



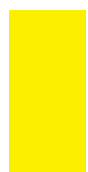
ALIGNING RESEARCH AND INNOVATION FUNDING TO THE DYNAMICS OF DIGITAL COMMONS

Policy Building Blocks for the Digital Commons #5

**OPEN FUTURE
POLICY BRIEF**

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ABOUT THIS POLICY BRIEF

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[Open Future](#) is a European think tank that develops new approaches to an open internet that maximize societal benefits of shared data, knowledge and culture. Open Future advocates for Digital Commons–characterized by distributed production, collective governance, and shared stewardship–as offering the most viable path towards a resilient digital ecosystem.

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INTRODUCTION

Digital sovereignty, understood as the ability of states, organizations, and individuals to independently shape and control their digital environments, has become a central concern for the European Union. Achieving it requires more than regulatory oversight of dominant technology providers: it requires building credible alternatives.

Digital Commons offer a pathway to digital sovereignty beyond protectionism and a paradigm for technology development that counters the extractive, proprietary dynamics that define the current landscape. The EU's research and innovation funding architecture, however, favors a market-driven approach, disproportionately focusing on “disruptive” innovation and short-cycle projects. This leaves Digital Commons without the necessary support to mature into viable alternatives, and leaves critical open source infrastructure chronically underfunded. This brief proposes reorienting the Multiannual Financial Framework to support Digital Commons and foster sustainable alternatives that strengthen digital sovereignty.

PROBLEM DEFINITION: DESIGNED FOR INNOVATION AND DISRUPTION, NOT COMMONS OR INFRASTRUCTURE

The EU's research and innovation funding landscape remains strongly shaped by narratives of technosolutionism—that technological innovation alone can address structural or societal challenges.¹ This leads to a significant emphasis on disruptive or frontier technologies in frameworks for funding research and innovation. This focus often comes at the expense of formulating frameworks attuned to the realities of the foundational digital infrastructure that underpins public services, the economy, and the digital public sphere.

Innovation premised on closed and proprietary ecosystems remains structurally dependent on the providers of those infrastructures, deepening lock-in and creating risks related to uneven value extraction from dominant platforms and infrastructure providers. Recent scrutiny by competition authorities of dominant hyperscalers illustrates these dynamics.² While support for ‘disruptive’ and future-oriented innovation remains important, such initiatives ultimately depend on resilient foundational infrastructure. In turn, such infrastructure requires sustainable funding aligned with strategic public priorities. Without such support funding, innovative alternatives are unlikely to resist capture even if they reach broader uptake.

¹ Open Future (2024). Putting money where your mouth is: Public investment in digital commons and digital sovereignty. Open Future. Available at: <https://openfuture.eu/publication/putting-money-where-your-mouth-is/>

² See, for instance: Autorité de la concurrence (2023). Cloud computing: The Autorité de la concurrence issues its market study on competition in cloud services. Paris: Autorité de la concurrence. Available at: <https://www.autoritedelaconcurrence.fr/en/press-release/cloud-computing-autorite-de-la-concurrence-issues-its-market-study-competition-cloud>; Competition and Markets Authority (2023). Cloud services market investigation. London: Competition and Markets Authority (CMA). Available at: <https://www.gov.uk/cma-cases/cloud-services-market-investigation>.

Integrating support for alternative digital infrastructures requires attention not only to how they are purchased and governed, but also to how they are built.³ This includes focusing on how innovation in digital technologies is conceived and prioritized from the outset through research and innovation funding frameworks. Public R&I funding shapes technological trajectories upstream, yet current frameworks remain insufficiently oriented toward commons-based approaches across different types of Digital Commons and stages of maturity, limiting the range of viable public-interest alternatives that can emerge and scale.

Digital Commons represent a distinct model of innovation and governance, rooted in community-led development and stewardship. They enable a shift away from the dominant model of digital infrastructure provision, which entrenches proprietary ecosystems controlled by large technology firms, and is often misaligned with public-interest. In addition, much of contemporary digital infrastructure is built upon Digital Commons. The European Commission's 2021 study⁴ on the economic impact of open source software and hardware recognized that open source software delivers a 3.5 times return on investment and constitutes a form of Digital Commons requiring commons-based governance rather than purely market-based approaches.

