

Announcement / Ausschreibung

Three Challenges to Contribute Back to Open Source

JUNE 2023

Let's strengthen the Open Source ecosystem together!

The Sovereign Tech Fund is looking for developers who use open source and want to contribute back to it. We need a sustainable ecosystem that enables new software development and ensures the ongoing security of existing dependencies.

In three challenges, participants can work on contributing back to open source for up to eight months with a budget of up to €300,000 for each four-month round.

Many more people use open source software every day than contribute to it. It's time to give back and invest in this ecosystem, to increase its security and sustainability, and to create a digital world that we collectively shape.

The Sovereign Tech Fund invests in open digital infrastructure. For us, this means fundamental technologies that enable the creation of other software. These components – like libraries and open standards – are openly accessible, trustworthy and can be used freely. Open digital infrastructure is critical for innovation and competitiveness, and it also provides the foundation for widespread digitalization.

What are the Contribute Back challenges about?

The Sovereign Tech Fund is issuing three challenges to encourage active participation in open source infrastructure. With the call to "**Contribute Back**", we are making it possible for developers, contributors, and maintainers to actively contribute to and work on the open source projects they depend on over a four to eight month period.

We want to identify critical issues in the open source ecosystem and empower people to work on them. To do this, the Sovereign Tech Fund is offering short-term challenge funding for participants to explore new solutions and focus on implementing them over a limited period of time. Our goal is to use these challenges to discover the best ways to strengthen the ecosystem together.

The Sovereign Tech Fund provides up to €300,000 per application over a period of four months, with the possibility of a four-month extension. We will support the creation and improvement of developer tooling, the production security of Free and Open Source

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Software (FOSS) components, and the documentation of projects.

In the challenges, the STF hopes to answer important questions, for example:

- Can better **developer tooling** help FOSS maintainers manage growing technical debt and increase test coverage to provide greater reliability and maintainability in the long term?
- What **software production security** mechanisms enable FOSS projects to stay open to contributions while protecting against the increasing threat of supply chain attacks?
- As the demand on the FOSS infrastructure increases, what **documentation** is needed to allow new developers to participate and to reduce the load on maintainers?

More about the challenges

1. Improve FOSS Developer Tooling

The Improve FOSS Developer Tooling Challenge calls on participants to contribute to the development workflow for FOSS infrastructure projects.

Software development is a complex process that requires a wide range of tools and technologies. There are often pain points in the workflow that slow down development and make software harder to maintain.

The goal of this challenge is to improve the efficiency and working conditions of FOSS maintainers and contributors by creating new developer tools or improving existing ones. This also includes deploying tools in a new way that addresses existing pain points and improves the overall development workflow and maintainability of FOSS infrastructure projects.

2. Securing FOSS Software Production

The Securing FOSS Software Production Challenge focuses on securing the entire production of FOSS, from source code to binary distribution.

In recent years, there has been an increase in security breaches targeting highly used and depended-upon FOSS infrastructure. These vulnerabilities have had serious consequences for the developers, for dependent software projects, and for the software users, resulting data loss, financial loss, and damage to the reputations of those affected.

The goal of this challenge is to enable developers to collaborate securely, share their work, and reuse software at every stage of the development lifecycle. To do this, dependencies must be known and vulnerabilities must be fixed quickly before they can be exploited.

3. FOSS Infrastructure Documentation

The FOSS Infrastructure Documentation Challenge invites participants to create comprehensive documentation for the most critical and widely-used FOSS infrastructure projects.

Documentation is an essential part of any software project, but especially for FOSS projects, as it can be a significant barrier to entry for new users and contributors if it is

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not well written and organized.

The goal of this challenge is to make FOSS projects more accessible to new users and contributors through improved documentation and better knowledge management. Participants will improve the documentation for a FOSS infrastructure project of their choice and ensure that it is clear, concise, up-to-date, and accurate.

Who can apply?

We welcome applications from teams of developers in agencies, consultancies and public institutions who want to dedicate four to eight months to one of the challenges. We especially welcome applications that are centered on a technology or an open source project that the participants already use and want to improve.

Applications are open to individuals and teams of all legal forms, in Germany, the EU or from outside the EU. The Sovereign Tech Fund also welcomes applications from consortia or group projects. However, there can only be one contractor of record.

