Program Solicitation

Biological Technologies Office (BTO)

Virtual-Integrated Twin for Autonomous Lifesaving (VITAL) DARPA-PS-26-26

April 09, 2026

PROGRAM SOLICITATION OVERVIEW INFORMATION

- **Federal Agency Name** – Defense Advanced Research Projects Agency (DARPA), Biological Technologies Office (BTO)
- **Funding Opportunity Title** – Virtual-Integrated Twin for Autonomous Lifesaving (VITAL)
- **Announcement Type** – Initial Announcement
- **Funding Opportunity Number** – DARPA-PS-26-26
- **Dates**
  - Posting Date: April 09, 2026
  - Proposer's Day: March 31, 2026
  - Questions Due Date: April 23, 2026 by 12:00 PM, Eastern Time (ET)
  - Abstracts Due Date and Time: May 20, 2026 by 5:00 PM (ET)
  - Oral Presentations Date: By Government invitation, July 23, 2026 (anticipated)

- The Defense Advanced Research Projects Agency (DARPA) is soliciting innovative approaches to address challenges in developing continuously updating digital twin models of the cardiovascular system that combine patient data with biological physics to simulate in real time possible interventions and to predict their outcomes before actual intervention on a patient. The VITAL program will establish a foundation for causal, prediction-driven decision support in medicine, enabling clinicians and future autonomous systems to evaluate treatment options before they are applied. By defining when mechanistic digital twins, reduced-order models, and data-driven inference are reliable and actionable, VITAL will shift medical care from reactive assessment to anticipatory intervention. This capability has the potential to improve outcomes across acute, chronic, and emergent clinical settings.

- **Anticipated Awards -** Multiple awards are anticipated.
- **Types of instruments that may be awarded** – Other Transaction for Prototype agreements
- **Agency Contact**

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  ATTN: DARPA-PS-26-26
  675 North Randolph Street
  Arlington, VA 22203-2114
- **Attachments**

  A. Abstract Summary Slide Template
  B. Abstract Instructions and Template
  C. Oral Presentation Proposal (OPP) Package Guidance (Informational Only)

PROGRAM SOLICITATION
Defense Advanced Research Projects Agency (DARPA)
Virtual-Integrated Twin for Autonomous Lifesaving
(VITAL)

1. PROGRAM INFORMATION

1.1. Background

The Department of War (DoW) faces a critical issue: resource- and information-limited medics treating severely injured soldiers, with potentially long delays before the casualties can be evacuated to a hospital. This combination of severe injuries, scarce resources, and extended timelines creates a life-threatening gap in medical capability.

As one part of the solution to the life-threatening capability gap, the Defense Advanced Research Projects Agency (DARPA) is launching the VITAL (Virtual-Integrated Twin for Autonomous Lifesaving) program.

The core of the VITAL program is the creation of a digital twin, a real-time, predictive computer model of the injured soldier.

This technology allows medics to:

- Predict how the casualty's condition will worsen using a virtual model.
- Simulate treatments on the virtual model to find the best option.
- Act decisively with the optimal intervention.

Ultimately, VITAL aims to shift battlefield care from being reactive to predictive, dramatically increasing the chances of survival for injured service members.

1.2. Program Description and Scope

The VITAL program will build continuously-updating computer models of the cardiovascular system that combine patient data with biological physics to simulate in real time possible interventions and to predict their outcomes before actual intervention on a patient.

VITAL's primary technical innovation is a patient Image-to-Physics-to-Twin construction pipeline, illustrated in Figure 1, that automatically compiles multimodal personalized clinical data, which may include imaging (e.g., Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Computed Tomography Angiography (CTA), ultrasound), chemical or biochemical measurements, electrophysiology, physiologic waveforms, laboratory values, omics, clinical observations, or other relevant modalities, into patient- or archetype-specific high-fidelity digital twins (DT)s. Segmented anatomy is translated into: (1) vascular networks, organs, and injury geometries, spanning both chronic and acute conditions; (2) localized three-dimensional injury-site solvers generating bleeding and impedance dynamics; and (3) whole-body 0D/1D physiology models propagating global responses such as shock.

Throughout the program, performers will continuously validate their models to establish the bounds of physiological modeling obtainable through Digital Twins.

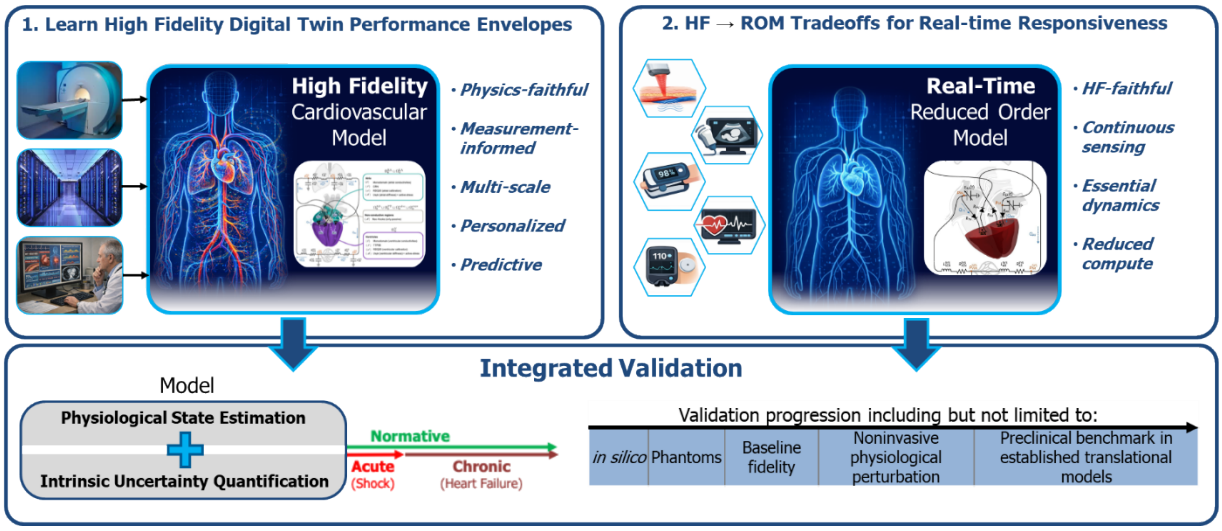

Figure 1. VITAL construction pipeline

VITAL will first seek to establish a foundation for causal, prediction-driven decision support through high fidelity (HF) DT models that explicitly represent the underlying physical, biochemical, and anatomical dynamics governing biological systems. HF model development must be grounded in, and traceable to, relevant personalized medical data. The choice of data modality(ies) is(are) left to the performer and should be driven by the medical condition and modeling approach. The HF models must accurately capture the full scope of the medical condition and intended use cases described by the performer. HF models will be established and benchmarked first as the baseline predictive references across static, chronic or acute scenarios. The capability limits of HF models will be measurable outcomes of the program which will provide an evidence-based foundation for determining when HF models are suitable as bedrock technology and where fundamental limitations remain.

