

Frequently Asked Questions (FAQs) for the Research Opportunities in Accelerator Stewardship and Accelerator Development Funding Opportunity Announcement

What's New in FY 2022?

In FY 2022, three major changes apply:

- **The Accelerator Development program begins (Track 4).** A new mission for ARDAP begins in FY2022, with the introduction of the Accelerator Development program, which is aimed at strengthening domestic supplies of critical accelerator technology. The aims are quite different from Tracks 1-3, please read the FOA carefully.
 - **The call for Accelerator Technology Sector Business Plans continues as Track 4a.** The aims, proposal format, and merit criteria remain the same as the FY2021 call.
 - **A new call for Accelerator Technology Public-Private Partnerships begins as Track 4b.** The aim is to fund activities that lead to supply chain risk reduction.
- **The Accelerator Stewardship Test Facility Program (Track 3) resumes the call for proposals.** The Accelerator Stewardship Test Facility Program continues with this year's FOA as Track 3.
- **Diversity, Equity, and Inclusion is now an explicitly scored factor in award decisions.** See section V.B.2 of the FOA, "Program Policy Factors", and note the addition of Appendix 8 "Recruitment and Retention of Early-Stage Investigators".

What is the "Accelerator Development program"?

The Accelerator Development program addresses supply-chain vulnerabilities that lead to high risks in constructing future Office of Science accelerator facilities by strengthening the domestic industrial production capability for critical accelerator technology components. The Accelerator Development approach is to fund public-private partnerships between national laboratories and domestic industry (with university participation as appropriate), matching technologies and capabilities developed in the national laboratories with needs of the domestic accelerator technology industry. The direct and indirect (i.e., non-accelerator) market may be large and consistent enough for the domestic industrial capability to become sustainable at the end of the Accelerator Development funding period, but, for some accelerator technologies, the capability may require continued long-term Federal funding. Other areas might require several funding cycle renewals to become sustainable without additional Federal support.

What is a "Stewardship Customer", what is a "stakeholder", and what is considered satisfactory "evidence" of the stakeholder's interest?

"Stakeholder" is used throughout this FOA as a generalization of the term "Stewardship Customer". For the Accelerator Production program, the mission needs of the SC programs are the primary focus. For the Accelerator Stewardship program, the needs of other federal agencies and industry carry similar weight to SC

programmatic needs. This difference in programmatic priority should be taken into account when preparing a proposal.

As defined in V(A)2, the term “stakeholder” is used broadly to organizations with a history of financial, intellectual, or physical support for research in the proposed subject matter. Stakeholders may be SC programs (e.g., BES, FES, HEP, or NP), other DOE program offices (e.g., NNSA, EERE, ARPA-E), other Federal agencies (e.g., NIH, NSF, DoD, DHS), or industries that use accelerator technology.

Evidence of the stakeholder’s interest may be found in advisory committee reports, workshop reports, white papers, or R&D roadmaps issued by the Stewardship Customer that identify the issue as important. More significant evidence is provided by substantial and material participation of the stakeholder in the effort (e.g., by co-funding, cost-sharing, in-kind donation or equipment, or donation of effort).

How can teams apply?

Teams of collaborating institutions are always strongly encouraged to apply, and for some Tracks, are required.

A single proposal must be submitted by the lead institution, with subawards provided to collaborators if needed. A single award will be issued to the lead institution, which must then write subcontracts to the subawardees to disburse the funds. The sole exception is if a DOE National Laboratory is a subawardee, in which case DOE will provide funds directly to the Lab by field work authorization, per section II(H).

As always, the participation of Minority-Serving Institutions and businesses owned by members of under represented groups is strongly encouraged. both as lead institution of a team or as a collaborating member. Inclusion of MSIs and dis

What are you looking for in a “team”?

Teaming is strongly encouraged for proposals to any Track, and is an explicit review criterion, please see section V(A)2.