Critical open source infrastructure also underpins a resilient and pluralistic digital public space, including decentralized and interoperable communication platforms that support independence from proprietary and surveillance-driven platforms. Dependence on such platforms creates strategic vulnerabilities and threatens the integrity of public discourse.⁵ While regulation can mitigate some harms, it cannot replace sustained public investment and collective governance of these foundational digital infrastructures.

The establishment of the Digital Commons EDIC,⁶ and prominent focus on it at the Summit on European Digital Sovereignty,⁷ signals growing recognition of Digital Commons as central to the EU's sovereignty agenda. Explicitly foregrounding Digital Commons within research and funding frameworks is therefore essential to ensure continued alignment with these political priorities.

³ A previous brief in this series examines how public procurement can strategically support the scaling of alternatives: Singh, A and Warso, Z. Public Procurement as a Strategic Lever for Digital Sovereignty, Open Future (26 March 2026), <https://openfuture.eu/publication/public-procurement-as-a-strategic-lever-for-digital-sovereignty/>.

⁴ European Commission (2021). Study on the impact of open source software and hardware on technological independence, competitiveness and innovation in the EU economy. Directorate-General for Communications Networks, Content and Technology (DG CONNECT). Luxembourg: Publications Office of the European Union. Available at: <https://digital-strategy.ec.europa.eu/en/library/study-about-impact-open-source-software-and-hardware-technological-independence-competitiveness-and>

⁵ Hybrid Election Integrity Observatory (2026). Dutch Parliamentary Elections 2025 Report. Available at: <https://www.heio.nl/wp-content/uploads/2026/01/260115-HEIO-Final-Report.pdf>.

⁶ European Commission (2025). Commission launches Digital Commons EDIC to support sovereign European digital infrastructure and services. Available at: <https://digital-strategy.ec.europa.eu/en/news/commission-launch-digital-commons-edic-support-sovereign-european-digital-infrastructure-and> (accessed 18 February 2026).

⁷ Presidency of the French Republic (2025). Summit on European Digital Sovereignty Delivers Landmark Commitments for a More Competitive and Sovereign Europe. 18 November 2025. Paris: Élysée Palace. Available at: <https://www.elysee.fr/en/emmanuel-macron/2025/11/18/summit-on-european-digital-sovereignty-delivers-landmark-commitments-for-a-more-competitive-and-sovereign-europe>.

The proposed MFF continues to earmark funding for digital research and innovation through the Horizon Framework, along with introducing a consolidated European Competitiveness Fund. However, the current proposal makes only a brief mention of open source technologies (Recital 28 of the ECF), despite acknowledging their importance in addressing critical dependencies and supporting digital transformation.

The European Parliament has also articulated its initial position in its Draft Interim Report of the Committee on Budgets on the proposed MFF Regulation.⁸ While the report addresses competitiveness, resilience, strategic autonomy, and the provision of “European public goods”,⁹ it does not explicitly recognize Digital Commons or open source infrastructure as strategic priorities, representing a missed opportunity to anchor these objectives in the EU’s long-term budgetary framework.

The Digital Commons paradigm goes beyond questions of collective provision by Member States by foregrounding governance—emphasizing not only shared benefit, but shared stewardship, open standards, and collective control over infrastructure.¹⁰

Lack of Strategic Funding for Scale

While the EU funds digital research and innovation through several programmes (with Next Generation Internet as a prominent example), the current model of support tends to be project-based, with limited support for continuity or scaling. Findings from the NGI Commons project¹¹ suggest that such funding structures tend to incentivize feature development over critical tasks related to governance and sustainability. This risks leaving activities such as maintenance, security, documentation, or community building in Digital Commons projects and communities undervalued and/or underfunded. This gap not only undermines the growth of individual initiatives, but it also prevents the emergence of sustainable Digital Commons that can strengthen the EU’s digital sovereignty.

⁸ European Parliament, Committee on Budgets (2025). Draft interim report on the proposal for a Council Regulation laying down the multiannual financial framework for the years 2028–2034 (PR_1333480EN). Brussels: European Parliament. Available at: https://www.europarl.europa.eu/meetdocs/2024_2029/plmrep/COMMITTEES/BUDG/PR/2025/12-11/1333480EN.pdf.

⁹ European public goods can be understood as goods which generate cross-border value that cannot be adequately provided by individual Member States acting alone. See: European Parliament, Directorate-General for Internal Policies (2024). Which European Public Goods? IPOL Policy Department Study, PE 755.722. Brussels: European Parliament. Available at: [https://www.europarl.europa.eu/RegData/etudes/IDAN/2024/755722/IPOL_IDA\(2024\)755722_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2024/755722/IPOL_IDA(2024)755722_EN.pdf).