While HF models can be expected to provide the strongest mechanistic predictions and causal interpretability, reduced order models (ROMs) are more suitable to provide real-time responsiveness and continuous updating, particularly when coupled to sensors capable of streaming measurements. The HF models must be constructed with the explicit intent of enabling later reduction to a ROM and must accurately capture the full scope of the medical condition and intended use cases described by the performer. Through rigorous verification, validation, and uncertainty quantification, the program will determine when and where different modeling approaches—HF models, reduced-order models (ROMs), and measurement-driven inference—are reliable.

The second core innovation of VITAL is mechanism-preserving multiscale coupling. Rather than prescribing chronic or acute states (e.g., fixed bleed rates or empirical coagulation penalties), pathology emerges directly from vessel mechanics, local pressures, and physiological variables such as clot state. Injury evolution depends on perfusion, dilution, inflammation, and temperature, while systemic acute responses feed back into local processes. Conservation laws are enforced across scales to maintain physical consistency, allowing injury progression and treatment response to co-evolve rather than being imposed externally.

Finally, VITAL will systematically reduce HF models into fast, continuously updateable, mechanism-preserving surrogates using physics-informed neural operators and differentiable simulations. These reduced-order models are trained against HF dynamics and structured to retain

vascular coupling and injury–treatment feedback, enabling ongoing state and parameter estimation under sparse and noisy sensing. By embedding differentiability throughout the HF-to-ROM pipeline, VITAL supports rapid calibration, sensitivity analysis, and uncertainty propagation—allowing whole-system digital twins to adapt in real time, learn from incoming data, and evaluate candidate interventions while preserving physical realism.

Due to the importance of understanding the limitations of any DT model, VITAL performers will explicitly document the trade-offs between fidelity and timeliness, identify conditions under which ROMs maintain acceptable predictive performance, and define thresholds where reduction introduces unacceptable loss of reliability. VITAL will learn the minimum sensing density required for effective models; how predictive accuracy degrades under sparse or noisy inputs; and how model-construction errors (e.g., segmentation inaccuracies and parameter estimation uncertainty) influence performance. It will also identify which physiological regimes—acute, chronic, or combined stress states—are tractable versus inherently ambiguous.

The core premise of the program is to construct and evaluate models using data that are as personalized as possible to a single patient or biological instance. Accordingly, the primary emphasis is on developing, calibrating, and validating high-fidelity and reduced-order models from data associated with one individual instance rather than from large synthetic populations.

This program is not intended to support the development of fundamentally new sensing modalities or advanced sensor hardware. Proposers should primarily rely on commercially available, off-the-shelf, or otherwise mature sensing technologies that can be acquired and integrated with minimal development effort. For example, if a performer determines that photoplethysmography (PPG) is required, they should plan to use an existing PPG sensor rather than propose development of a novel ultra-low-profile, highly wearable PPG device.

Limited sensor adaptation or integration may be appropriate when necessary to support the measurement model, but the primary focus of the effort should remain on determining what measurements are needed, how they map to physiological state, and how they enable construction and reduction of the HF and ROM models—not on sensor invention or hardware maturation.

In addition, this program is not about developing sophisticated user interfaces or interaction tools. While some method of interacting with the HF/ROM models is necessary, minimal effort should be devoted to its development.

1.3. Acquisition Strategy

This Program Solicitation (PS) seeks abstracts for a 36-month effort across two phases. Abstracts must be submitted by May 20, 2026, at 5:00 PM (Eastern Time). Proposers with a successful abstract will be invited to submit an Oral Presentation Proposal (OPP) package to describe their approach for the DARPA VITAL program. The OPP package will include an oral presentation which will be reviewed by the Government, and if selected, may result in a Phase 1 award of an Other Transaction (OT) for Prototype Agreement, with option to participate in Phase 2 of the program.

This PS encourages solutions from all responsible sources capable of satisfying the Government's needs, including large and small businesses, *non-traditional defense contractors* as defined in 10 U.S.C. § 3014, universities, and *research institutions* as defined in 15 U.S.C. § 638. The process and requirements for abstract submissions are detailed in Section 2.1 of this PS.

1.4. Program Structure

VITAL will be a 36-month program consisting of two phases: Phase 1 (15 months) and Phase 2 (21 months). Figure 2 summarizes the VITAL program schedule and workstreams across Phases 1 and 2, showing the parallel progression of technical development. Key decision points—kickoffs, downselect, and phase objectives—will ensure the program advances from foundational modeling to validated, uncertainty-aware digital twins.

VITAL will develop DTs for both chronic and acute response types. Because the HF model will necessarily be different for each type, a single abstract may address only chronic **or** acute responses, but not both. If proposers wish to develop models for both response types, they must submit two separate abstracts. Proposers who choose to submit to both response types may use the same or different team members in each proposal. If the same principal investigator (PI) is named to lead both proposals, he or she must allocate a sufficient level of effort (preferably ≥ 20%) to each in order to ensure the success of both programs should they be awarded.

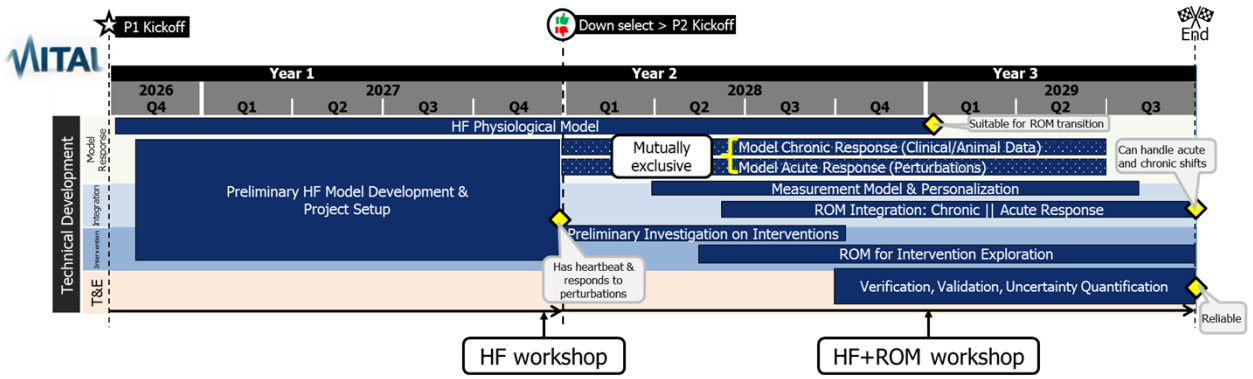

Figure 2. VITAL program Gantt chart

There will be two focus areas: Focus Area 1 (FA1), which will cover the development, setup, and validation of the HF models; and Focus Area 2 (FA2) in which the reduced order models will be developed and integrated into the pipeline. Work on the two focus areas will be divided among the phases per the chart in Figure 3.

Phase 1 will be devoted entirely to FA1. It will establish and validate the technical credibility of the HF models, quantify their performance limitations, and rank HF model performance per the criteria listed in Section 1.5. At the end of Phase 1, performers will be required to simulate predefined perturbations relevant to chronic (e.g., passive leg raise to probe preload responsiveness in heart failure) or acute conditions (e.g., lower-body negative pressure to simulate hemorrhage) with their HF models *in silico*. Corresponding perturbation experiments will be conducted in human or animal models obtained by the performers and then measured against these predictions. Model–experiment agreement will be evaluated using feature-based comparisons that emphasize causal response structure rather than pointwise matching, including: i) directionality (sign) of responses, ii) gain (dose–response) relationships, iii) timescale of fast and slow components, iv) phase and lead–lag relationships across signals. Performers selected to advance to Phase 2 will have met the metrics in Table 1 and successfully demonstrated the predictive ability of their HF model against provided benchmark cases provided by the Test and Evaluation (T&E) team.