Applicants must verify that the work in their proposal is not already funded by another public institution.

For maintainers (i.e., those already actively working on open source projects), we'd like to highlight the option of **applying** to receive investment from the Sovereign Tech Fund for **longer periods of time** (<https://sovereigntechfund.de/en/applications/>).

Application Process

The challenges will take place over a period of eight months and consist of two rounds of four months each.

For the first round, interested participants apply through the Sovereign Tech Fund's application platform. The selections are made by the Sovereign Tech Fund based on the criteria outlined below. Participants spend four months developing and implementing their proposal. After three and a half months, participants will submit a report on their progress and what further activities are planned to expand on that progress.

The report serves as the input for a panel that evaluates the progress, contribution to the technology, and activities planned for the second round. Participants selected for the second round will again have four months to implement their proposals.

Teams can apply to multiple challenges if they wish.

Timeline

TIMELINE*	
6 June 2023	Applications for challenges open
6 July 2023	Application deadline
July 2023	Evaluation and selection of first round participants
September 2023	First round begins
December 2023	Evaluation of first round participants Selection of second round participants
January 2024	Second round begins
April 2024	Challenges end

** Updated on 18 July 2023: Due to the large number of applications received, we have adjusted our evaluation process and timeline so all applications received can be reviewed in detail. Based on our estimates of the time required, the first round of funded work will not begin before 1 September 2023 (originally planned for 1 August 2023).*

Selection Criteria

For the first round, the Sovereign Tech Fund will select participants based on the application and the following criteria, each of which will be scored on a scale of 1-5. The questions below serve as a guide for scoring each criterion.

First round selection

Degree of Criticality

- What is the level of technical relevance?
- Is the technology to be supported and improved critical? Are there many dependencies?

Degree of Maturity

- Is there an existing community of developers around the technology with an established organizational model?
- How are security risks associated with the technology and its development managed? Are there clear procedures and mechanisms in place? If not, does the proposed work include plans to address this?

Degree of Sustainability

- Is there involvement from the developer community for the implementing this project? Can it be verified that the work is desired by the FOSS project and that there is consent?
- Can it be expected that the activities will improve the technology in the long term?
- Can positive effects be reasonably expected in the long term?

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Degree of Benefit for the Public

- Is there a public interest in the functioning and securing of this technology?
- Is it easy to understand what the societal relevance is?

Degree of Feasibility

- Are the goals achievable within the timeframe?
- Are the activities structured in a practical way?

Second round selection

By 15 December 2023, all participants will submit a report on their progress and any further activities planned for the second round. The Sovereign Tech Fund will provide a template for this report. The selection for the second round will take place in a joint session with the STF and selected external experts. The decisions will be announced in November. The selected projects will receive further funding of at least €65,000 and a maximum of €300,000 per project over four months.

Selection is based on the progress of the project to date and the following criteria:

Degree of progress (Maturity)

- Did the work in the first round improve the technology's organizational capacity to meet its development and security goals?
- Have new procedures, documentation, or tools been introduced that improve the long-term security of the project?

Degree of sustainability

- Did the activities in the first round improve the sustainability of the technology?
- Have new processes, documentation, or tools been introduced that improve the long-term sustainability or maintainability of the project?

Degree of feasibility

- Are the goals achievable within the timeframe?
- Are the activities structured in a practical way?

Additional Information

How will the Sovereign Tech Fund provide support?

For the first round, the STF will provide a minimum of €65,000 and up to €300,000 per selected application. The applicants must present their financial needs and the planned activities in their applications. For the second round of funding, a minimum of €65,000 and a maximum of up to €300,000 will be allocated again.

Prospective participants can also apply for more than one challenge.

All figures quoted do not include VAT.

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How does the application process work?

Applicants can apply for the first round using the Sovereign Tech Fund application platform (<https://apply.sovereigntechfund.de>). Sample application forms are available at the end of this document.

Participants in the first round can apply for the second round by submitting their report.

What about confidentiality?

Sovereign Tech Fund and SPRIND will treat all submissions confidentially. Information about the submissions will only be passed on to a panel of judges or reviewers. STF and SPRIND also require these persons to maintain confidentiality.