¹⁰ Where the “European public goods” framing can remain agnostic about ownership and governance models, the Digital Commons approach maintains that the mode of production and governance is central to sovereignty outcomes.

¹¹ NGI Commons Consortium (2025). D1.3 The Impact of NGI Funding on Digital Commons and Internet Commons – Intermediate Report (Horizon Europe, Grant Agreement No. 101135279). Available at: https://commons.ngi.eu/download/d1-3-the-impact-of-ngi-funding-on-dc-ic-intermediate-report/?wpdmdl=54734&masterkey=sPTWPY0EOonMnMMXIWLfD_7dCY6CpoW9yNCoZ95gDom4z6jov4jb8_XOpErUGoElpduRFS-ZPNjXrs3yz6u7FxbCH5NlgG2LQFFAXe5L54M. [Pending approval]

Beyond building technical infrastructure, deploying viable alternatives to dominant platform models also requires alternative business models and stewardship arrangements. This includes experimentation with governance structures such as cooperative ownership, public utility approaches, or community-governed infrastructures. Alongside long-term maintenance, the development, testing, and deployment of these alternatives require stable, multi-year support in order to make them successful and deployable at scale.

Limited support for critical infrastructure

While many successful open source projects benefit from private contributions or commercial ecosystems, numerous others—especially small but widely used components—operate under severe resource constraints.¹² This creates a paradox: open source software generates immense public value, yet the communities stewarding these resources operate on the margins of sustainability. Moreover, many projects are maintained by a single individual who absorbs a lot of community knowledge and has huge burdens placed on their time and contribution. More than 70% of modern software depends on open source components,¹³ yet a 2024 survey¹⁴ found that 60% of European open source maintainers are unpaid, and most are sole maintainers of their projects. The consequences can sometimes manifest in the form of security vulnerabilities and governance deficits.

As with any critical infrastructure, the digital systems underpinning social and economic life require predictable, long-term funding throughout their entire lifecycle. The EU's research and innovation funding infrastructure must therefore move from rhetorical support for open source toward institutionalizing commons-based production as a legitimate form of economic activity deserving of sustained investment.

PROPOSED INTERVENTION

In order to align the EU's funding framework for digital technologies with the principles and realities of Digital Commons, this policy brief proposes a layered model spanning Horizon Europe and the European Competitiveness Fund (ECF).

Strengthening Digital Commons as part of Europe's digital innovation and infrastructure landscape requires an integrated approach across instruments: one that supports early experimentation through research and innovation programmes; values maintenance and governance as much as technical innovation; and that provides medium and long-term funding for scaling and stewardship of Digital Commons that underlie essential infrastructures.

¹² Eghbal, N. (2016). Roads and Bridges: The Unseen Labor Behind Our Digital Infrastructure. Ford Foundation. Available at: <https://www.fordfoundation.org/learning/library/research-reports/roads-and-bridges-the-unseen-labor-behind-our-digital-infrastructure/>.

¹³ Linux Foundation (2022). Census II of Free and Open Source Software – Application Libraries the World Depends On. Available at: <https://www.linuxfoundation.org/blog/blog/a-summary-of-census-ii-open-source-software-application-libraries-the-world-depends-on>.

¹⁴ SonarSource and Tidelift (2024). The 2024 Maintainer Impact Report. Available at: <https://www.sonarsource.com/the-2024-tidelift-maintainer-impact-report.pdf>.

Public Funding for Maintenance of Open (Source) Infrastructure

Realizing the full potential of Digital Commons requires a shift in how public investment is conceived and deployed. A mapping of Digital Commons and related communities by the NGI Commons project¹⁵ indicates that while some Digital Commons may generate revenue through provisioning services, many foundational infrastructures may be unable to create viable income streams due to their open and shared nature. This is particularly true for foundational open (source) technologies at lower layers of the stack, many of which are used broadly across a range of digital infrastructures and/or end-user applications and services. These foundational technologies require direct, sustained public funding to support and maintain them.

Public investment, best suited to supporting infrastructures that do not fully align with market logic, should enable the sustainable development, maintenance, and governance of such shared digital resources. Such support should be structured as core, multi-year funding that enables projects to secure and retain developer capacity and sustain essential development and maintenance activities over their entire lifecycle.

