



Should Governments Pay for Open Source Maintenance? A European Answer

Presenting the Findings of a Feasibility Study for an EU Sovereign Tech Fund (EU-STF)

Nicholas Gates, Senior Policy Advisor at OpenForum Europe



OpenForum
Europe



OpenForum
Europe

Funding Europe's Open Digital Infrastructure

A Study on the Economic, Legal,
and Political Feasibility of an EU
Sovereign Tech Fund (EU-STF)

By: Nicholas Gates, Jennifer Tridgell, Rosa Maria Torraco, Carsten Schwäbe, Felix Reda,
Andreas Hummler, Thomas Streinz, Astor Nummelin Carlberg, and Knut Blind

This work by OpenForum Europe is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License



OpenForum
Europe

Authors:



Nicholas Gates



Jennifer Tridgell



**Rosa Maria
Torraco**



Carsten Schwäbe



Felix Reda



Andreas Hummler



Thomas Streinz



**Astor Nummelin
Carlberg**



Knut Blind

**Why do a feasibility study for an
EU Sovereign Tech Fund *now*?**



**Sovereign Tech
Agency**



Log4j and the problem with trusting open source

Open source isn't the issue — companies need mechanisms to ensure the integrity of the software and code they adopt.

Published Dec. 20, 2021



Samantha Schwartz
Reporter



Open-Source Software Community Rocked by a Sophisticated Backdoor in XZ Utils

Late last month, a Microsoft engineer who volunteers for RDBMS PostgreSQL caught what is described as one of “the best executed supply chain attack we’ve seen described in the open.” The attack, possibly planned and under execution since at least 2021 to target several Linux distributions, could have proven catastrophic had it not been discovered in time.

The Top 10 OSS Risks



- OSS-RISK-1 Known Vulnerabilities
- OSS-RISK-2 Compromise of Legitimate Package
- OSS-RISK-3 Name Confusion Attacks
- OSS-RISK-4 Unmaintained Software
- OSS-RISK-5 Outdated Software
- OSS-RISK-6 Untracked Dependencies
- OSS-RISK-7 License Risk
- OSS-RISK-8 Immature Software
- OSS-RISK-9 Unapproved Change (Mutable)
- OSS-RISK-10 Under/Over-Sized Dependency

Why do a feasibility now?

CONFIRMATION HEARINGS 2024

“... **open source and open standards** [...] has really been a **European success story**, and they have been in the heart of our policies of **connectivity, eID data and AI** also. So we will continue this approach. [...] In data spaces and also in the **cloud services**, this is an important basis [...] Now we can see that the market is taking up here because of the open source projects, where **European Start-Ups** are doing, for example, now projects on **generative AI** and in **microelectronics**”



“Cybersecurity is the foundation of Europe's stability and sovereignty in the 21st century. In an era of growing geopolitical tensions, we must act together—within the European Union and in cooperation with our international partners.”

– Krzysztof Gawkowski

Deputy Prime Minister, Minister for Digital Affairs

“Cyber crises know no borders and international cooperation is essential here for prevention and response.”