Who can I contact with questions?

We ask applicants to review the Participation Agreement and the rest of the FAQs. If you still have questions that are not answered there, please contact challenges@sovereigntechfund.de for further clarification.

What is the Sovereign Tech Fund? What is SPRIND?

The Sovereign Tech Fund (STF) supports the development, improvement, and maintenance of open digital infrastructures. The goal of the STF is to strengthen the open source ecosystem sustainably. We focus on security, resilience, technological diversity, and the people behind the code. It is funded by the German Federal Ministry of Economic Affairs and Climate Action (BMWK) and hosted and supported at the German Federal Agency for Disruptive Innovation GmbH (SPRIND).

SPRIND enables and supports disruptive innovation – products, services and systems that make life tangibly and sustainably better. SPRIND was founded in 2019 by the Federal Republic of Germany. In addition to the defining goal of discovering and advancing research ideas that have the potential to become breakthrough innovation, SPRIND's mission also includes contributing to the advancement of knowledge transfer of innovative ideas as well as the underlying factors driving innovation.

Gefördert durch:



Bundesministerium
für Wirtschaft
und Klimaschutz

aufgrund eines Beschlusses
des Deutschen Bundestages

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SPRIND

SPRIND GmbH BUNDESAGENTUR
FÜR SPRUNGINNOVATIONEN
Lagerhofstraße 4
04103 Leipzig



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Sample form, not for offline completion.

Visit <https://apply.sovereigntechfund.de> to apply.

Challenges Tooling

Application name

I acknowledge: My application will be dismissed if it does not fit within STF's scope of work or if it is incomplete.

I acknowledge: Funding is denied if other grants are applied for from other public bodies for the same purpose (exclusion of duplicate funding).

I acknowledge: I am legally able to sign contracts for this project or represent an organization that can.

I acknowledge: All code and documentation to be supported must be licensed such that it may be freely reusable, changeable and redistributable

Project title

May be identical with application name

Link to project repository

Link to project website (optional)

What open source infrastructure component would you like to contribute to? Please provide more details. 300 words

Why is this technology critical? Please explain to us the relevance of this technology. 300 words

Please provide a brief overview over your project's dependencies, including your own dependencies and projects that rely on your technology. 300 words

Who benefits from this technology and the improvements or contributions? Which target groups does your project address (who are its users?) and how do they benefit from the funding (directly and indirectly)? 300 words

How are decisions regarding this technology's development made? Please describe the project's governance model. 300 words

If you don't have an explicit governance model, please let us know why.

How does this project handle security risks? Are there policies, procedures, or tools in place to minimize the introduction of vulnerabilities or undesired contributions? 300 words

The Improve FOSS Developer Tooling Challenge calls on participants to contribute to the development workflow for FOSS infrastructure projects.

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How will you address the challenge described? Give an overview of your work and why it is significant, specifically addressing the challenge. Explain what the field will learn from your proposed work and how it contributes to the long-term sustainability of the technology. 900 words

How will you accomplish the work? Please provide a list of deliverables with associated effort and cost of each deliverable. 900 words

Example:

Deliverable 1: Re-engineer ExampleDeveloperTool-Core into it's own library (74,000 Euros) (90 person days)

Deliverable 2: Implement UI Improvements to ExampleDeveloperTool-Core and ExampleDeveloperTool-Rust (24,000 Euros) (24 person-days)

Deliverable 3: Develop Python extension for ExampleDeveloperTool (43,000 Euros) (60 person-days)

Total amount in Euro

Please enter numbers only

Your name/handle

Link to your profile

(e.g. your GitHub profile)

Describe your relationship to the maintainers of this technology. Are you yourself the maintainer? Do they know you plan to do this work and do they support it? Please tell us more about how you obtained their support and how you plan to work together to make sure your contributions are accepted. 400 words

What is your role in this project?

- Maintainer
- Contributor
- Fundraiser
- Fiscal host
- Other

Country and state of residence

This information is not relevant for selection but for administrative and evaluation purposes.

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Challenges Securing Production

Application name

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Project title

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Link to project repository

Link to project website (optional)

What open source infrastructure component would you like to contribute to? Please provide more details. 300 words

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Challenges Documentation

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