There have been calls for an EU Sovereign Tech Fund, modelled on the German Sovereign Tech Agency, to address critical dependencies in the EU's digital infrastructure, particularly by supporting strategically important open source components through targeted maintenance funding. While these calls are often focused on open source software, the core logic can extend to a wide range of Digital Commons communities and artefacts, including the work of open data initiatives, platform cooperatives, open hardware, programming languages, and beyond.

One such proposal¹⁶ for maintenance funding at the EU-level—a so-called EU Sovereign Tech Fund (EU-STF)—sets out a mandate centred on five core activities:

- Mapping and identifying open source dependencies and projects of strategic interest,
- Systematically mapping open source dependencies across critical infrastructure to identify under-maintained, vulnerable, or strategically important components,
- Procuring and supporting maintainers to carry out essential upkeep of strategically relevant open source projects,
- Funding security audits and expert-led interventions, delivered through trusted intermediaries, to strengthen the cybersecurity posture of critical open source components,
- Providing dedicated funding to enable widely used projects to improve, evolve, and scale in line with strategic priorities, and

¹⁵ NGI Commons Consortium (2025). D1.1 Active Communities of Commoners and Relevant Commons (Grant Agreement No. 101135279). Horizon Europe Programme. Available at: https://cdn.commonsongi.eu/wp-content/uploads/2025/04/01095250/NGI-Commons_D1.1_ACTIVE-COMMUNITIES-OF-COMMONERS-AND-RELEVANT-COMMONS_v1.pdf.

¹⁶ OpenForum Europe (2023). Investing in Open Source Sustainability and Security: OFE's Proposal for an EU Sovereign Tech Fund. Available at: <https://openforumeurope.org/investing-in-open-source-sustainability-and-security-ofes-proposal-for-an-eu-sovereign-tech-fund/>.

- Supporting coordination, capacity-building, collaboration, and training across the open source ecosystem to reinforce long-term sustainability.

National initiatives such as the German Sovereign Tech Agency have demonstrated the feasibility and value of targeted maintenance funding. Scaling such efforts to the EU level—through pooled EU, Member State, and industry co-financing—would allow for broader coverage of cross-border dependencies and greater long-term financial stability. Addressing digital infrastructure dependencies at Union scale also better reflects the transnational nature of Digital Commons.

In addition to a focus on critical technical components, the scope of an instrument responsible for the EU-STF or related functions should encompass the governance and community structures required to sustain and nurture the Digital Commons communities that support them over time. Addressing technical dependencies without investing in the social and organizational foundations that maintain these infrastructures risks reproducing fragility, rather than achieving meaningful and durable technological sovereignty.

The conceptualization of technologies and their dependencies should not rely exclusively on security scores, risk assessments, or purely quantitative metrics. Instead, it should adopt a mixed-methods approach that also evaluates the broader public value of these technologies, including how they support and contribute to public-interest objectives.

In particular, the infrastructures underpinning digital public spaces should be explicitly brought within scope. This includes online environments where public discourse, civic participation, cultural exchange, and access to information increasingly take place. Such infrastructures, such as social networking services, messaging platforms, search and recommendation systems, and community platforms that function as *de facto* public forums.¹⁷ Within its mandate to identify and address dependencies on non-EU and proprietary technologies in critical domains, the instrument should also support the development and operation of open infrastructures that sustain plural and resilient digital public spaces.¹⁸

In this way, such a fund's governance must reflect core Digital Commons values. This includes participatory decision-making processes that involve communities, public authorities, and civil society in setting priorities and providing oversight. It also includes ensuring sustainable stewardship that recognizes maintainers as legitimate stewards of public digital infrastructure, providing compensation and institutional support rather than relying on volunteer labor, and support for such technologies oriented towards public interest. towards the public interest. Accountability should be guaranteed through transparent funding processes, clear metrics for impact, and mechanisms for community oversight. Implementation should be co-designed with the community, and a minimum EU contribution should be earmarked through the MFF.

¹⁷ Open Future (2023). Digital Public Space: A Primer. Available at: https://openfuture.eu/wp-content/uploads/2023/10/231024DPS_primer.pdf.

¹⁸ Another brief in this series sets out in further detail how public investment can sustain these infrastructures: Singh, A and Warso, Z. Fostering Plurality, Integrity and Safety in Digital Public Spaces, Open Future (09 April 2026) <https://openfuture.eu/publication/fostering-plurality-integrity-and-safety-in-digital-public-spaces/>.