– Henna Virkkunen, Executive

**Vice-President for Tech
Sovereignty, Security and
Democracy**



POLISH PRESIDENCY
COUNCIL OF THE EUROPEAN UNION

POLAND25.EU



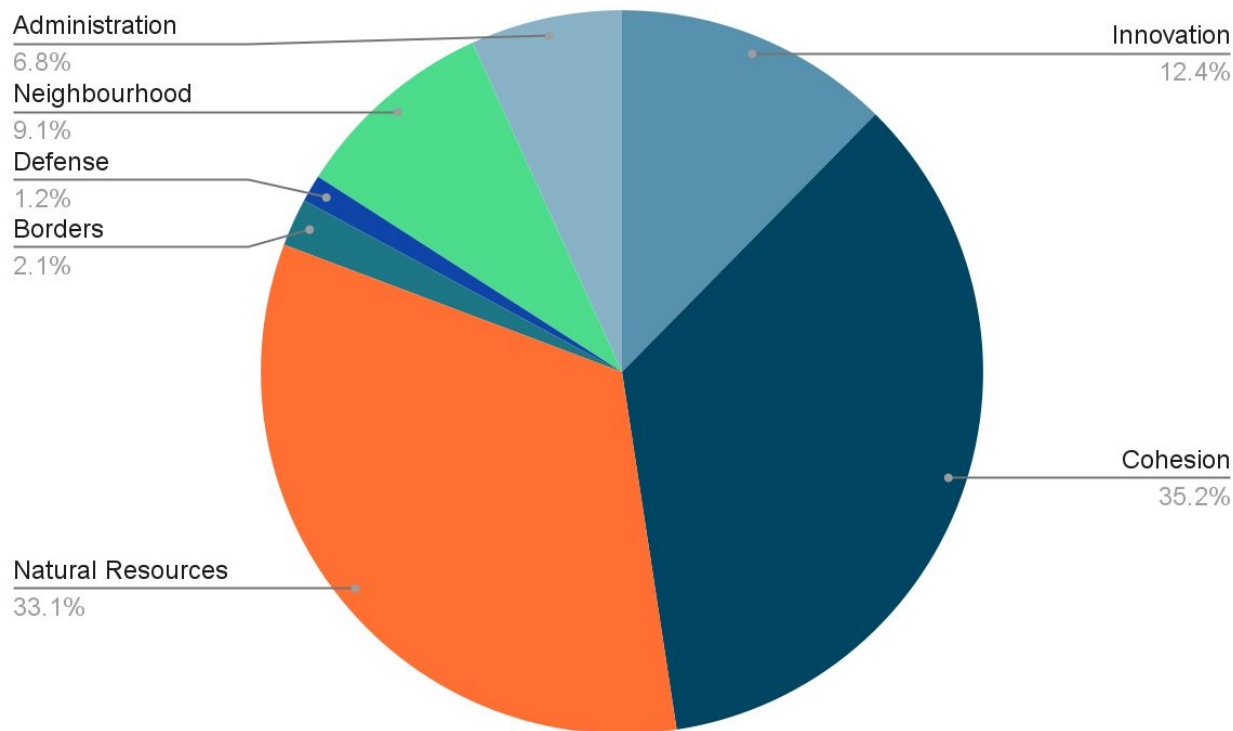
Warsaw Call Declaration adopted at the informal TTE Telecom Council on cybersecurity

