



U.S. National Science Foundation
Pathways to Enable Secure
Open-Source Ecosystems

NSF PESOSE: Pathways to Enable Secure Open-Source Ecosystems

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**Scan for program details
nsf.gov/funding/pesose**

Q&A Session Overview



- Welcome and Run of Show (5 minutes)
- Getting Started, Webinar Format, Run of Show and Submission Process (5 minutes)
- Attendee Q&A (45 minutes)
- Closing and Next Steps (5 minutes)

Webinar: Format and Run of Show



- NSF Team will be scanning the Q&A "queue", answering and prioritizing.
 - General instructional-type questions will be answered in the Q&A box or in separate webinar/s.
 - Programmatic, strategic, and/or conceptual in nature, will be **discussed live today.**
 - Context-dependent questions should be sent to the mailbox, PESOSE@nsf.gov.
- Category tagging will help us move through responses faster by getting to the crux of the "ask".
- Organizational info will be used for future planning if targeted assistance is needed.

Submitting Your Questions



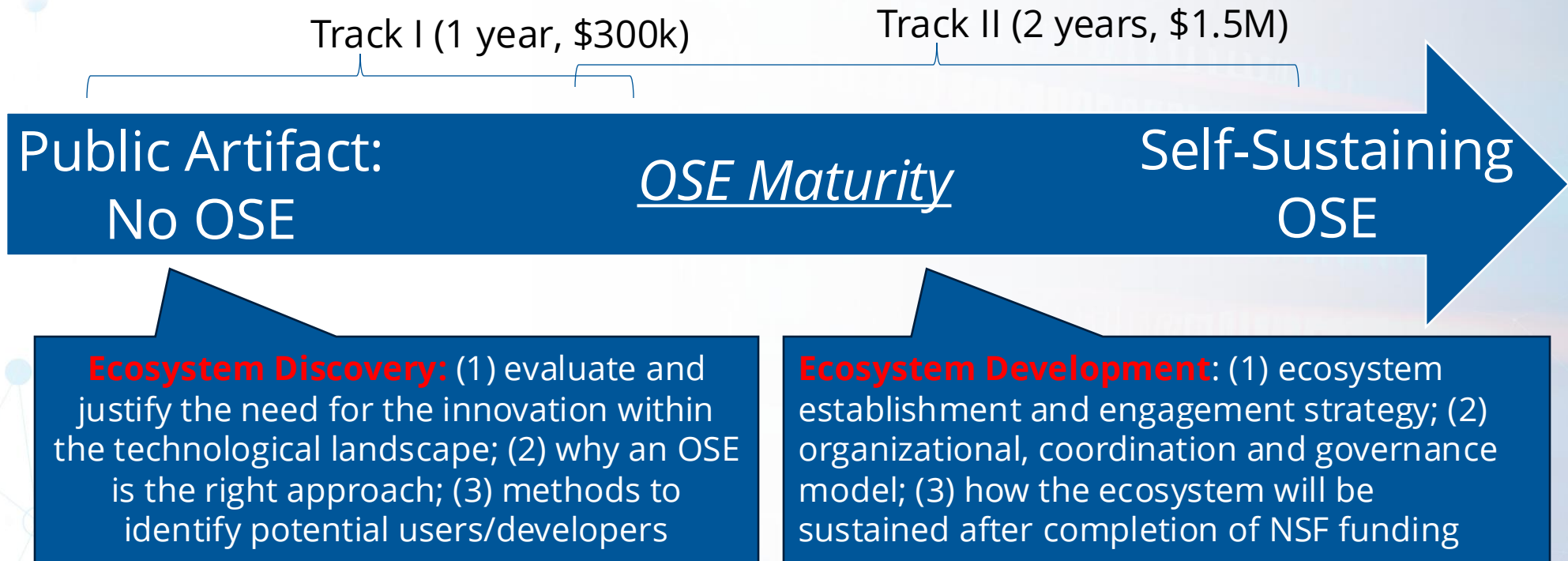
- Enter/Submit questions in/from the Q&A box during the webinar.
- Tag question with the number of the applicable **category and your Institution:**
 1. Ecosystem and elements; governance, maintenance, contributors, maturity etc.
 2. Open-Source asset(s) and technology domains
 3. Sustainability
 4. Team Make-up
 5. ICorps for PESOSE
- Hold for future webinars or mailbox
 - ✓ Proposal Submission & Merit Review
 - ✓ Budgets, Funding & Allowable Costs
 - ✓ Team Member Eligibility

