

**DARPA-PS-26-118 ExPEDitions**  
**Frequently Asked Questions (FAQs)**  
**as of 6/18/26**

70Q: Must abstracts describe a viable path to achieving the metrics indicated in Section 1.4 of the PS in order to be evaluated? Will the abstracts be considered non-conforming if they don't achieve the metrics?

70A: No, abstracts will not automatically be considered non-conforming. However, the abstract must address the metrics indicated in Section 1.4. If the proposed solution cannot reach the specified targets, proposers must provide a clear justification explaining why. As long as this justification is included, the abstract will still be evaluated.

69Q: Can foreign universities and companies participate in ExPEDitions?

69A: No, non-US organization may not participate in the ExPEDitions program. All proposing organization must be US entities.

68Q: For the Month 9 IV&V event, what cell format and maturity level are expected? Are there minimum expectations for cell count, capacity, areal loading, cycling protocol, or repeatability?

68A: The Month 9 IV&V deliverables are intended to evaluate the progress of your battery development. DARPA understands that the cells will still be in the development phase. While performers must deliver the required 16 cells, there are no mandated minimums for cell format, capacity, or areal loading at this stage, provided the cells demonstrate fundamental performance progress.

67Q: Is it acceptable for a performer to use an external commercial cell-fabrication partner to assemble validation cells from performer-supplied electrode materials, provided the electrochemical innovation and material production remain within the proposing team?

67A: Yes, this is acceptable. Performers may utilize external commercial partners for cell assembly. Proposers should outline this arrangement in their proposal. Please note that the prime performer retains full responsibility for the final deliverables and ensuring all materials are handled in accordance with program security and CUI guidelines.

66Q: How will domestic sourcing of battery components be evaluated? Can an initial demonstrator use commercially available or non-domestic commodity components if the proposal includes a credible path to replace them with domestically available materials later in the program?

66A: Yes, this is acceptable. Proposers may use non-domestic commodity components for initial early-phase demonstrators. The proposal should explicitly identify these components and provide a clear, feasible roadmap detailing how the team will transition to a domestic supply chain for later phases and final production.

65Q: Are the design, testing data, and assembly of individual "battery cells" (i.e., a single electrochemical cell) considered CUI? There is some ambiguity to the statement "*Technical information for novel battery components or subsystem design, production, or integration methodologies within a demonstrator vehicle*" as a unit cell could be considered a "subsystem" to a battery pack.

65A: No, the design, testing data, and assembly of an individual battery cell are not considered CUI. The ExPEDitions CUI Guide specifically protects technical information, components, or subsystems that are tied to *integration within a demonstrator or operational vehicle*. Because an individual, standalone battery cell is not associated with, nor does it reveal the design of, a demonstrator vehicle, it does not meet the threshold for CUI. Performers should handle fundamental cell-level data as unclassified unless it explicitly reveals system-level vehicle integration methodologies.

64Q: Will DARPA provide additional details regarding the IV&V organization, testing schedule, reporting process, and expected performer interactions prior to award?

64A: No. All details on IV&V testing are provided in Attachment E.

63Q: Are there any costs, logistics, testing fees, shipping requirements, or support activities associated with IV&V testing that performers should include in their proposed budgets?

63A: Proposals should include the costs of shipping battery cells and packs to the IV&V team.

62Q: Will performers have any role in selecting, coordinating with, or contracting with the IV&V team?

62A: No.

61Q: Is the IV&V team selected and managed by DARPA, or is each performer expected to identify and engage its own IV&V organization?

61A: The IV&V team is selected and managed by DARPA; it is not being solicited under this Program Solicitation.

60Q: Does JP-8 SOFC power source fit the scope of the program?

60A: A standard JP-8 SOFC power source does not fit the scope of the ExPEDitions program. Proposed fuel cell systems must include a fuel regeneration component capable of electrically recharging the system. Systems that operate solely as primary power generators without including a component to electrically regenerate fuel are non-conforming.

59Q: Could you please clarify the meaning of the term "rechargeable fuel cell" as used in the program description? My understanding is that conventional fuel cells generate electricity from fuel, while some fuel cell technologies can also operate in reverse as electrolyzers, converting electrical energy into chemical fuels. In this context, does the program define a rechargeable fuel cell as a single reversible fuel cell system capable of both power generation and fuel production, or as an integrated system consisting of a conventional fuel cell coupled with a separate electrolyzer unit?