Press release / 5 March 2025

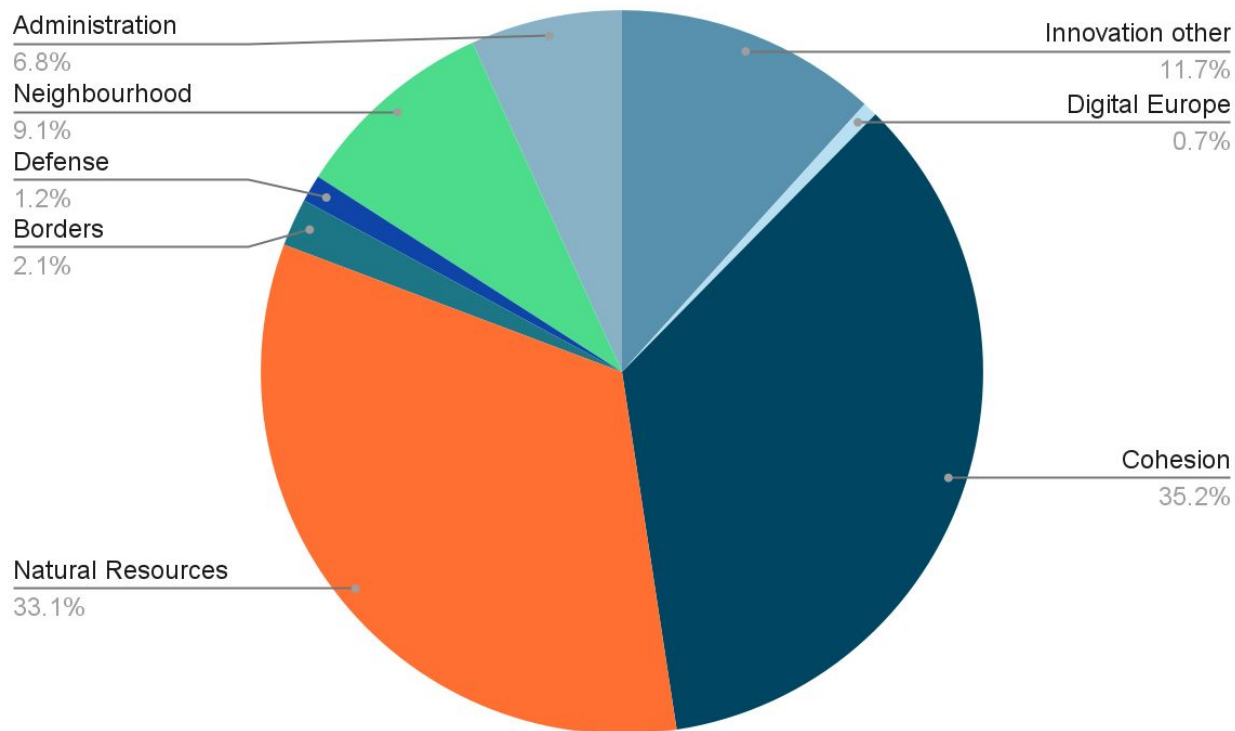
Deputy Prime Minister, Minister of Digital Affairs Krzysztof Gawkowski
© Chancellery of the Prime Minister/ PAP S.A.



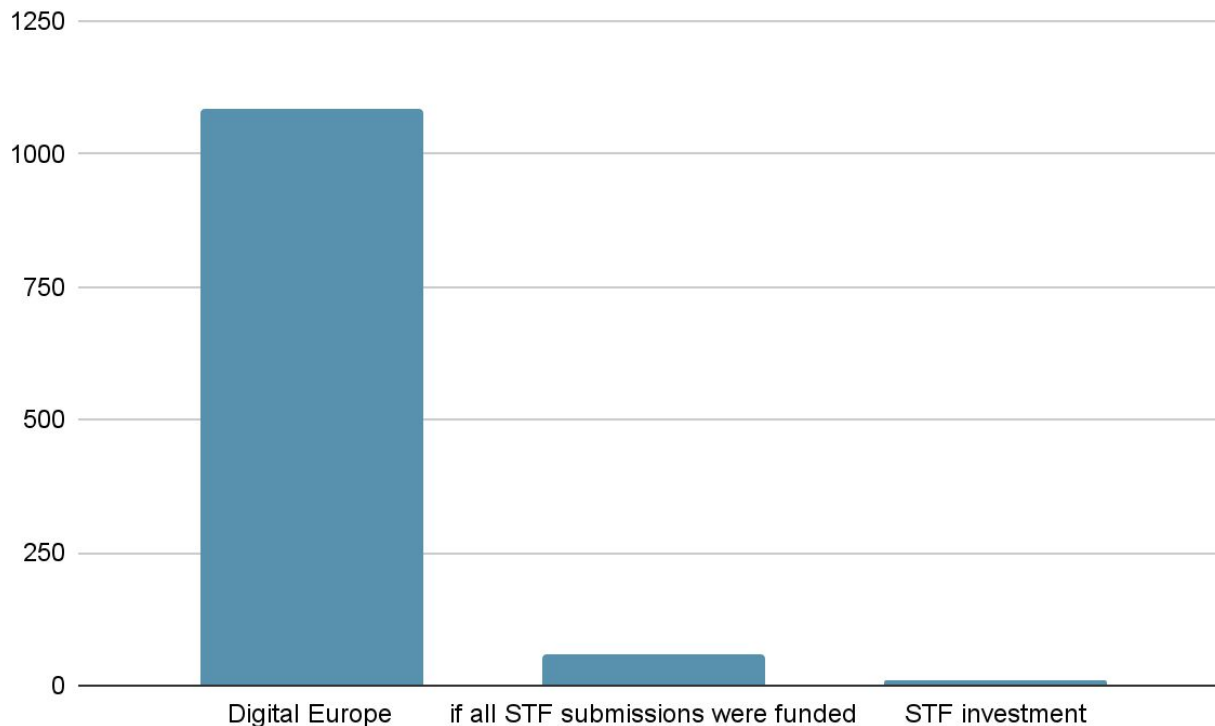
Where does EU funding go? (21-27)