Development of reduced-order models (FA2) will begin in Phase 2. FA1 efforts will concentrate on refinement of the HF models, preparing them for ROM transition approximately 15 months after the beginning of Phase 2. The major tasks to be achieved in Phase 2 are:

- Preliminary investigation on interventions: Performers will evaluate how candidate interventions (e.g., fluids, medicines, or mechanical support) perturb modeled physiological states and identify suitable models/variables most predictive of treatment response.
- Modeling of acute and chronic responses (distinct models for each): Performers will develop and evaluate models capturing physiological dynamics in either acute injury states or chronic disease conditions to ensure robustness across clinically relevant regimes.
- Developing measurement models and personalization: Performers will develop inverse models that link physiological states to observable sensor and imaging measurements enabling personalization of model parameters to individual subjects. Sensing and sensor fusion will be evaluated only in terms of how well they support construction, calibration, updating, and validation of the HF and ROM models. Performers should use whatever combination of modalities they determine is necessary at each phase to achieve their modeling objectives.
- Exploration of ROM intervention: Performers will investigate reduced-order representations that preserve key physiological mechanisms while enabling rapid simulation of intervention effects.
- Integration of HF model with ROM: HF models will be used as the mechanistic reference to train and constrain ROMs, ensuring that reduced models retain physiological consistency while enabling real-time computation.
- Verification, validation, and uncertainty quantification: Performers will quantify numerical accuracy, predictive validity, and uncertainty propagation across both HF and ROM models to establish credibility for intervention forecasting

To maintain relevance with the on-going needs of the medical community, two workshops will be held over the course of the program in the Washington, DC area, the first in the final month of Phase 1, and the second in the final year of Phase 2. Performers will report on capabilities and limitations of the existing models at the scheduled workshops to invited subject matter experts from the DoW and industrial stakeholder communities.

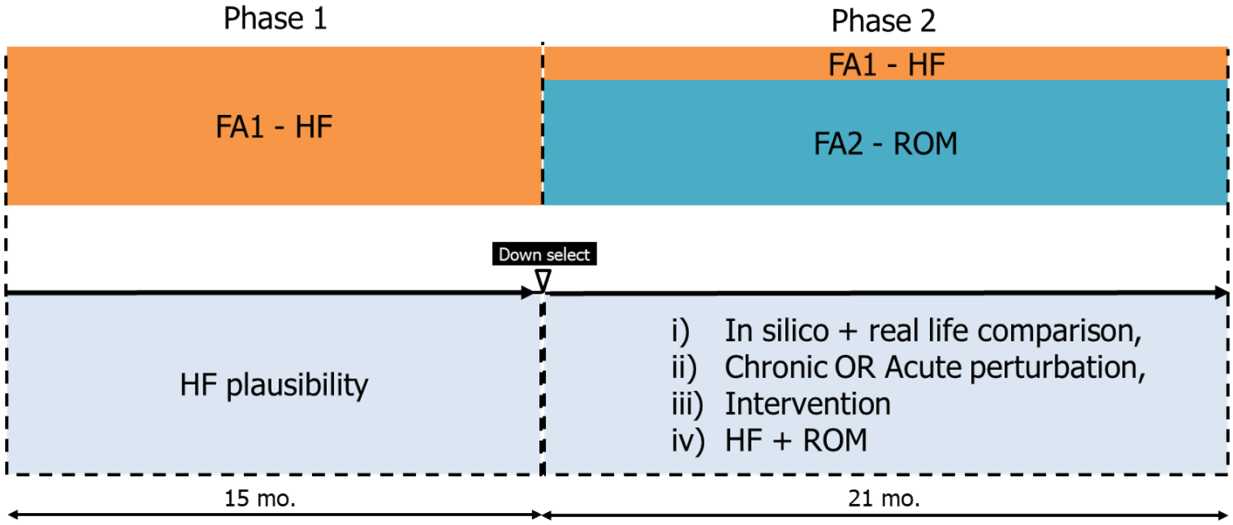

Figure 3. Division of effort by Phase and Focus Area

1.5. Metrics

The VITAL program will systematically benchmark HF, and integrated ROM, models across two representative regimes: (i) static or near-steady physiological states and (ii) chronic disease progression or acute perturbations. The conditions of interest are:

- Chronic heart failure/structural heart disease as the representative chronic disease and
- Major hemorrhage/hemorrhagic shock as the representative acute perturbation.

Proposals for work on other conditions or perturbations will be considered non-compliant.

Proposing teams may nonetheless select specific subcategories or representative conditions within the chronic and acute areas. Teams should choose conditions that enable a meaningful and rigorous research plan aligned with the program objectives, including construction, validation, and assessment of the HF model and its eventual transition to a reduced-order model (ROM).

Additionally, the following topics are considered out of scope:

- Model construction approaches that are not explicitly data-driven or lack a direct lineage to physiological measurements.
- Models not grounded in observable dynamics or based on purely theoretical constructs without a direct data-driven lineage.
- Developing a ROM as a standalone effort without first establishing and validating it against a corresponding HF parent model. The entire HF-to-ROM pipeline is a required component.
- The development of novel imaging techniques, new types of biological sensors, or data acquisition hardware.
- Purely data-driven or "black box" machine learning models (e.g., standard deep learning networks) that predict outcomes without an embedded, verifiable physical or biological mechanism.

Each proposal must elect to focus on either the chronic or the acute condition. The success of the program will be measured not only by the achievement of quantifiable metrics, but also by the measured performance of the models with respect to computational speed, forecasting horizon, predictive accuracy, uncertainty bounds, data requirements, sensitivity to parameter estimation, segmentation error, and measurement sparsity.

The Phase 1 metrics, specified in Table 1, are the requirements to ensure that the HF models are credible and sufficiently reliable to achieve the ultimate program goals. Model performance will be scored based on the fidelity of responses to perturbations, per the following methodology:

- Performers will propose and execute human and/or animal perturbation protocols and provide relevant datasets derived from their imaging-based anatomical models, including physiological waveforms and time-stamped perturbations. *Performers are responsible for the full experimental lifecycle, including study design, protocol development, securing required IRB/IACUC and institutional ethics and regulatory approvals, data acquisition, quality control, and documentation. Proposals should also describe how experiments are designed to enable model calibration, validation, and prediction of system response under perturbation, including repeatability, cohort design, and statistical power considerations.*
- An independent Test and Evaluation (T&E) team will define test cases for each protocol

and curate the performer-contributed data for performance assessment. They may also recommend limited additional perturbations or protocol variations within the performers' original experimental paradigms to strengthen evaluation.

- Model outputs will be benchmarked against gold-standard experimental measurements from human or animal subjects. Verification will assess numerical stability and conservation. Validation will assess agreement with measured trajectories and response dynamics. Uncertainty quantification will require calibrated confidence bounds and sensitivity to parameter and segmentation errors. To assess generalization and prevent overfitting, the T&E function will define additional composite stress scenarios. It will also analyze the computational models to identify failure points and then request targeted biological stress tests to expose those vulnerabilities.