59A: The program defines a 'rechargeable fuel cell' as any system that can both generate electricity and electrochemically regenerate its fuel. DARPA does not mandate a specific architecture; therefore, both a single reversible unit or an integrated system (fuel cell + separate electrolyzer) are acceptable, provided the complete system meets the overall program metrics.

58Q: Would a reversible fuel cell based system with a roundtrip efficiency lower than 90% be considered non-responsive, even if the proposed system meets or exceeds the other program metrics?

58A: Proposals under 90% round-trip efficiency are not automatically deemed non-responsive. However, the abstract must state the projected round-trip efficiency, detail why the 90% constraint cannot be achieved with their system, and justify how the system will meet or exceed all other program metrics. The feasibility of this technical trade-off will be evaluated during the abstract review.

57Q: Is there a target cell capacity, size, or level of system integration expected for successful completion of Phase 1, or is the primary focus on demonstrating the required energy density, power density, rechargeability, and manufacturability objectives?

57A: The primary focus is on demonstrating the required energy density, power density, and rechargeability metrics. While there is no mandated target cell capacity or size, the chosen form factor and level of system integration must directly align to a specific application.

56Q: Does DARPA expect Phase 1 prototypes to be fabricated by a commercial battery manufacturer, or would prototypes designed, fabricated, and tested within the performer's laboratory be acceptable?

56A: Prototypes designed, fabricated, and tested within the performer's laboratory are acceptable, provided they can achieve the program metrics. However, performers must ensure that laboratory fabrication processes are sufficiently controlled to demonstrate the repeatability and scalability required to meet TRL 5–6 objectives by the end of Phase 1.

55Q: For the Month 15 and Month 18 milestones, and the stated objective of achieving a TRL 5-6 battery prototype, is there a specific form factor or maturity level DARPA expects? For example, would a laboratory-fabricated coin cell, pouch cell, cylindrical cell, or small battery module be considered acceptable for Phase 1, assuming the required technical metrics are achieved?

55A: No specific form factor is mandated, as long as all technical metrics are achieved and the form factor aligns with the proposed application. However, please note that laboratory coin cells typically do not meet the scale or integration requirements of a TRL 5-6 prototype.

54Q: Would a Po-210 nuclear battery development project be in scope for this solicitation?

54A: To be considered in scope, any proposal utilizing nuclear-adjacent materials must rely on reversible electrochemical reactions that can be repeatedly charged and discharged.

53Q: Regarding the battery pack deliveries to IV&V: Is the intent for these packs to mirror the specifications of the end-user application? For example, if the end-user application requires a 24 V pack, must the units delivered to IV&V also be 24 V? Alternatively, are we permitted to deliver lower-voltage packs (e.g., 5 V) to IV&V in parallel with our ongoing development of the higher-voltage (e.g., 24 V) end-user packs?

53A: The prototype battery packs delivered to IV&V do not need to meet a specific voltage requirement (such as 24V). Performers should deliver configurations that make the most technical sense for evaluation and demonstrate the core capabilities of the technology under development.

52Q: Regarding the Phase 2 Contractual Deliverable of '10 prototype battery packs for End User': Can you clarify whether these packs must be delivered in a single shipment (e.g., in Month 33 to provide lead time/runway for the Expo)? Alternatively, are performers permitted to split deliveries across PH2 (e.g., delivering 5 packs in M27 and 5 packs in M33) to facilitate incremental integration and testing with the End User application?

52A: The battery packs do not need to be delivered in a single shipment. The performer may coordinate directly with the end user to establish a mutually agreed-upon delivery schedule.

51Q: Regarding the language for Milestone 17: '*Confirmed delivery of devices to End User satisfying the terms in the ACA and Joint Development Plan...*', please clarify the specific quantity of devices required for delivery to the End User in Month 27. Additionally, is this quantity inclusive of, or related to, the Phase 2 Contractual Deliverable of '10 prototype battery packs for End User'?

51A: The requirement to deliver 10 prototype battery packs to the end user is a restatement of the Milestone 17 deliverable; only these 10 units are required for delivery.

50Q: Regarding CUI classification: Would a tubular ceramic part, fabricated by a vendor using a custom cylindrical mold, be considered a Commercial-Off-The-Shelf (COTS) component? While it requires a custom mold, the resulting tubular shape does not 'reveal or imply novel design approaches or capabilities.

50A: This is not considered CUI. Based on the ExpEDitions CUI guide, drawings or documentation only require CUI controls if they identify specific subsystems or imply novel design approaches *for a demonstrator or operational vehicle*. Because this is simply a tubular ceramic shape that does not reveal any novel capabilities, even with a custom mold, it does not meet that criteria and can be handled as standard unclassified information

49Q: Can part of the faculty time spent on the project be counted towards the 1/3 cost sharing?