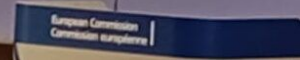
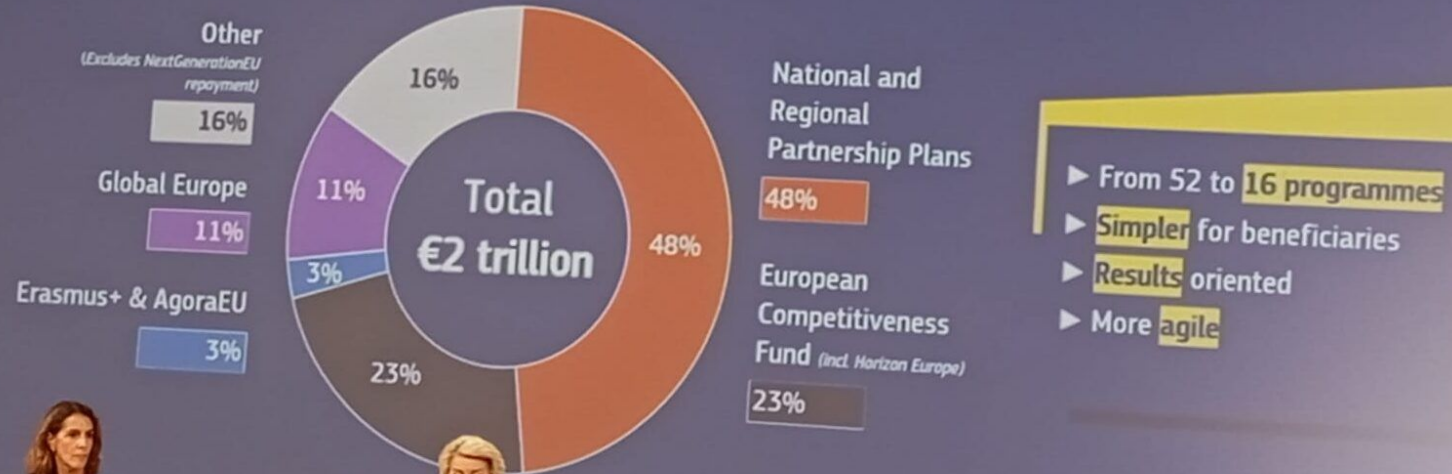
Where does EU funding go? (21-27)



Average annual budget in M€



AN AMBITIOUS BUDGET FOR A STRONGER EUROPE 2028-2034



**What are the key findings from the
EU-STF Feasibility Study?**

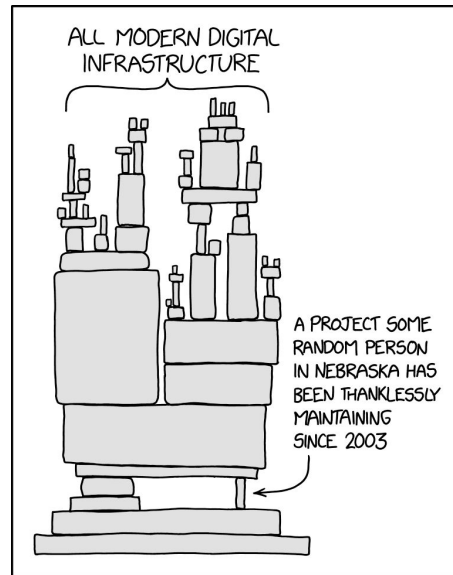
The need for mission-driven investment in open digital infrastructure

The economics of investing in open source technologies

Public funding is essential to overcome market and system failures behind chronic under-investment in open source technologies. Without public-led intervention, the OSS ecosystem will continue to lack the coordinated, mission-driven investments required to sustain, maintain, and secure Open Digital Base Technologies (ODBTs) at scale.