Table 1. Phase 1 Metrics

Category	Measurement Methodology	Quantitative Metric
Numerical Credibility (Gate)	Stability, conservation, and repeatability of the HF model	• ≤2% cumulative mass/momentum drift over 30–60 min (simulated time) • Stable under ±30% parameter perturbation • Relative standard deviation (SD/mean) of outputs ≤10%
Uncertainty Quantification	Calibration and credibility of predictive uncertainty	• Existence of confidence bounds on all outputs • Expected Calibration Error (ECE) ≤0.15
Perturbation Fidelity	Physiological correctness of response to controlled perturbations	• ≥95% correct directionality • Response magnitude within ±25% of reference • Latency error ≤20%

The Phase 2 metrics, listed in Table 2, represent the baseline for determining the ultimate success of the VITAL program and its relevance to real-time interventions that may save lives both in civilian populations and in the battlefield.

Table 2. Phase 2 Metrics

Metric	Measurement Methodology	Quantitative Metric
HF-to-ROM Fidelity Retention	Preservation of HF behavior after reduction	• ≤15% degradation relative to refined HF baseline • No non-physiological artifacts
Continuous Update Capability	Real-time state and parameter updating	• End-to-end update latency ≤5 s • Stable streaming assimilation
Prediction Horizon	Predicting event at time t before it occurs with AUROC ≥80%	• Hemorrhagic shock t ≥15 minutes • Heart failure Stage 4, $t \geq 80\% * (t_{onset\text{-}stage\ 4} - t_{onset\text{-}stage\ 3})$[1]
Intervention Response Prediction	Prediction of physiological response to treatment	• ≥50% faster time-to-intervention • ≥90% expert concordance • ≥10X richer expert reasoning • ≥50% improvement in maintaining survivable

[1] To enhance model accuracy, performers are advised to leverage quantifiable metrics to characterize heart failure stages, such as: End-systolic elastance (Ees), Ventricular-Arterial Coupling (Ea/Ees), Effective Arterial Elastance (Ea), Natriuretic peptide levels (BNP and NT-proBNP) or Echocardiographic measurements (e.g., LVEF)

physiological windows

As stated above, the success of the program is not only a matter of meeting a set of fixed metrics, but in demonstrating that digital twins are viable mechanisms for determining patient-centric interventions in chronic **and** acute conditions. Consequently, it is essential to understand performance limitations of the DTs with respect to computational speed, forecasting horizon, predictive accuracy, uncertainty bounds, data requirements, sensitivity to parameter estimation, segmentation error, and measurement sparsity.

Tables 3 and 4 provide supplementary metrics for Phases 1 and 2 that define desirable performance standards for the HF models and ROMs. Regular reports, as specified in the milestones listed in Table 5, on the models' ability to surpass, attain, or fall short of these goals are required to document the evolution of the models' capabilities and limitations as they mature over the course of the program. In addition to the quantitative metrics listed in the tables, these reports must also document:

- The runtime computational burden of executing the HF and ROM models, in terms of wall-clock vs. simulated time
- The scaling behavior of the computational cost vs. dataset size
- Reproducibility of results, assumptions made, boundary conditions, and failure modes

Table 3. Phase 1 Supplementary Metrics

Category	Definition	Desired Performance
Sensitivity & Robustness	Dependence on parameters, segmentation, and data sparsity	• ≤25% performance degradation for < ±3 voxel segmentation error • ≥70% variance explained by top parameters

Table 4. Phase 2 Supplementary Metrics

Benchmark	Definition	Desired Performance
HF Envelope Expansion	Improvement of HF predictive capability beyond Phase 1	≥30% increase in predictive horizon or reduction in uncertainty vs Phase 1 baseline
HF Perturbation Generalization	HF accuracy across expanded acute–chronic perturbations	≤20% error across mixed stress states (e.g., hemorrhage + vasoactive + hypothermia)
HF Uncertainty Reduction	Improved calibration through additional data and refinement	Expected Calibration Error (ECE) ≤0.10 for HF models
HF Numerical Robustness	Stability under broader operating conditions	Stable under ±40% parameter variation and ≥2× longer simulations
Robustness & Graceful	Behavior under missing/noisy data	• ≤15% performance loss with ≥40% data dropout

Degradation		• Safe deferral to standard practice defined under Clinical Practice Guidelines (CPG)
Uncertainty-Aware Decision Logic	Use of uncertainty to gate predictions	• Expected Calibration Error (ECE) ≤0.05 • Explicit uncertainty-triggered deferral
Computational Efficiency	Speedup relative to refined HF models	≥1,000× runtime improvement
Out-of-Distribution (OOD) Detection & Failure Reporting	Detection of unseen or invalid regimes	• ≥90% OOD detection • Documented fallback behavior

1.6. Milestones / Deliverables

Table 5 lists the timeline of the major milestones and required deliverables over the course of the program.

Table 5. Major Program Milestones and Deliverables

	Number	Month	Milestone	Deliverable
Phase 1	1	1	Phase 1 Kickoff meeting	Briefing slides that are acceptable to DARPA.
	2	4	IRB/IACUC and institutional ethics and regulatory approvals, as applicable, secured	Copy of approval document(s)
	3	9	Design of initial HF model, including development and implementation plans	Report on status of initial HF model and roadmap to achieve the Phase 1 metrics
	4	12	Implementation of initial HF model with demonstrable outputs achieved	Performance demonstration of initial HF model; report on metrics achieved, observed limitations of the model, and paths to improve performance
	5	15	End of Phase 1	Presentation of HF model capabilities and limitations at scheduled workshop to invited subject matter experts from the DoW and industrial stakeholder communities
Phase 2	6	16	Phase 2 Kickoff meeting	Briefing slides that are acceptable to DARPA.
	7	24	Preliminary results available for initial investigations of interventions; Initial models of acute or chronic responses developed; Measurement models and personalization development initiated	Report on preliminary results of initial studies of ROM behavior for interventions and responses to acute and chronic perturbations and plan forward for next steps
	8	30	HF physiological model fully developed for integration; investigation on interventions completed; progress on acute or chronic response models per plan; initial ROM integration with HF ready for demonstration	Report on continuous updating capability of the integrated HF/ROM; ability to anticipate adverse trajectories; and prediction of responses to interventions
	9	32	Assessment of capabilities and limitations completed; ROM integration substantially completed	Presentation of integrated HF/ROM capabilities and limitations at scheduled workshop to invited subject matter experts

				from the DoW and industrial stakeholder communities
	10	36	HF+ROM integration finalized	Delivery of prototype models with associated code and data to the Government
	11	36	End of Phase 2; Delivery of the prototype: ROM integration and VVUQ completed	End of program review; Final report including final conclusions of all prior tasks; HF/ROM integration; and verification, validation, and uncertainty quantification (VVUQ)

1.7. Program Schedule

Planned meetings and workshops are listed in Table 6. There will be in-person kickoff meetings for each phase and regular virtual quarterly program reviews. In addition to these meetings, DARPA may schedule monthly check-ins and/or site visits to performers' facilities.