49A: Yes. Cost sharing can be either monetary or in-kind contribution. In-kind cost sharing is the contribution of non-monetary goods, services, or resources to the project from the performer that are not paid for by the government. If in-kind contribution is proposed, it needs to be itemized and still must be assigned a verifiable dollar value for the government to assess and confirm to fulfill the mandatory matching requirement.

48Q: Can we schedule a meeting to discuss our proposal ideas?

48A: No. Once the Program Solicitation is issued, the government can longer hold meeting with potential proposers. To ensure all potential proposers have equitable access to information, discussions will be managed through the FAQ process. Detailed feedback and questions will be provided on specific proposal ideas presented in submitted abstracts

to be adjudicated and addressed in the full proposal, but we will not be meeting with individual proposers to discuss ideas during the solicitation period.

-----↑↑↑New Q/A↑↑↑-----

47Q: Is this solicitation exclusively focused on advanced battery technologies like Lithium-air?

47A: No. While advanced battery technologies like Li-air are of interest, the program's scope is much broader. We highly encourage proposals that focus on the single-device integration of fuel synthesis and CO<sub>2</sub> capture to achieve our performance metrics. These integrated systems are fully in scope.

46Q: Is there a stack pressure requirement, or is it preferred without any applied pressure?

46A: There are no specific technical requirements outside those listed in the program metrics.

45Q: For rechargeability, could you please advise whether there is any expected charging or discharging rate, such as the target charge/discharge duration or the expected state-of-charge/state-of-discharge range?

45A: Because of the potential variety of solutions to the problem, the charge and discharge rates are normalized to W/kg and W/L. Performers who normally report results in C-rates (for instance) will be expected to convert these numbers to show how they compare to program metrics.

44Q: Will there be a Government IV&V team, if so, are the milestone deliverables deemed sufficient to support assessments? Or will additional deliverables be needed?

44A: Yes, there will be a Government IV&V team and milestone deliverables are sufficient to support assessments. In addition to the Government IV&V deliverables, 10 battery pack prototypes will need to be delivered to your End User if you partner with one in Phase 2.

43Q: Are there any organization restrictions on submissions per TA, e.g., can only prime one, firewalls?

43A: Multiple proposals from the same institution are allowed; however, they must have different PIs, and institution must address any potential conflict of interest. DARPA will assess the staffing plan to ensure program performance will not be impacted and there is no conflict of interest.

42Q: Please clarify expectations for potential applications in abstracts. Are proposers expected to discuss their own potential applications?

42A: Proposers are expected to identify potential use cases for their technology. This will assist the DARPA team in generating the End User solicitation.

41Q: Please clarify what you mean by “primary battery proposals” are not of interest?

41A: The ExPEDitions program is specifically focused on rechargeable energy storage solutions. Primary (non-rechargeable) battery technologies are considered out of scope

and do not meet the program's requirements. All proposed solutions must be capable of electrical recharge.

40Q: Is this a fixed-price OT? Are expenditure-based OTs acceptable?

40A: This is a fixed-price OT.

39Q: The special notice description emphasizes implementing the batteries in real-world devices. Will you consider new kinds of Li-ion batteries (with new electrodes or electrolytes)? Or does it have to be a carbon-air system?

39A: Proposals must convincingly demonstrate the technology's ability to meet specified program metrics, regardless of the underlying technical approach or chemistry.

38Q: Is there interest in adjacent expeditionary power technologies, such as high-power primary chemistries for UAS or mechanically rechargeable metal-air fuel cells?

38A: High-power primary chemistries and mechanical rechargeable metal-air fuel cells are out of scope. All recharge must be electric. The metrics in the PS contain constraints regarding recharge rate.

37Q: Is DARPA primarily interested in carbon-air / carbon-utilization architectures, or would the program also consider other battery or rechargeable fuel-cell concepts that can meet the target GED/GPD requirements?

37A: No, any technology that can address the program metrics is in-scope.

36Q: How do we get access to BAAT?

36A: Instructions will be provided in the solicitation.

35Q: Is there a minimum and maximum (floor and ceiling) for the total or phase budget?

35A: We are unable to share this information.

34Q: For energy density calculation, is the mass based on active materials or the whole cell?

34A: The energy density will be based on the mass of the whole cell, to include oxygen or other external oxidizer balance, if relevant, as well as packaging.

33Q: Does a project proposed under ExPEditions have to explicitly follow up on ExCURsion, or can it be fully separate?