The recently established European Digital Infrastructure Consortium (EDIC) for Digital Commons provides a promising institutional model to steward such a funding instrument.¹⁹ An EDIC can offer a clear legal framework, with public reporting requirements, and transparency in how commons are stewarded. The structure enables combining public funding from the EU and Member States with in-kind contributions from communities, industry, and other sources.

Realizing the full potential of an EU-level Sovereign Tech Fund requires coordination and co-investment across Member States. The EDIC structure is particularly well-suited to enabling such multi-country collaboration, while also providing a framework for engagement with the wider Digital Commons ecosystem. However, if the Digital Commons EDIC is to fulfil this role, it must be backed by adequate and sustainable resources, with minimum EU contributions earmarked through the MFF, and explicit recognition of Digital Commons and the EDIC as strategic priorities of the framework.

Strategic Funding for Scale and Competitiveness

In addition to support for experimentation and early-stage development, public funding should enable scaling and maturation of Digital Commons and public digital infrastructures that have the potential to become viable alternatives to dominant, extractive platform models. The focus should be on targeted and strategic support that allows commons-based initiatives in transitional phases to overcome structural disadvantages and develop sustainable organizational and economic models.

Commons-based alternatives must compete with incumbent platforms that benefit from entrenched network effects, access to capital, and closed ecosystems that externalize costs onto users and institutions. In this context, strategic public funding can play a market-shaping role by supporting scaling pathways that prioritize openness, interoperability, and public value, rather than extractive growth strategies.

This requires funding mechanisms that go beyond short-term project grants and include time-bound operational support and blended financial instruments that enable organizations to professionalize operations and invest in maintenance and reliability.

This calls for staged or tiered funding pathways that allow successful initiatives to graduate to larger, multi-year support, based on rewarding maturity and governance capacity. By enabling promising Digital Commons to transition from prototypes into robust, competitive infrastructures, such mechanisms reduce dependency on closed and proprietary ecosystems while fostering genuine alternatives aligned with public-interest objectives. In this way, funding design becomes a strategic lever for shaping the European digital ecosystem around public value, rather than supporting isolated research and innovation projects.

¹⁹ In March 2026, the German Sovereign Tech Agency announced a collaboration with the DC EDIC on an EU-STF pilot programme. See: Sovereign Tech Agency, Digital Commons EDIC takes shape with more countries, director, and first projects (30 March 2026). Available at: <https://www.sovereign.tech/press/edic-digital-commons-director>.

INTEGRATION INTO THE MULTIANNUAL FINANCIAL FRAMEWORK

Support for early-stage and community-driven innovation, strategic funding for scale, and public funding for essential infrastructure should follow an integrated approach spanning and coordinating between the different elements of the proposed MFF.

Horizon Europe should continue to support the exploratory innovation driven by programmes such as NGI, as well as research on Digital Commons that can inform governance and sustainability.

The NGI initiative has demonstrated how public funding can support a diverse, rights-based, and interoperable digital ecosystem. Findings from the NGI Commons project²⁰ demonstrate that NGI's cascade funding model is well adapted to the decentralized nature of open source communities, enabling a wide ecosystem of innovation and experimentation while maintaining alignment with EU priorities. The NGI model, which disburses funding through intermediaries embedded in the ecosystem, allows these organizations to leverage their understanding of community-driven development and domain-specific expertise. They can offer deeper support to applicants and grantees by providing guidance and mentorship, constructive feedback, and access to relevant networks.

The impact of this model would be significantly strengthened if its principles were embedded in design choices across the EU's wider funding architecture. This includes, for instance, eligibility requirements that favor openness and interoperability, evaluation criteria that prioritize governance and community sustainability, and funding instruments that support long-term stewardship rather than short-term delivery.

Within the scope of Horizon Europe, priorities related to supporting the maintenance of essential infrastructures must also include dependency mapping, developing Digital Commons governance models, security research for Digital Commons based infrastructure, and innovation in collective stewardship practices. This connects to Horizon Europe's approach, treating sustainable Digital Commons as a societal challenge requiring coordinated research and innovation.

The European Competitiveness Fund, through the Digital Leadership window can support investments focused on moving beyond pilot stages and prototyping towards deployment, maintenance, and scale-up.