A dual tragedy of the commons

OSS suffers from a dual tragedy: under-provision at the code level and attention depletion at the production level, meaning that simply increasing contributors can exacerbate maintainer burnout. Public-led pooled funding can address these systemic sustainability challenges by directly supporting core developers, governance tools, and administrative infrastructure—areas often overlooked by private investment.



OpenForum
Europe

Europe is well-positioned to meet the moment and fund open digital infrastructure

The economic benefits of OSS investment

Even modest OSS investments yield growth effects comparable to large EU infrastructure programmes and increase economic complexity, resilience, and open standards adoption. To achieve long-term benefits for digital sovereignty and economic innovation, the EU must act as a reliable market creator and funder, especially where open source lacks viable commercialisation paths.

Mission-driven investment in open source technology

Mission-driven investment in open source technologies addresses core policy goals of digital sovereignty, autonomy, resilience, cybersecurity, and competitiveness. Open source supports autonomy by reducing external dependencies and promotes resilience by ensuring transparency, distributed maintenance, and reduced vendor lock-in, making it a strategic multiplier for European digital policy.

Economic rationale for the EU-STF

- **Guaranteeing the provision of a viable and vibrant open source ecosystem not only facilitates the supply of OSS as a public good but also constitutes a strong strategic asset for Europe.** Studies have shown that OSS contributes significantly to economic performance: the European Commission has estimated that open source already adds between €65–95 billion annually to the EU's Gross Domestic Product.
- **Globally, the demand-side value of OSS is assessed at up to USD \$8.8 trillion.** Even relatively modest increases in capital injections or state funding for OSS activities can generate growth effects on par with large-scale European investment or research programmes, while simultaneously strengthening resilience, competitiveness, and innovation capacity.
- **Without public-led intervention to diversify the funding available to the open source ecosystem, OSS technologies will continue to lack the coordinated, mission-driven investments required to sustain, maintain, and secure open source technologies at scale.** Public-led pooled funding can address sustainability challenges inherent in how OSS – by virtue of being free to edit and modify – is developed and maintained, by directly supporting key contributors and maintainers to do their work.
- **As open source often has challenges in finding viable commercialisation paths, modest OSS investments yield growth effects.** These effects are comparable to large EU infrastructure programmes and increase economic complexity, resilience, and open standards adoption.

Policy rationale for the EU-STF

Mission-driven investment in open source technologies addresses core policy goals of autonomy and resilience, which underpin digital sovereignty, cybersecurity/cyber resilience, and competitiveness. Open source supports autonomy by reducing external dependencies and promotes resilience by ensuring transparency, distributed maintenance, and reduced vendor lock-in, making it a strategic multiplier for European digital policy.

- **Digital sovereignty:** The EU-STF supports autonomy and resilience, which are considered preconditions for making policies and investing in projects that support digital sovereignty.
- **Cybersecurity/cyber resilience:** The EU-STF is envisioned as enhancing cyber resilience by supporting the maintenance and security of open source components within Europe's digital infrastructure.
- **Competitiveness:** The EU-STF contributes to competitiveness by strengthening Europe's open digital base, reducing reliance on single vendors, and supporting strategic technological capabilities.

Mandate of the EU-STF

1. The EU-STF must **preserve the core features of the German STF** while embracing distinguishing aspects of its EU-wide scale.
2. The **EU should contribute at least EUR €350 million to its budget** over the course of the next MFF to invest in maintenance, security, and improvement of key open source components, as well as identify/map dependencies and invest in ecosystem strengthening activities.
3. This **core budget should be complemented** by Member State and industry contributions.