33A: No, it can be fully separate. ExCURsion just provided inspiration for the program.

32Q: Can you provide an estimated funding range for both Phase 1 and Phase 2?

32A: We are unable to share this information. Per the information being shared at Industry Day, the funding will be based on the quality of the proposals received.

31Q: When do you anticipate the start date for Phase 1?

31A: January 2027

30Q: What would be an example of not having technical ability? And what would be an example of having excellent technical ability?

30A: Not having technical ability would be if you do not present a case for providing the required number of devices at specific points during the program, or if you have not worked on battery-related research before. Excellent technical ability would be demonstrated ability to manufacture pack-level battery technologies at the scales required by the program.

29Q: Any temperature and pressure expectation for cell operation?

29A: No particular temperature and pressure is expected at the cell-level; however, you should be able to propose use-cases that can handle the temperature and pressure that your battery performs at.

28Q: Are the energy density and power density expected at materials level, cell level or device level?

28A: The program solicitation will have the exact details. The stated metrics are at the cell level, with a <20% decrement in performance at the device level due to packaging, etc.

27Q: What TRL is being targeted?

27A: 18 months into the program, proposed solutions are expected to be at Technology Readiness Level (TRL) 5-6, suitable for integration and preliminary testing in a real device.

26Q: Can any information be released on results from ExCURSion to share insight on program inspiration?

26A: No.

25Q: Can you elaborate more on the second focus area of the abstracts (Technical Ability)?

25A: Technical ability is defined as the proposer has a demonstrated ability to realistically meet the program milestones laid out in the Solicitation.

24Q: What state of charge should be used for estimating cell specific energy, considering air batteries take on oxygen during discharge and increase weight.

24A: Specific energy estimation for batteries should fully take into account oxygen balance. One may assume a per-cycle depth of discharge of 80%.

23Q: A US organization with a non-US individual is eligible, right?

23A: Yes.

22Q: Will a data package for technology developed under the ExCURSion program be available for ExPEDitions proposers?

22A: No information will be provided from ExCURSion. Familiarity with the ExCURSion program is not necessary for application to ExPEDitions.

21Q: Regarding CUI, could we classify our project as fundamental research? This would make compliance at our institution much easier.

21A: As of the date of publication of this solicitation, the Government expects that program goals as described herein may be met by proposed efforts for fundamental research and non-fundamental research. ExPEDitions is subject to the published CUI Guide (will be published with the Program Solicitation (PS)), and as such, your effort can be met with fundamental research that is subject to CUI restrictions and protection.

20Q: Should the proposal include milestones, plans, and a budget for both Phase 1 and Phase 2 (36 months total)?

20A: Yes. Only proposing to one phase will be out-of-scope.

19Q: Can Army centers (GVSC, C5ISR) be included on the team and receive budget?

19A: Government entities can be included on the team. Please read the solicitation carefully to address the restrictions for Government entities and the submission requirement for them.

18Q: Is the battery type limited to metal-air battery?

18A: No, any technology that can address the program metrics is in-scope.

17Q: Will the slides that are “distribution unlimited’ be made available?

17A: Yes, slides and the recording will be made available on the DARPA website.

16Q: FFRDC cannot cost share so that must come from the other team members, correct?

16A: For ExPEDitions, DARPA believes FFRDC can bring value to the program and as such, allows FFRDC to propose either as prime or sub. In order to consider FFRDC, FFRDC’s proposal must demonstrate that what they are proposing is not available within industry. If selected for funding, DARPA will leverage existing agreements with these entities to establish the agreement and will be treated as Government team. Cost sharing requirement is only applicable to performers on ExPEDitions.

15Q: Can FFRDC lead and the cost share is still required?

15A: For ExPEDitions, DARPA believes FFRDC can bring value to the program and as such, allows FFRDC to propose either as prime or sub. In order to consider FFRDC, FFRDC’s proposal must demonstrate that what they are proposing is not available within industry. If selected for funding, DARPA will leverage existing agreements with these entities to establish the agreement and will be treated as Government team. Cost sharing requirement is only applicable to performers on ExPEDitions.

14Q: Typically, how many abstracts are encouraged for full proposal development?

14A: For ExPEDitions, abstract is decisional and required. Each team should only submit one abstract/proposal. The Government Evaluation Team will review all submitted abstracts and invite selected abstract proposers to submit a Full Proposal. Proposal packages MAY NOT be submitted without an invitation from DARPA. The

number of invitations to submit a full proposal is dependent on the quality of the abstracts received.