Article 39(2) of the European Competitiveness Fund proposal identifies several priorities for digital leadership, including the development of sustainable core digital technologies that

²⁰ NGI Commons Consortium (2025). D1.3 The Impact of NGI Funding on Digital Commons and Internet Commons – Intermediate Report (Horizon Europe, Grant Agreement No. 101135279). Available at: https://commons.ngi.eu/download/d1-3-the-impact-of-ngi-funding-on-dc-ic-intermediate-report/?wpdmdl=54734&masterkey=sPTWPY0EQonMnMMXIWLfD_7dCY6CpoW9yNCoZ95gDom4z6jov4jb8_XOpEr_uGoElpduRFS-ZPNjXrs3yz6u7FxbCH5NlgG2LQFFAXe5L54M. [Pending approval]

reflect Union values, safeguard the Union's security, and foster global competitiveness. Digital leadership is further framed in terms of achieving technological sovereignty through resilient digital ecosystems and advancing the digital transformation of public and private sectors.

In this context, technological sovereignty should not be understood merely as the diffusion of specific technologies, but as the strengthening of the digital capacity and autonomy of the EU's institutions and economy. Digital Commons support these objectives by reducing dependency on proprietary technologies and enabling collectively governed alternatives that align digital transformation with sovereignty and public value.

Article 39(1) defines the scope of digital leadership through an explicit enumeration of strategic technologies and approaches. Given this specificity in strategic focus, open source and Digital Commons should also be explicitly recognized here as a technological and governance configuration underpinning critical digital infrastructures and enabling a public-value driven approach to digital sovereignty.

Consistent with its competitiveness mandate, the ECF can channel investment into integrating Digital Commons into public infrastructure, rather than reinforcing proprietary ecosystems. In this context, the ECF's proposed comprehensive financing toolkit, which includes grants, loans, guarantees, and procurement, is well suited to support the diverse operational and business models of Digital Commons.

Building on Horizon Europe and the European Competitiveness Fund as the key instruments for research, deployment, and scaling, other instruments can play a complementary role in reinforcing the stewardship and resilience of Digital Commons.

The Global Europe programme can support transnational coordination and investment in Digital Commons, recognizing their inherently global nature. Strengthening these resources internationally enhances strategic autonomy by ensuring that foundational infrastructure remains collectively governed rather than captured by any single jurisdiction. It also provides a channel to support commons stewards outside the EU, whose contributions remain vital for the stability of Europe's digital ecosystem.

National Partnership Plans can enable embedding support for Digital Commons within national digital strategies, enabling a federated approach to stewardship. This respects subsidiarity while ensuring coherence in how the EU's shared digital infrastructure is sustained and governed.

LEGAL AND POLICY CONTEXT

This section situates the proposed MFF-related funding interventions within the EU's wider legal and policy framework. It demonstrates how targeted public investment in Digital Commons can reinforce and complement existing EU legislation, ensuring that regulatory objectives are supported by the financial instruments needed to deliver them in practice.

The **European Declaration on Digital Rights and Principles**²¹ foregrounds transparency, participation, and digital solidarity. The EU's research and innovation framework, including instruments like an EU-STF, can operationalize these principles through open governance of open source, community-driven stewardship models, collective investment in shared infrastructure, and long-term commons stewardship. This connects high-level values to concrete institutional mechanisms.

The **Cyber Resilience Act**²² represents a critical juncture for open source software. While imposing obligations on commercial actors using Open Source, it provides limited support for communities stewarding these resources. Funding for critical Digital Commons addresses this asymmetry by supporting upstream security improvements that benefit all downstream users, maximizing collective return on investment. It can help open source stewards meet their obligations under Article 24 to document cybersecurity policies and handle vulnerabilities. Such a funding instrument can enable CRA implementation while protecting commons-based governance models from being undermined by compliance burdens.

The **NIS2 Directive's**²³ focus on essential entities and supply chain security creates indirect but significant demand for securing open source software. This requires treating Open Source as critical infrastructure requiring proactive public investment, supporting supply chain security through investments in foundational commons, facilitating information-sharing between commons communities and cybersecurity authorities, and creating governance mechanisms that align commons' stewardship with the need for critical infrastructure protection. This reframes open source communities from informal volunteer projects to recognized critical infrastructure requiring institutional support.