“Teaming” in the context of this solicitation means the substantial collaboration of two or more institutions to achieve the proposal’s goals. It is a central aim of Accelerator Stewardship that technologies developed for basic research find use in a wealth of other applications, and often an excellent way to achieve this is through teams composed of people with expertise in (1) the accelerator technology, (2) the requirements of the new application, and (3) what’s required to make a viable commercial product. Track 1 proposals (applied R&D) are expected to be from multi-institutional teams. Track 2 proposals (basic R&D) are encouraged to be from teams, but this should be determined by the nature of the work. Track 3 proposals (Test Facility Program) must have at least two institutions participating. In the case of Track 3 proposals, teaming between the non-DOE entity and a DOE Office of Science Laboratory is enforced by the requirement that a Collaborative proposal be submitted by both entities. This is to ensure that proposals take accurate account of the capabilities, availability, and cost of working at the national lab, and to ensure the national lab has agreed to support the work.

In the case of Track 4a proposals, teaming between industrial companies, universities, National Laboratories, and a business school or business consulting firm is necessary to ensure the accelerator sector business plan will be developed with a broad perspective and with the input of a sufficiently broad set of stakeholders. The

inclusion of a business school or private consulting firm on the team is highly desirable to (1) engage a disinterested party to guide the business plan towards a balanced sector-wide perspective and (2) to provide an academic perspective on business analysis, somewhat mitigating the difficulties of having any one company reveal its analysis and strategic approach.

In the case of Track 4b proposals, teaming between domestic industrial companies and National Laboratories is necessary, with university participation as appropriate to insert enabling research developed in that sector into the production effort. Inclusion of a business school or private consulting firm is desired, especially if a business plan for the activity was not developed during a related previous Track 4a effort. Depending on the public-private partnership model, the Track 4b effort will most likely be led by either a domestic company or by a National Laboratory, although other options are possible with adequate justification.

What are you looking for in a Track 4 “Partnership”?

Different forms of partnerships are needed for different accelerator technology areas. The form of these partnerships could range from a model where domestic industrial entities receive specific technology transfer from National Laboratories plus the use of existing or new Laboratory infrastructure; to a looser consortium model; to a model where a National Laboratory is responsible for maintaining the capability and which may include targeted industrial infrastructure investments.

What are you looking for in the way of Diversity, Equity, and Inclusion (DE&I)?

While the primary focus of the Accelerator Stewardship and Accelerator Development programs is the advancement of the science, technology, and production of accelerators, workforce development is a vital product of the R&D process. Ensuring that the educational, R&D, and infrastructure development opportunities provided by federal assistance awards are available to all is a critical step towards fully engaging the best and brightest minds to solve the research challenges ahead.

In that spirit, efforts to partner substantively, equitably, and meaningfully with investigators and institutions from underserved communities¹ are strongly encouraged. DE&I plans should be reflected in the descriptions of the roles of the participants and participating institutions, in Appendix 8 (“Recruitment and Retention of Early-Stage Investigators”), and in the budget and budget explanation.

What if a DOE National Lab is a collaborator on my proposal? What should the budget include? Who receives the funding, and what does section II(H) mean?

Collaborating with a DOE National Laboratory is much like collaborating with any other institution. However, because DOE already has contracts with the Labs, there are some subtle differences:

What should the budget and budget narrative include?

For all proposals, a single proposal must be filed and the budget and budget narrative should include (and explain) funding requests from **all** participants, **including** any participating DOE National Laboratories.

¹ As defined in Executive Order 14035, Section 2(a), June 25, 2021, <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/>.

Who receives the funding, and what does section II(H) mean?

In all cases, funds that are destined for a DOE National Laboratory will be provided directly to the lab through the DOE Field Work Authorization System. This applies even if the Lab is a subawardee. We will provide further instructions during award negotiations.

Is a Letter of Intent (LOI) required?

No, but a Pre-Application (FOA applicants) or Pre-Proposal (LAB applicants) is required. See the Funding Opportunity Announcement section IV(B) for further details.

Should I submit my proposal to a specific Office of Science accelerator R&D call or to the Accelerator Stewardship and Accelerator Development solicitation?

If the work you propose predominantly impacts one Office of Science (e.g., BES, FES, HEP, or NP), submit the proposal to the respective Office's accelerator R&D call. If the work you propose is cross-cutting (i.e. impacts several Offices of Science, or several federal agencies' missions, and there is a clear stewardship customer, submit the proposal to the Accelerator Stewardship call. See the Funding Opportunity Announcement section V(A)2 "Merit Review Criteria" for further details.