Getting Started: A Few Questions



- How should we judge the maturity of our ecosystem for proposal submission purposes, e.g., Track 1 or 2?
- Is there a minimum size of an OSE (based on number of users or contributors) that is required for a PESOSE award?
- The PESOSE solicitation makes many mentions of “sustainable open-source ecosystems.” What does sustainability mean in this context?
- Could you share examples of OSEs that have already been funded by NSF or others that reflect the nature of OSEs in this Program?
- How does the I-Corps requirements work for PESOSE?

PESOSE Track I and II



Both phases: Projects should already have a publicly available, functional, robust open-source artifact, preferably available under an open-source license, and some users outside of the original developers; Product should offer promise in meeting a societal or national need



- Sustainability is the ecosystem's capacity to continually attract participation and resources, maintain and improve its open-source assets, respond to changing needs, and deliver value without depending indefinitely on its original founders or a single source of funding.
- ...does **not** necessarily mean becoming completely self-financing or generating revenue. ..having a credible and diversified way to secure whatever combination of funding, volunteer participation, institutional support, partnerships, and in-kind resources the ecosystem requires.

Sustainability: Dimensions



- **Community:** A continuing pipeline of users, contributors, maintainers, and leaders, not dependence on one person or institution.
- **Technical:** The asset is actively maintained, documented, tested, secured, updated, and able to adapt as technologies and user needs change.
- **Governance:** Roles, decision-making processes, contribution rules, conflict-resolution practices, and leadership succession are clear and trusted.
- **Financial and Operational:** The ecosystem has reliable resources for coordination, infrastructure, maintenance, security, outreach, and other essential work. Funding may come from several sources rather than just grants.

Open Source Examples and Comparators



- **POSE/Safe-OSE Active Awards:** [Search Results - NSF Award Search, proposal List or by State](#)
- **Galaxy Project:** [Scientific workflows, analysis tools, data-processing platform, training materials and shared infrastructure, Galaxy Community Hub | Galaxy Hub.](#)
- **Gathering for Open Science Hardware—GOSH:** [Open hardware designs, documentation, manufacturing practices, policy resources and community roadmaps, Home - Gathering for Open Science Hardware](#)
- **Bioconductor:** [Domain-specific software packages, interoperable data structures, workflows, documentation and training. Bioconductor - Home](#)

Sustainability: Dimensions



- **Values and Adoption:** The open-source asset continues to solve a meaningful problem and attracts organizations or communities willing to use, contribute to, or support it.
- **Organizational:** managing organization or distributed leadership structure can perform essential functions such as convening, communications, compliance, partnership development, and community support.
- **Maintainer Well being:** Essential work is distributed realistically, contributors are supported, and the ecosystem does not rely on unpaid or overextended maintainers and important practices are followed, e.g., regular funding, documentation, transparency, mentoring, and manageable workloads (Linux Foundation).

Upcoming PESOSE webinars



- **PESOSE Office Hours: Technical Guidance for Proposal Submission**
 - Wednesday, August 5, 2PM ET
 - Target audience: proposers new to the NSF proposal submission process and/or from non-academic institutions
- **PESOSE Proposal Preparation Webinar**
 - Tuesday, August 11, 1PM ET
 - Target audience: proposers planning to submit to the September 1 deadline who have questions about the Program requirements and review criteria

Engage With NSF PESOSE

Please reach out to PESOSE@nsf.gov to:

- Tell us about an OSE
- Share your interest in open-source conference

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Sign up to be a PESOSE Reviewer



***Principal investigators (PI), co-PIs, or senior personnel may NOT serve as a reviewer on any panel for a program in which they have a pending proposal, (excludes supplements, creativity, extensions, workshops, conferences, etc.) in that program.*





THANK YOU!



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