The **Digital Markets Act**²⁴ and **Digital Services Act**²⁵ address platform power and digital market concentration. The EU's funding framework must provide a complementary strategy by investing in alternatives that reduce dependency on gatekeepers, supporting interoperability through open standards and protocols, enabling genuine user choice through viable, collectively governed alternatives, and strengthening the contestability of digital markets. Digital Commons can become the infrastructure enabling the competitive, pluralistic digital markets these acts seek to create.

²¹ European Parliament, Council of the European Union, and European Commission (2022). European Declaration on Digital Rights and Principles for the Digital Decade. OJ C 23, 23.1.2023, pp. 1–7. Available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023C0123\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023C0123(01)).

²² Regulation (EU) 2024/2847 of the European Parliament and of the Council of 23 October 2024 on horizontal cybersecurity requirements for products with digital elements and amending Regulation (EU) No 168/2013 and Regulation (EU) 2019/1020 (Cyber Resilience Act).

²³ Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive).

²⁴ Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act).

²⁵ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act).

RESOURCE REQUIREMENTS

Building a resilient ecosystem for Digital Commons requires a funding architecture that matches the scale and strategic importance of the infrastructure it aims to support.

Within this architecture, **Horizon Europe** should continue to allocate substantial resources to exploratory and research and development related to Digital Commons, including through programmes such as NGI. This can include dependency mapping and ecosystem analyses to serve as the evidence base for EU-level sovereign tech funding instruments. For this purpose, Digital Commons and Open Source should be systematically prioritized across relevant Horizon clusters and work programmes, recognizing their role as enablers of cumulative innovation and digital sovereignty.

As demonstrated by NGI investments exceeding €300 million over recent funding periods, sustained support at this scale is both feasible and impactful.

Similarly, the ECF's **Digital Leadership** and **Resilience and Security** windows provide the primary vehicle for scaling and operationalizing commons-based alternatives. This requires positioning Digital Commons as one of core elements of the ECF's financing envelope for digital leadership, ensuring that deployment, procurement, and blended finance instruments actively support open and interoperable infrastructures.

Drawing on proposals for an EU Sovereign Tech Fund²⁶ and targeted support for public digital infrastructure,²⁷ this brief recommends a budget of €350–500 million for the 2028–2034 period dedicated to the long-term sustainability, maintenance, and governance of open source digital infrastructure.

The budget envelope of €350 million from EU sources represents a baseline level of support. This represents the minimum viable scale for meaningful impact, informed by the German Sovereign Tech Fund's experience and adjusted for an EU-wide mandate. The upper boundary of €500 million reflects the need to support not only critical shared components but also the ambition of creating and sustaining viable alternatives to dominant proprietary platforms and integrating them into public services and critical systems.

A co-funding structure should ensure both European-level leadership and national investment in shared stewardship:

- EU contribution: 60–70%
- Member State contribution: 30–40%

²⁶ OpenForum Europe (2023). Investing in Open Source Sustainability and Security: OFE's Proposal for an EU Sovereign Tech Fund. Available at: <https://openforumeurope.org/investing-in-open-source-sustainability-and-security-ofes-proposal-for-an-eu-sovereign-tech-fund/>.

²⁷ Open Future (2023). A Public Digital Infrastructure Fund: White Paper. Available at: <https://openfuture.pubpub.org/pub/public-digital-infra-fund-whitepaper/release/2>.

This blended model provides stability while allowing Member States to align their contributions with national priorities. Member State co-investment can include direct financial contributions (for instance, through the Digital Commons EDIC structure) or in-kind contributions, including technical expertise, infrastructure, operational capacity, and administrative support. The German Sovereign Tech Agency can serve as a model for how Member States might establish complementary funding mechanisms at national, regional, or local levels to tailor support to domestic ecosystems. Coordinated through an EU-level instrument, such distributed structures can enable regional experimentation and contextual adaptation while maintaining strategic coherence.

Public investment must form the backbone of a sovereign tech instrument with private and philanthropic contributions complementing such support, which can also be channeled through the Digital Commons EDIC. A flexible, multi-source financing model grounded in public values ensures stability while enabling additional actors to participate meaningfully in sustaining society's shared digital foundations.

POSSIBLE RISKS AND MITIGATIONS

Reforms to a funding framework of this nature can materialize risks that need to be anticipated.