Table 6. Schedule of meetings and workshops

Month	Deliverable
Phase 1	
1	Kickoff meeting (in-person)
3	Quarterly program review (virtual)
6	Quarterly program review (virtual)
9	Quarterly program review (virtual)
	First report on High Fidelity model plausibility due (final date)
12	Quarterly program review (virtual)
15	Demonstration of initial HF model (final date)
15	HF model workshop (in-person)
Phase 2	
16	Kickoff meeting (in-person)
18	Quarterly program review (virtual)
21	Quarterly program review (virtual)
24	Quarterly program review (virtual or at performer site, at DARPA's discretion)
	Report on results of initial HF/ROM integration (final date)
27	Quarterly program review (virtual)
30	HF+ROM model workshop (in-person)
	Report on continuous updating capability of the integrated HF/ROM due (final date)
33	Quarterly program review (virtual)
36	End of program review (in-person); Final report due

1.8. Public Release of Information

At this time, DARPA expect the results of the work performed under VITAL to be unclassified, fundamental research that is not subject to pre-publication review. However, press releases or other marketing and publicity materials —including those related to fundamental research awards—are not considered results of fundamental research and are therefore subject to publication review. DARPA highly encourages data and model(s) produced under VITAL to be published and

disseminated to the scientific community.

2. PROGRAM SOLICITATION AUTHORITY

This PS may result in the award of an Other Transaction (OT) for Prototype agreement, which can include not only commercially-available technologies fueled by commercial or strategic investment, but also concept demonstrations, pilots, and agile development activities that can incrementally improve commercial technologies, existing Government-owned capabilities, and/or concepts for broad defense and/or public application(s). The Government reserves the right to award an OT for Prototypes under 10 U.S.C. § 4022, or make no award at all. In all cases, the Government agreements officer shall have sole discretion to select the award agreement type, regardless of agreement type proposed, and to negotiate all agreement terms and conditions with selected proposers. The OT agreement will not require cost sharing unless the offeror is a traditional defense contractor who is not working with a non-traditional defense contractor participating in the program to a significant extent.

2.1. PS Procedure

In response to this solicitation offerors are asked to submit a no more than 7-page abstract as described in Section 4.2. This process allows DARPA to ascertain (1) whether the proposers understand the key challenges of the VITAL program, and (2) whether they are capable of executing a proposed concept. Specific evaluation criteria used to make the assessment can be found in Section 4.3. If DARPA finds that both of these conditions are met, it may request the offeror to submit an Oral Presentation Proposal (OPP) package as described in Attachment C and participate in an oral presentation to DARPA, where the proposed technical solution will be evaluated. Further details regarding the oral presentations will be sent within the Invitation to Submit an OPP. After the oral presentations, DARPA will decide which proposers will be selected for award. The Government will not pay offerors responding to this PS for the costs associated with Abstract submission, OPP preparation and OPP package submissions for VITAL program.

DARPA will use the following process to facilitate the VITAL source selection:

a. **Proposers Day:** A Proposers Day was held on March 31, 2026, where the Program Manager briefly described the program and its goals and received questions from attendees. Participation in the Proposers Day is/was not a requirement for proposers seeking to submit an abstract. Additional details about the Proposers Day were provided in Special Notice DARPA-SN-26-55 separate from this PS.

b. **Questions and Answers (Q&A) (Informational Only):** DARPA will post a consolidated Q&A document online questions sent to VITAL@darpa.mil for questions sent to VITAL@darpa.mil by April 23, 2026 12:00pm (ET) at https://www.darpa.mil/research/programs/virtual-integrated-twin-for-autonomous-lifesaving. DARPA will respond to any relevant and/or PS clarification question(s) prior to the final abstract due date and post consolidated Q&As at the VITAL program page referenced above.

c. **Abstracts (Required)**: Abstracts shall be submitted as specified in Section 4.2 of this PS. The Government will review all submitted abstracts for technical comprehension and ability (see Section 4.3). Selected proposers will be invited to provide an OPP package and

participate in an oral presentation to the Government. Note that proposers must submit an abstract(s) in response to this solicitation to be considered for participation in the VITAL program. Proposers will not be invited to submit an OPP package, provide an oral presentation, or be included in any further progression of the program without participating in the abstract phase of the solicitation.

d. **Oral Presentation Proposal (OPP) Package/Oral Presentation (Required if invited)**: Oral presentations are anticipated to take place approximately four weeks after notification of proposer's selection and are by invitation only. DARPA will send an invitation to submit an OPP package to those who are invited to participate in oral presentations. OPP content and format, to include templates, submittal instructions for OPPs, and proposed presentation dates for oral presentations will be provided in the invitation. The Government will review all OPP packages in accordance with the evaluation criteria provided within the invitation to submit an OPP. The content of the OPP will not be made public or provided to other proposers. Upon the selectability determination, and subject to the availability of funds, the Government may award an OT for Prototype under 10 U.S.C. § 4022 with fixed, payable milestones for both Phase 1 and Phase 2. (**Note** – Milestones represent a completed event. Milestone schedule is based on key observable events in the critical path to accomplish program objectives.) Payments are triggered by successful performance of observable technical events. Fixed payable milestones are payments based on successful completion of the milestone accomplishments agreed to in the milestone plan (Schedule of Milestones and Payments). Additional details will be provided within the invitation to submit an OPP.

2.2. Program Length

Phase 1 will be 15 months, and Phase 2 will be 21 months. Submitted abstracts and budget estimates should address work proposed for both phases.

3. ELIGIBILITY INFORMATION

3.1. Eligible Applicants

3.1.1. Federally Funded Research and Development Centers (FFRDCs) and Government Entities

3.1.1.1. FFRDCs and UARCs

Federally Funded Research and Development Centers (FFRDCs) and University-Affiliated Research Centers (UARCs) are subject to applicable direct competition limitations and cannot propose to this PS in any capacity unless they meet the following conditions: (1) FFRDCs/UARCs must clearly demonstrate, with specific details, that the proposed work, expertise, and facilities are not otherwise available from the private sector, and (2) FFRDCs/UARCs must provide a letter on official letterhead from their sponsoring organization citing the specific authority establishing their eligibility to propose to Government solicitations and compete with industry, and their compliance with the associated FFRDC sponsor agreement's terms and conditions. This information is required for FFRDCs proposing to be awardees or subawardees. FFRDC/UARC proposals that do not include these elements may be deemed non-conforming and removed from consideration.

3.1.1.2. Government Entities

Government Entities (e.g., Government/National laboratories, military educational institutions, etc.) are subject to applicable direct competition limitations. Government entities must clearly demonstrate that the work is not otherwise available from the private sector and provide written documentation citing the specific statutory authority and contractual authority, if relevant, establishing their ability to propose to Government solicitations, and compete with industry.

3.1.1.3. Authority and Eligibility

At the present time, DARPA does not consider 15 U.S.C. § 3710a to be sufficient legal authority to show eligibility. While 10 U.S.C. § 4892 (formerly 10 U.S.C. § 2539b) may be the appropriate statutory starting point for some entities, specific supporting regulatory guidance, together with evidence of agency approval, will still be required to fully establish eligibility. DARPA will consider FFRDC and Government entity eligibility submissions on a case-by-case basis; however, the burden to prove eligibility for all team members rests solely with the proposer.

3.1.2. Other Applicants

Non-U.S. organizations and/or individuals may participate to the extent that such participants comply with any necessary nondisclosure agreements, security regulations, export control laws, and other governing statutes applicable under the circumstances.

