because a pilot/proof of concept occurred.
- The implementation stage should focus on the solution that was actually validated, not on assumptions that were not tested.
- The prime contractor should remain fully responsible for implementation performance, including integration, delivery, and the performance of subcontractors.
- If particular subcontractors are central to the solution demonstrated in the proof of concept, the State may require them to be identified in the implementation proposal and may evaluate the offeror's proposed subcontractor management approach as part of implementation readiness.

  **Best practice:** At the completion of each phase, the procurement officer shall prepare a written phase-review determination documenting:

  - vendors advancing to the next phase;
  - the basis for advancement;
  - evaluation results;
  - any vendors eliminated from further consideration; and
  - the rationale supporting the determination.

  The determination shall be approved by the procurement officer and retained in the procurement file.

**Step 9: <u>Conduct a negotiated evaluation for implementation</u>**

- When evaluating implementation proposals, the unit may:
  - conduct discussions and receive clarifications from the offeror to obtain the best price and ensure understanding of the State's needs and the offeror's proposal;
  - allow proposal revisions through best and final offers; and
  - conduct more than one round of discussions.

**Step 10: <u>The State may award full implementation</u>**

- The unit may recommend an award to a responsible offeror whose proposal or BAFO is determined to be most advantageous to and in the best interest of the State.
- The unit may also make multiple award recommendations if this option was outlined in the solicitation and doing so is in the best interest of the State.
- The unit must follow any existing DGS OSP and BPW delegation authorities and approval processes prior to making a final award.

  **Note:** Any contracts awarded in excess of the Small Procurement Amount specified in SFP §13-109 must be published in eMaryland Marketplace Advantage.

Additional considerations when awarding full implementation

- The file should clearly document:
    - why the State concluded the Proof of Concept was successful or unsuccessful;
    - whether an MVP was demonstrated;
    - why the State decided to move to implementation, not move forward, or revise its approach; and
    - how the implementation award decision aligns with the process disclosed in the solicitation.
- At the close of the process, the agency should retain a concise summary of lessons learned, including what worked, what did not, whether the process reduced procurement risk, and whether the State would use this approach again for similar needs.

## IV. ADDITIONAL PRACTICAL SAFEGUARDS AND PROTEST RISKS TO CONSIDER:

1. Document every material decision

- Competitive Proof of Concept Procurements can be complex and involve multiple phases.
- Feasibility, usability, integration, and stakeholder feedback all involve judgment. Judgment is acceptable, but it must be tied to disclosed criteria and recorded contemporaneously.
    - For example, document why a Competitive Proof of Concept Procurement was selected, why vendors were ranked as they were, why a Proof of Concept was deemed successful, why any vendor advanced or did not advance, etc.
- The documentation can be brief, but it should show what was reviewed, what criteria were applied, and why the State continued or stopped.

2. Inadequate articulation of why a Competitive Proof of Concept Procurement is appropriate

- If the agency cannot show why this procurement method is needed instead of a regular procurement, a disappointed vendor may argue that the State used a Competitive Proof of Concept Procurement to avoid normal competition or to favor a preselected approach.

3. Vague statement of need

- The solicitation needs to identify the problem clearly enough for meaningful competition, but not so narrowly that it effectively names one solution.

- Too vague: vendors do not know what to propose.
- Too narrow: risk of a disguised sole source.

4. Use light-touch market research.

- A brief and sensible market scan can improve the solicitation and reduce the risk that the State unintentionally drafts around a preferred solution.

5. Failure to separate evaluation phases

The solicitation should clearly distinguish:

- proposal evaluation for entry into the Proof of Concept stage,
- evaluation of whether the Proof of Concept itself was successful,
- evaluation for subsequent stages, and ultimate for full implementation.
    - If there may be subsequent phases, explain that process clearly, including discussions, BAFOs, and award basis if applicable. That helps avoid claims that the State changed the rules after seeing vendor responses.

6. Undisclosed or shifting success criteria

- If the agency decides after awarding that “success” means something different from what vendors were told, the record becomes vulnerable.
- The  agency should know what was proven before it moves into implementation.

7. Ambiguity about number of awards

- The solicitation shall state the anticipated number of Proof of Concept awards that will be made, under what circumstances the State may change that number, and whether the State anticipates making one or more full implementation award.
- If this is not disclosed, offerors may argue unequal treatment or moving goalposts.

8. Unequal treatment in discussions, samples, or demonstrations

- Requests for samples/testing/demonstration should be issued to all reasonable offerors at that stage.
- The procurement officer should document who was included, why, and what instructions each received.

9. Inadequate resource planning by the agency

- Simultaneous proof of concepts may be attractive but can create inconsistent evaluation, poor oversight, and weak documentation if the agency lacks staff or technical infrastructure.
- That can later undermine the defensibility of the decision.

10. Data, security, privacy, and access concerns

- The justification itself requires consideration of the contractor's use of or access to State data.
- A solicitation that does not clearly state the data environment, access boundaries, security expectations, and compliance obligations creates both operational and protest risk.

11. Preserve strong prime-contractor accountability for subs in implementation

- The State should not lose accountability simply because key work is performed by subcontractors.

## V. RELATED STATUTES, REGULATIONS, POLICIES, AND OTHER RESOURCES:

- Maryland Annotated Code, State Finance and Procurement Article §13-116 ("Competitive Proof of Concept Procurement")
- Office of State Procurement's Procurement Review Group (PRG) Webpage
    - For MBE and VSBE goal-setting guidance

## VI. VERSION HISTORY:

| Version Number | Effective Date | Reason for Change |
|---|---|---|
| 01 | October 21, 2026 | New Policy and Procedures, providing guidance related to changes made to the Competitive Proof of Concept procurement method in SFP §13-116 resulting from CH265, 2026 Laws of Maryland |