A first concern is one of scale. The dependencies that this intervention seeks to address are systemic. Approaches that are too fragmented, or limited in scope or scale, may fail to meaningfully reduce vulnerabilities or shift ecosystem dynamics. The funding architecture should therefore be designed for scale from the outset, with the capacity to expand across multiple MFF cycles. Matched funding models that catalyze co-investment from Member States, industry, and philanthropy can further extend the instrument's reach without diluting its public-interest mandate. In addition to funding magnitude and approach, building an evidence base through clear metrics –such as increased uptake in public services–will be essential to making the case for sustained funding.

A second risk comes from employing conventional funding models to support Digital Commons. Highly bureaucratic procedures can transform a flexible investment vehicle into one unsuitable for the realities of distributed, community-led production. Guarding against this requires enshrining Digital Commons principles, such as openness, decentralization, and transparency, in the founding statutes of the instrument, and ensuring meaningful community and civil society representation within its governance structures.

Closely related is the risk of capture. Without adequate safeguards, large commercial actors or Member States could steer a Digital Commons funding instrument's strategic direction in ways that undermine community autonomy and public-interest alignment. This requires robust conflict-of-interest rules and transparency requirements for governance and expert bodies, a mandate that explicitly prioritizes community stewardship and openness, and a clear position that private sector participation is supplemental to, but not determinative of, governance or funding priorities.

Grant design also presents risks of exclusion. Conventional grant mechanisms can unintentionally disadvantage the small, community-led projects that form the backbone of the Digital Commons ecosystem, favouring larger and better-resourced applicants who can navigate complex compliance requirements. Cascade funding models, as used successfully by the NGI initiative, offer a proven alternative: intermediaries with community expertise administer microgrants and mentorship, while reporting and compliance obligations are streamlined in proportion to grant size and risk.

Finally, even viable Digital Commons based infrastructure will struggle to achieve impact if procurement practices continue to favor proprietary vendors, or if interoperability standards are inconsistently adopted across Member States. Realizing the potential of this investment requires commons-aligned procurement guidelines adopted across EU and national contracting authorities, alongside coordinated support for the integration and scaling of Digital Commons solutions in public services and industrial ecosystems. Another policy brief in this series addresses public procurement in further detail.²⁸

IMPLEMENTATION PATHWAY

In the near term, from 2026 and onwards, the priority is to build on the DC EDIC's recently announced EU STF pilot, which provides a timely foundation for formalizing an EU Sovereign Tech Fund instrument. This pilot should be an opportunity to embed Digital Commons principles of participatory governance directly into the instrument's operational design from the outset. The pilot funding streams should target a small set of critical open source projects—providing professional support to existing maintainers and generating early community feedback—to inform the design and calibration of the broader instrument ahead of full-scale deployment. Alongside this, a multi-stakeholder governing board should be constituted, bringing together representatives from open source software communities, civil society, EU institutions, and Member States, to define strategic priorities and oversee fund allocation.

Existing programmes within Horizon Europe can continue to provide complementary support for Digital Commons, including funding methodologies for dependency mapping, security assessment, and governance-related research in the context of critical infrastructure.

From 2028 onwards, and in alignment with the new MFF cycle, the focus can shift to integration and scale. The EU STF, building on evidence and operational learning from the DC EDIC pilot, should be integrated with the new Horizon and ECF programmes under the 2028–2034 MFF, ensuring a coherent approach from early innovation through to operational scaling and long-term stewardship. The funding architecture should cover the full lifecycle of Digital Commons—encompassing development, maintenance, and governance, as well as broader ecosystem-strengthening activities. Staged or tiered funding pathways should be implemented to allow successful initiatives to graduate from pilot or prototype phases to multi-year, infrastructure-

²⁸ Singh, A and Warso, Z. Public Procurement as a Strategic Lever for Digital Sovereignty, Open Future (26 March 2026), <https://openfuture.eu/publication/public-procurement-as-a-strategic-lever-for-digital-sovereignty/>.

level support, ensuring that the instrument rewards demonstrated impact and provides the stability that commons-based infrastructure requires.

The way public money is invested in digital technology upstream shapes the choices available to institutions and enterprises in terms of the infrastructure they depend on. Public investment also has an impact on what effect regulation can have, in terms of shaping markets and infrastructures. Digital Commons are the shared foundations on which Europe's digital sovereignty, resilience, and digital public sphere must be built. The upcoming MFF represents a critical opportunity to ensure that the EU's approach to funding digital technologies has the scale, coherence, and institutional commitment needed to match these ambitions.