What if I've submitted a substantially similar proposal to another solicitation at another agency? Am I forbidden from submitting my proposal?

No, but you must list the duplicative proposal in Appendix 2: Current and Pending Support. Concurrent submission of an application to other organizations for simultaneous consideration will not prejudice its review. We will, however, contact the other agency prior to making an award to establish the disposition of the duplicate request.

How many proposals may one PI (or one institution) submit?

There is no limit. However, PIs are strongly encouraged to focus their effort on one proposal where their interests and capabilities align well with the objectives of the solicitation and they can write a strong proposal.

Are letters of endorsement from collaborators helpful?

Endorsement letters are not recommended or necessary for pre-proposals, but may be helpful for full proposals.

Can DOE labs apply to Track 2?

No. See the Funding Opportunity Announcement, section III(A), Eligibility.

Can DOE labs apply to Track 3?

Yes, in fact they must submit a Collaborative Application together with the non-DOE entity. This is done to ensure the hosting Lab is fully aware of—and able to commit—the resources the non-DOE entity will need.

Who can lead a Track 4 proposal?

Any recognized entity (domestic industrial entity, National Laboratory, other FFRDC, or university). They need to ensure the teaming requirements are met.

Can labs apply to the Funding Opportunity Announcement (FOA)?

Yes. Labs must apply to the FOA, which now covers all applicants.

Can non-DOE FFRDCs apply to this FOA?

Yes.

Can Track 2 applications include a DOE Lab as a subaward?

Yes. The university must lead the effort, and such an arrangement must not be used to circumvent the restrictions on Track 2 eligibility. See the Funding Opportunity Announcement, sections II(H) and II(I).

What is the typical award size?

The award size depends on the Track, the topic, the work scope, the available funding, and other factors. Track 1 awards generally average approximately \$2M/3 years, Track 2 awards generally average \$500k/3 years, and Track 3 awards are limited to no more than \$300k/1 year. That said, the requested budget should always be driven by the research goals and proposed work scope, not the other way around. Track 4a awards are limited to no more than \$200k/1 year. Track 4b awards are limited to \$2M/2 years.

What is the typical award duration?

The typical award duration is 3 years for Track 1 and Track 2 proposals, 12 months for Track 3 and Track 4a, and 2 years for Track 4b. Exceptions include design studies, for which the award duration is typically limited to 1 year. The duration should be chosen in light of the research goals, proposed work scope, and FOA requirements.

What does the language in section II(B) “Estimated Funding” mean?

Budget numbers listed in section II(B) refer to the specific fiscal year. For example “It is anticipated that approximately \$X,XXX,XXX will be available in FY 20YY” means that the sum of all FY 20YY year obligations incurred as a result of new awards under this solicitation (including awards to all applicants) will not exceed \$X,XXX,XXX. This amount does not include prior-year or subsequent-year obligations, and is subject to appropriated funds being available.

“Total value of awards” refers to value of all grants, interagency agreements, and laboratory work authorizations awarded under this year’s FOA over the full duration of the award. This number is subject to the availability of appropriated funding in this and future years.

What is the “Full Forward Funding” requirement?

Since 2014, DOE has been required by statute to fully forward fund awards of \$1,000,000 or less in the year in which the award begins. This means, for example, that an award of \$100,000 per year over 3 years must have the total value of \$300,000 set aside in the year the award is made. The PI will receive \$100,000 in the first year, and the balance will be held at headquarters for release in subsequent years. This means the subsequent years

of the award are paid for up front, and that the entire value of the proposal then must be obligated from the “Estimated Funding” number listed in II(B).

Can the submitting institution be a foreign organization?

No. See the Funding Opportunity Announcement, section III(A), Eligibility.

Can a subawardee be a foreign organization?

Yes. Per 48 CFR 970.5227-3(f) preference should be given in such a manner as to enhance the accrual of economic and technological benefits to the U.S. domestic economy. For Track 4b proposals, a rationale needs to be included in the proposal on how the foreign subaward preferentially enhances the domestic technical vendor capability relative to foreign competitors.

Can a fee be charged?

Yes, per 2 CFR 605.15, a fee may be requested *only* by small business applicants.