3.2. Organizational Conflicts of Interest (OCI)

Without prior approval or a waiver from the DARPA Deputy Director, a contractor cannot simultaneously provide scientific, engineering, technical assistance (SETA), advisory and assistance services (A&AS), or similar support and also be a technical performer. As part of the OPP, all members of the proposed team (including any potential subawardees or consultants) must affirm whether they (their organizations and individual team members) are providing SETA or similar support to any DARPA office(s) through an active award or subaward. All facts relevant to the existence or potential existence of Organizational Conflicts of Interest (OCI) must be disclosed in the Administrative and National Policy Requirements document, should the proposer be invited to submit an OPP.

If SETA, A&AS, or similar support is being or was provided to any DARPA office(s), the OPP must include in the Administrative and National Policy Requirements document:

- The name of the DARPA office receiving the support;
- The prime contract number;
- Identification of proposed team member (subawardee, consultant) providing the support; and
- An OCI mitigation plan.

Under this section of the OPP, the proposer is responsible for providing this disclosure with each OPP submitted. The disclosure must include the proposer's OCI status, and as applicable, proposed team member's OCI mitigation plan. The OCI mitigation plan must include a description of the actions the proposer has taken, or intends to take, to avoid, neutralize, or mitigate such conflict, prevent the existence of conflicting roles that might bias the proposer's judgment, and prevent the

proposer from having unfair competitive advantage. Prior to the start of OPP evaluations, the Government will assess potential conflicts of interest based on the OPPs submitted. DARPA will promptly notify the proposer if any appear to exist. The Government assessment does NOT affect, offset, or mitigate the proposer's responsibility to give full notice and planned mitigation for all potential organizational conflicts.

If, in the sole opinion of the Government after full consideration of the circumstances, a proposal fails to fully disclose potential conflicts of interest and/or any identified conflict situation cannot be effectively mitigated, the OPP will be rejected without technical evaluation and withdrawn from further consideration for award.

If a prospective proposer believes a conflict of interest exists or may exist (whether organizational or otherwise) or has questions on what constitutes a conflict of interest, the proposer should send his/her contact information and a summary of the potential conflict via the specific email address identified in this PS before time and effort are expended in preparing an OPP and mitigation plan.

4. GUIDELINES FOR ABSTRACTS

4.1. General Guidelines

- The submitted abstract must follow the "Abstract Template and Instructions" as described in Attachment A. An Abstract Summary Slide, as described in Attachment B, is also required. Abstracts should address the key scientific questions (§1.2.1) and program objectives/metrics (§1.4) as stated above.
- It is highly encouraged that the principal investigator's (PI) level of effort must be greater than or equal to 20%, to ensure the success of the program.
- Do not include elaborate brochures or marketing materials; only include information relevant to the submission requirements or evaluation criteria.
- Use of a diagram(s) or figure(s) to depict the essence of the proposed solution is permitted.
- All Abstracts shall be unclassified.
- Offerors are responsible for clearly identifying proprietary information. Submissions containing proprietary information must have the cover page and each page containing such information clearly marked with a label such as "Proprietary" or "Company Proprietary." NOTE: "Confidential" is a classification marking used to control the dissemination of U.S. Government National Security Information as dictated in Executive Order 13526 and should not be used to identify proprietary business information.
- All proposal abstracts are required to be submitted via DARPA's Broad Agency Announcement Tool (BAAT). Please visit Proposer Instructions and General Terms and Conditions for instructions on how to submit your abstract through DARPA's BAAT. It is important to note that the terms and conditions on the remainder of the Proposer Instructions and General Terms and Conditions link above do not apply to this solicitation. The purpose of referencing the website is for you to obtain instructions for

DARPA's BAAT. Abstracts must be submitted no later than May 20, 2026, 5:00 PM (ET). Submissions sent through other media, channels, or after the prescribed PS deadline will not be considered, reviewed, nor evaluated.

- Offerors providing Abstracts that are not invited to an Oral Presentation will be notified in writing as soon as practicable.
- Questions regarding Proposal Abstracts can be sent to VITAL@darpa.mil by April 23, 2026, 12:00 PM (ET).

4.2. Abstract Content

- Abstracts should not exceed seven (7) single-sided 8.5" by 11" written pages using 12-point Times New Roman font with 1" margins all around. Abstracts must include the following:

  a. ***Title page*****:** Offeror Name, Title, Date, Point of Contact Name, E-Mail Address, Phone, Address, and CAGE Code. (The Title Page does not count against page limits). The offeror shall include a statement that no people on the offeror's team work for DARPA as Scientific Engineering Technical Assistance (SETA), Advisory and Assistance Services (A&AS) or similar support services, as DARPA has a policy prohibiting such people from working as a technical performer. Include this statement on the title page; it will NOT count as part of the seven (7) written pages limit.

  b. ***Technical Approach*****:** Provide a summary of the technical goals of the VITAL program. This summary shall be stated in the offeror's own words without any "copy and paste" of this solicitation. The goal is for the offeror to demonstrate clear understanding of the VITAL program's purpose and goals. The summary shall be no more than 1 page and **is** included in the seven (7) written pages limit.

  c. ***Technical Challenges*****:** Identify specific technical challenges faced in the VITAL program. The offeror should include what they think the primary risks are to successful development of the VITAL program. The summary shall be no more than 1 page and **is** included in the seven (7) written pages limit.

  d. ***Technical Ability*****:** Detail why the offeror's team and organization believe they have the ability to be successful at achieving the goals, if selected, for the VITAL program. The program does not prescribe any specific team composition or required areas of expertise. Proposers are expected to assemble a credible team with the expertise necessary to execute the proposed work. The abstract may include past experience, organizational capabilities, team members' qualifications, or anything else that demonstrates competence in designing and executing the VITAL program. Excessive superlatives should be avoided. The summary shall be no more than 1 page and **is** included in the seven (7) written pages limit.

  e. ***Estimated Cost:*** Include the estimated total labor cost, and estimated materials and ODCs (equipment, materials, travel, tuition). This may be presented as no more than

half a page narrative or table and **is** included in the seven (7) written page limit.

f. ***References:*** Provide a list of citations, references, or end notes. References are **not** included in the page limit

4.3. Abstracts – Process and Basis of Evaluation

Abstract evaluation criteria are listed in descending order of importance. Individual abstracts will be evaluated against the evaluation criteria described below and not against other abstracts submitted in response to this PS. As stated above, proposers are required to submit an abstract for evaluation by DARPA to be considered for any subsequent award. DARPA will respond to the 7-page abstract with a statement as to whether or not DARPA requests submission of an Oral Proposal Package. Upon review of abstracts, the Government may elect to invite all, some, or none of the proposers to submit an OPP and participate in oral presentations. *Only abstract proposers invited by DARPA to submit an OPP and participate in oral presentations are eligible to provide one.*

- ***Technical Approach****:* The proposed technical approach is innovative and rigorous, and key technical challenges and risks are identified.
- ***Technical Ability:*** The proposer demonstrates an ability, if selected, to achieve the goals of the VITAL program.
- ***Budget:*** The estimated costs are realistic for the technical approach and accurately reflect the technical goals and objectives of the Program Solicitation.