13Q: What battery technologies is DARPA Expedition program most interested in?

13A: Any technology that can address the metrics of the program.

12Q: What shall the team be made of? Lead by industry and partner with academic institutions? Can academic institutions be lead institutions? What is a good team composition to achieve the goals, objectives and metrics for ExPEDitions?

12A: It is up to proposers to form the most suitable team with the expertise and capability to achieve the goals and objectives for ExPEDitions.

11Q: For ExPEDitions, how important is achieving practical field rechargeability at the system level, including carbon handling, recharge time, and operational logistics, or carbon replenishment is allowed?

11A: Carbon replenishment (or more generally “mechanical recharge”) is out of scope. All recharge must be electric. The metrics in the PS contain constraints regarding recharge rate.

10Q: Can you speak to the ability of FFRDCs/DOE Labs to be performers (either prime or sub) as a part of this program?

10A: FFRDCs, UARCs & Government Entities may propose against this solicitation per instructions within the PS. DARPA will only leverage existing contractual agreement for these entities and a new contractual agreement will not be established for those who propose as prime. If submitted as Sub, there is specific requirement for submission which also includes these entities 1) clearly define their work scope within the technical proposal with a point of contact, and 2) ROM for their effort. Refer to the PS for additional information.

9Q: Orchestration layer — Is there an explicit orchestration / mission-aware decision component planned within ExPEDitions — turning mission intent into dispatchable power plans across mixed assets — or is the program scoped to power- and energy-dense hardware implementations only? Relatedly, are there upcoming DARPA programs in operational energy where the orchestration /software-decision layer is the explicit focus?

9A: The ExPEDitions program focuses primarily on hardware. We cannot address whether DARPA has upcoming programs in the area of interest.

8Q: Exercises & service partners — Are there planned field exercises or experimentation events tied to ExPEDitions, and which service partners (Army, USMC, SOF, etc.) are you currently engaged with as transition customers or end-user evaluators?

8A: There are no planned exercises currently. There are no definite partners. However, we will be releasing the End-User solicitation in the upcoming months to engage with the services and other industry partners who may propose an exercise or demonstration.

7Q: Attendee list — Will DARPA be releasing the proposers-day attendee list (or an opt-in version) to support teaming conversations ahead of the full Solicitation?

7A: Yes, we will be. If you indicated in registration you want to share your email your information will be distributed to the Proposers Day participants.

6Q: Is DARPA interested in electrocatalysis fuel cell prototypes that can generate hydrocarbons or e-fuels at forward operating bases, or purely battery solutions? If so, is DARPA open to two proposals, e.g., solid-state lithium air and electrocatalysis demonstration of e-fuel capabilities?

6A: DARPA is open to any technology that addresses the program metrics.

Fuel/electrolysis cells must contain electrical fuel regeneration capabilities, and mechanical recharge (physical refueling) is specifically excluded. Fundamentally different ideas will require separate proposals. Multiple proposals from the same institution are allowed; however, they must have different PIs and institution must address any potential conflict of interest. DARPA will assess the staffing plan to ensure program performance will not be impacted and there is no conflict of interest.

5Q: What categories of CUI are potentially expected and what LDC or distribution statements would go along with the anticipated data?

5A: We expect the program will generate CUI. A CUI Guide will be released with the solicitation.

4Q: We're in the process of CMMC certification, would you please advise on what potential requirements are for attaining CMMC L2 certification by a 3rd party assessor? What is the timeline for both of these?

4A: At this time, CMMC certification is not a requirement in order to award an OT for Prototype. For more information on CMMC and requirements on attaining CMMC L2 certification by a 3<sup>rd</sup> party assessor, please visit: <https://dodcio.defense.gov/CMMC/About/>. Please also note that the first phase of CMMC implementation began on November 10, 2025. The second phase of CMMC begins on November 10, 2026. The assessment requirements will be implemented using a four-phase plan over three years.

3Q: Are there any restrictions on company ownership structure for prime proposers? Specifically, can a US-incorporated company with a non-US majority shareholder participate as a prime?

3A: Yes, any US-incorporated company can participate and propose for ExPEDitions.

2Q: At the end of Phase 1, is DARPA looking primarily for best cell-level performance, or integrated pack-level demonstrations under realistic platform duty cycles?

2A: The program solicitation provides specific metrics at the cell-level, with the expectation that performance at pack-level will be >80% of the cell-level performance.

1Q: For ExPEDitions, does DARPA see the primary challenge as the chemistry itself, or reducing the integration risk required to turn promising chemistry into device-ready systems?

1A: Both.