Key activities of the EU-STF

1. **Mapping and Identifying OSS Dependencies and Projects of Strategic Interest:** The EU-STF should begin by mapping software dependencies across critical infrastructure to identify under-maintained, vulnerable, or strategically important open source components.
2. **Investing in Maintenance:** The EU-STF should procure maintainers to carry out essential maintenance work on their projects identified as strategically important.
3. **Investing in Security:** The EU-STF should fund security audits and expert-driven interventions by trusted intermediaries to help maintainers assess and improve their projects' cybersecurity posture.
4. **Investing in Improvement:** Improvement should be a distinct funding category to help widely used projects scale and evolve, with priorities guided by strategic dependency mapping.
5. **Investing in Ecosystem-Strengthening Activities:** The EU-STF should coordinate with stakeholders across the open source ecosystem to align efforts, build capacity, support collaboration, and provide training and peer-support programmes.

Seven key criteria for a funding vehicle

1. **Pooled Financing and Coordination:** The EU-STF should enable joint investment from the EU, Member States, and industry to consolidate fragmented efforts and ensure strategic alignment across borders.
2. **Low Bureaucracy:** To remain attractive and accessible to open source communities, the EU-STF must minimise bureaucratic overhead and simplify compliance processes.
3. **Political Independence:** The fund should operate with institutional autonomy and multistakeholder input to ensure decisions reflect both public priorities and the needs of the open source ecosystem.
4. **Flexible Funding:** It must support a range of funding models – e.g. microgrants, emergency response, and core maintenance – while maintaining oversight mechanisms and flexibility in funding recipients.
5. **Community Focus:** The EU-STF should embed structured collaboration with open source communities, foundations, and industry to co-define funding priorities and respond to evolving needs.
6. **Strategic Alignment:** All funding decisions must be grounded in EU policy goals – such as digital sovereignty, cybersecurity, and competitiveness – and compliant with state aid and procurement rules.
7. **Transparency:** The fund must uphold transparency in governance, funding allocations, and evaluation metrics to foster trust and legitimacy across stakeholders.

Tension between more centralised and decentralised approaches to funding

There are two potential models most worthy of consideration.

A standalone and centralised fund – A new funding body created by legislation.

- **Recommended implementation: Standalone Fund via HaDEA.** Likely managed under DG-CNECT. Executive implementation could be delegated to HaDEA, given its experience with Horizon Europe, DIGITAL, and CEF Digital.

A hybrid/shared management structure – Leveraging established EU institutional frameworks like the EDIC that allow for pooled contributions of Member States alongside EU funding, and even industry co-financing.

- **Recommended implementation: European Digital Infrastructure Consortium (EDIC):** Governed by: EU law, Host Member State's law, and EDIC statutes and implementing rules

Making the EU-STF into a reality



What happens next?

- Doing outreach to the European Commission and European Parliament
- Tracking ongoing development of proposals surrounding the European Competitiveness Fund as part of the MFF negotiations
- Continuing to get the word out and speak at events like this!

What can you do?

- Talk about the EU-STF whenever you mention open source funding
- Call your MEP and advocate for open source funding

Join us!

1. If you want to express support, reach out and we can **add a testimonial** from your organisation to the website.
2. **Write a blog** on your organisation's website to share the report and raise awareness.
3. Join our campaign and **add your name to a list of organisations who have expressed public support** for the EU-STF.
4. **Write a letter of public support** to your MEP.
5. Reach out to us to **arrange a call** and discuss how you can become involved.

Get in touch: nicholas@openforumeurope.org



Funding Europe's Open Digital Infrastructure

**A Study on the Economic, Legal,
and Political Feasibility of an EU
Sovereign Tech Fund (EU-STF)**

By: Nicholas Gates, Jennifer Tridgell, Rosa Maria Torraco, Carsten Schwäbe, Felix Reda,
Andreas Hummler, Thomas Streinz, Astor Nummelin Carlberg, and Knut Blind

This work by OpenForum Europe is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