DARPA's policy is to ensure impartial, equitable, and comprehensive proposal evaluations based on the evaluation criteria listed above and to select the source (or sources) whose abstract meets DARPA's technical, policy, and programmatic goals. DARPA will conduct a review of each conforming abstract, and all evaluations will be based solely on the evaluation criteria in this section.

For the purposes of this abstract evaluation process, DARPA defines a "selectable" abstract as follows:

- ***Selectable:*** *A selectable abstract is one that the Government has evaluated against the evaluation criteria listed in the PS, and the positive aspects outweigh the negative aspects.*

For the purposes of this abstract evaluation process, DARPA defines a "non-selectable" abstract as follows:

- ***Non-Selectable:*** *An abstract is considered non-selectable when the Government has evaluated it against the evaluation criteria listed in the PS, and the positive aspects do not outweigh the negative aspects*

5. OPP PACKAGE INSTRUCTIONS & PROCESS

If DARPA requests an Oral Presentation Proposal (OPP) Package, the proposers will be asked to provide further details on their proposed solution. As mentioned previously, OPP content and format (to include templates, submittal instructions for OPPs, evaluation criteria, and proposed presentation dates for oral presentations) will be provided in the invitation to submit an OPP to those being selected for oral presentations.

Oral presentations are expected to be held in-person (encouraged) over the course of 1-3 days in late

July (anticipated) in the Washington, DC metro area. Virtual presentations will be allowed on a case-by-case basis, where in-person attendance is not possible. Travel costs for oral presentation will not be reimbursed by the Government. It is anticipated that each oral presentation will be scheduled for 60 minutes, allowing for a strictly limited 40-minute presentation time, and up to 20 minutes of questions and answers following. However, further details will be provided at the time of selection, and presentation times may be adjusted based on the number of participants. Additional details will be provided in the invitation to submit an OPP. Attachment C VITAL OPP Package Guidance highlights the process and instructions for OPP and is being provided for planning purposes only.

Proposers are additionally asked to create two complementary documents, i) a Technical Clarification Document (TCD) and ii) a supporting narrative, with each being up to seven pages in length. The primary purpose of the TCD is to serve as a formal, detailed response to the program office, directly addressing their questions and feedback. The companion narrative should then translate this technical foundation into a compelling story, focusing on the project's execution plan. This document must clearly articulate the complete experimental plans, define the precise measurement models to be used to gauge performance, and provide specific implementation details. Crucially, the companion narrative must function as a comprehensive guide that allows for the evaluation of the proposed approach and demonstrates a clear path to achieving all program metrics and milestones.

6. AWARDS

6.1. General Guidelines

After completing evaluation of Oral Presentations, DARPA will: 1) choose to negotiate and award an OT for Prototype Agreement; or 2) inform the offeror that its proposed concept/technology/solution is not of continued interest to the Government and they are no longer considered for participation in the program. If DARPA does not intend to issue an award to an offeror, DARPA may provide brief feedback to the offeror regarding the rationale for the decision.

The Agreements Officer reserves the right to negotiate directly with the offeror on the terms and conditions prior to execution of the resulting OT agreement, including payment terms, and will execute the agreement on behalf of the Government. A copy of the draft OT agreement is attached to this PS for review. In order to speed up negotiations, offerors selected for oral presentations will be required to either attest to compliance with all OT agreement articles or note those they take exception to. Be advised, only a Government Agreements Officer has the authority to enter into, or modify, a binding agreement on behalf of the United States Government.

In order to receive an award:

- Offerors must have a Unique Entity ID number and must register in the System for Award Management (SAM). Offerors are advised to commence SAM registration upon notification of entry of the competition.
- Offerors must also register in the prescribed Government invoicing system (Wide Area Work Flow: https://wawf.eb.mil/xhtml/unauth/registration/notice.xhtml). DARPA Invoices personnel will provide assistance to those proposers from whom a proposal is requested.
- Offerors must be determined to be responsible by the Agreements Officer and must not be suspended or debarred from award by the Federal Government nor be prohibited by

Presidential Executive Order and/or law from receiving an award.

6.2. Fundamental Research & Fundamental Research Risk-Based Security Review Process (FRRBS)

Proposers should indicate in their proposal whether they believe the scope of the research included in their proposal is fundamental or not. While proposers should clearly explain the intended results of their research, the Government shall have sole discretion to determine whether the proposed research shall be considered fundamental and to select the award instrument type. Appropriate language will be included in resultant awards for non-fundamental research to prescribe publication requirements and other restrictions, as appropriate. Please see - https://www.darpa.mil/work-with-us/communities/academia/fundamental-research

For certain research projects, it may be possible that although the research to be performed by a potential awardee is non-fundamental research, its proposed sub-awardee's effort may be fundamental research. It is also possible that the research performed by a potential awardee is fundamental research while its proposed sub-awardee's effort may be non-fundamental research. In all cases, it is the potential awardee's responsibility to explain in its proposal which proposed efforts are fundamental research and why the proposed efforts should be considered fundamental research.

It is DoW policy that the publication of products of fundamental research will remain unrestricted to the maximum extent possible. National Security Decision Directive (NSDD) 189 defines fundamental research as follows:

'Fundamental research' means basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons.

DARPA's Fundamental Research Risk-Based Security Review Process (FRRBS) is an adaptive risk management security program designed to help protect the critical technology and performer intellectual property associated with DARPA's research projects by identifying the possible vectors of undue foreign influence. DARPA will create risk assessments of all proposed Senior/Key Personnel selected for negotiation of fundamental research awards (to include cooperative agreements and Other Transactions). The DARPA risk assessment process will be conducted separately from the DARPA scientific review process for all fundamental research effort/proposal and adjudicated prior to final award. For additional guidance, information **and submission requirement on this process**, please visit Proposer Instructions: Other Transactions.

Please note that FRRBS is not a requirement for Abstract submission, but it is a requirement for OPP package submission for fundamental research effort. If key personnel are changed after OPP updated FRRBS paperwork is required with the final proposal.

6.3. Representations and Certifications

All offerors are required to submit DARPA-specific representations and certifications for Prototype OT awards in order to be eligible to receive an OT award. See http://www.darpa.mil/work-with-us/reps-certs for further information on required representations and certifications for Prototype OT awards. Please note that this is not a requirement for Abstract submission, but it is a requirement for award.

6.4. Competition Sensitive Information

DARPA policy is to treat all submissions as competition sensitive, and to disclose their contents only for the purpose of evaluation. Restrictive notices notwithstanding, during the evaluation process, submissions may be handled by support contractors for administrative purposes and/or to assist with technical evaluation. All DARPA support contractors performing this role are expressly prohibited from performing DARPA sponsored technical research and are bound by appropriate nondisclosure agreements. Input on technical aspects of the proposals may be solicited by DARPA from non-Government consultants/experts who are strictly bound by the appropriate non-disclosure requirements.

6.5. Intellectual Property

The Government expects unlimited rights for the technology and data developed and/or generated under the program but is open to flexible intellectual property (IP) proposals from proposers that are advantageous to the Government. IP proposals should, at a minimum, allow DARPA to:

- Brief U.S. Government stakeholders regarding technical progress and accomplishments.
- Allow validation of technical performance, capabilities, and accomplishments by independent technical (potentially non-Government) experts, subject to NDA restrictions.
- Facilitate discussion of technical challenges and applications with the broader technical community – for example, by starting a new DARPA program that attempts to solve a serious technical challenge that limits further progress.
- Support analysis of alternatives, and
- Support transition opportunities, including design and performance data required to support other acquisition activities. These latter activities may require the Government to conduct an independent performance analysis.

Proposers responding to this PS shall appropriately identify any potential restrictions on the Government's use of any intellectual property furnished by the proposer. This includes both Noncommercial Items and Commercial Items. Proposers are encouraged to identify these restrictions in a format like the table depicted below. If no restrictions are intended, then the proposer should state "NONE."

List of restrictions

Technical Data, Computer Software To be Furnished with Restriction	Summary of Intended Use in the Conduct of the Research	Basis for Assertion	Asserted Rights Category	Name of Person Asserting Restrictions
(LIST)	(NARRATIVE)	(LIST)	(LIST)	(LIST)

6.6. Data Rights

The Government expects unlimited rights in data, including technical data and software, first produced/generated and delivered in the performance of VITAL regardless of success or failure of work performed on the program. However, the Government is open to flexible data rights proposals from proposers that are advantageous to the Government. Performers are highly encouraged to make data, models, and software developed under this effort available to the research community

through publicly accessible repositories, accompanied by appropriate documentation and metadata to support reuse and reproducibility, consistent with applicable privacy, security, and intellectual property considerations. Data includes manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes developed, delivered or furnished for use under VITAL program.

6.6.1. Release, publication, and use of data.

The Performer shall, subject to the terms of the Agreement, have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Performer in the performance for this program.

6.6.2. Subcontracting

The Performer shall obtain from its subcontractors all data and rights therein necessary to fulfill the Performer's obligations to DARPA under the resultant award. If a subcontractor refuses to accept terms affording the DARPA those rights, the Performer shall promptly notify the Agreements Officer of the refusal and shall not proceed with the subcontract/subcontractor award without authorization in writing from the Agreements Officer.

6.6.3. Copyrights

Performers may, with prior approval of the Agreements Officer, assert copyright in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings, or similar works.

6.7. Human Subjects Research /Animal Subject Research Use

Proposers that anticipate involving human subjects or animals in the proposed research must comply with the approval procedures detailed at https://www.darpa.mil/policies/human-animal-research to include providing the information specified therein as required for proposal submission. Documented received approval is a required milestone by the end of Month 4 after Agreement Award (AAA). Proposers should anticipate that T&E may include animal subjects, and that government-managed events may include HSR/ASR work as part of a collaboration with the Government team.

6.8. Procurement Integrity Act (PIA)

All awards under this PS shall be treated as Federal Agency procurements for purposes of 41 U.S.C. Chapter 21. Accordingly, the PS competitive solicitation process and awards made thereof must adhere to the ethical standards required by the PIA.

7. PS DEFINITIONS

"Data" refers to recorded information, regardless of form or method of recording, which includes but is not limited to, technical data, software, mask works and trade secrets. The term does not include financial, administrative, cost, pricing or management information and does not include inventions.

"Government Purpose" means any activity in which the United States Government is a party, including cooperative agreements with international or multi-national defense organizations, or sales or transfers by the United States Government to foreign governments or international organizations.

Government purposes do not include the rights to use, modify, reproduce, release, perform, display, or disclose technical data for commercial purposes or authorize others to do so.

"Government Purpose Rights" means the rights to use, duplicate, or disclose Data, in whole or in part and in any manner, for Government Purposes only, and to have or permit others to do so for Government Purposes only.

"Limited Rights" means the rights to use, modify, reproduce, release, perform, display, or disclose Data, in whole or in part, within the Government, to include Government support contractors.

"Nontraditional Defense Contractor" is defined in 10 U.S.C. § 3014 as an entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by the DoD for the procurement or transaction, any contract or subcontract for the DoD that is subject to full coverage under the cost accounting standards prescribed pursuant to 41 U.S.C. § 1502 and the regulations implementing such section. This includes all small business concerns under the criteria and size standards in 15 U.S.C. § 632 and 13 C.F.R. Part 121.

"Other Transaction" refers to the type of OT that may be awarded as a result of this PS. This type of OT is authorized by 10 U.S.C. § 4022 for prototype projects directly relevant to enhancing the mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed by the DoD, or for the improvement of platforms, systems, components, or materials in use by the armed forces.

"Prototype Project" is described in the DoD Other Transactions Guide (Version 1, Nov. 2018) issued by the Office of the Under Secretary of Defense for Acquisition and Sustainment: https://www.dau.edu/guidebooks/Shared%20Documents/Other%20Transactions%20(OT)%20Guide.pdf.

"Restricted Rights" applies only to noncommercial computer software and means the Government's right to use, modify, reproduce, perform, display, release disclose or transfer computer software are restricted, except that the Government may use a computer program on a limited number of computers and make the minimum number of copies of the computer software required for safekeeping (archive), backup, or modification purposes. The Government will not transfer the software outside of the Government or for any purpose other than the Goblin program, except that the Government may allow the use of the noncommercial computer software outside of the Government under a limited set of circumstances, including use by a covered Government support contractor in performance of its covered Government support contract (management and administrative support), and after the contractor or subcontractor asserting the restriction is notified in writing as far in advance as practicable that a release or disclosure to particular contractors or subcontractor is planned to be made.

"Small Business Concerns" is defined in the Small Business Act (15 U.S.C. § 632).

"Unlimited rights" means rights to use, modify, reproduce, perform, display, release, or disclose technical data in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so.

8. ACRONYMS

- A&AS: advisory and assistance services
- AI/ML: Artificial Intelligence/Machine Learning

- BAAT: Broad Agency Announcement Tool
- BTO: Biological Technologies Office
- CD: Capability Demonstration
- CDR: Critical Design Review
- CUI: Controlled Unclassified Information
- DARPA: Defense Advanced Research Projects Agency
- DHA: Defense Health Agency
- DOD: Department of Defense
- DT: Digital Twin
- FDA: Food & Drug Administration
- FFRDCs: Federally Funded Research and Development Centers
- FRRBS: Fundamental Research Risk-Based Security
- GFI: Government-furnished information
- GPR: Government Purpose Rights
- HF: High Fidelity
- IACUC: Institutional Animal Care and Use Committee
- IP: Intellectual Property
- NDA: Non-Disclosure Agreement
- OCI: Organizational Conflicts of Interest
- OT: Other Transaction
- OPP: Oral Presentation Proposal
- PDR: Preliminary Design Review
- PI: Principal Investigator
- POC: Point of Contact
- PS: Program Solicitation
- Q&A: Question and Answer
- ROM: Reduced order model
- SAM: System for Award Management
- SETA: Scientific, engineering, technical assistance
- SME: Subject Matter Expert
- TBD: To Be Determined
- TCD: Technical Clarification Document
- T&E: Test and Evaluation
- TR: Technical Representatives
- TRL: Technology readiness level
- UARC: University-Affiliated Research Centers
- UEI: Unique Entity Identifier
- USG: United States Government
- WAWF: Wide Area Workflow

9. Additional Information

Please e-mail VITAL@darpa.mil if you wish to be added to our blast list for future program updates.