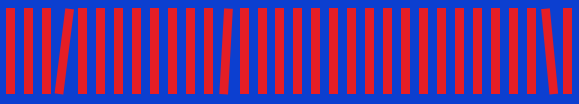
A collective proposal by the Democratic and Ecological Digital Sovereignty Coalition

# Reclaiming Digital Sovereignty



## A roadmap to build a digital stack for people and the planet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# Executive summary

This policy paper outlines a progressive reform agenda to enhance digital sovereignty for people and the planet. Digital technologies are crucial for the proper functioning of modern societies, yet the way we currently arrange their development and deployment promotes economic centralization and winner-takes-most dynamics that work against the public good. Given the high costs to develop these technologies, their relevance and their ecological footprint, a plan for an alternative model requires states to step in and design public, multilateral institutions with autonomy from specific governments that can provide infrastructure and essential digital services as public services or commons built through international cooperation. For that aim, we offer the following **4 key proposals**:

1. Offer a democratic, public-led digital stack that shall include: 1) **Digital infrastructure as a service** (for training, processing and developing digital solutions) provided by non-profit and democratic international consortia; 2) **universal platforms**, such as search engines and foundation AI models, that should be a commons governed by new public institutions with state and civil society representation; and 3) **a public marketplace where companies can offer their computing services without lock-ins**. To assure demand, states shall procure from this marketplace and end contracts with Big Tech.

2. **Craft a research agenda** focused on digital developments that are not driven by the hype or pressures of technological solutionism but that have the potential to solve collective problems and enhance human capacities. This agenda would require consideration for the ethical, economic, ecological, and political impacts of technological development and adoption, including of AI applications. It should also be inspired by addressing the world's main challenges in a holistic, interdisciplinary, and non-profit way. For this end, **public knowledge networks led by a new public international research agency (or regional agencies) could counterbalance the expanded concentration of private and closed science.**

3. **Ground digital sovereignty in an ecological internationalism** that rejects seeing sovereignty as a battlefield among countries, which neglects that today's rulers are not only powerful states but also leading corporations. This could be promoted as a chapter of the **Non-Aligned Technologies Movement** that recognises how nationalist technological agendas will worsen the ecological breakdown and exacerbate underdevelopment. Internationalism is also an antidote to individual government surveillance and power abuses, and is essential for minimising the resources needed to build a democratic, public digital stack.

4. Establish strict mechanisms at every step to **dismantle existing and prevent potential forms of state surveillance or misappropriation of collective solutions by specific governments**. Multilateral agreements on principles and rules for the internet are indispensable safeguards for building autonomous and democratically governed institutions and solutions.

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# Executive summary

To complement and facilitate all the above, we further lay out a strategy on retrofit markets' authorities for the digital age and implement measures to properly regulate and tax existing dominant technology companies. As such, we propose the following:

1. Prevent chokepoint and panopticon power in the digital space by regulating forms of control beyond ownership, including **forbidding mergers and acquisitions, corporate venture capital, and strategic alliances among complementary firms** that expand the control of a handful of companies at the expense of the rest of the digital ecosystem.
2. Restrict the monopolisation of intellectual assets, such as data, knowledge, and the control of narratives, by a few leading corporations. **Regulators must limit these companies' indiscriminate concentration of social knowledge** by gaining access to the intangible assets they have captured and promote the public use of collectively created data and knowledge.
3. **Tax large digital corporations to simultaneously regulate their actions and fund an alternative that expands democratic digital sovereignty**. Levy effective taxes by recognising their leading positions in key sectors, which enable them to capture extraordinary rents. Taxes shall also be levied based on their capture of social knowledge and data.
4. **Recognize that not every technology is desirable**. Technologies that replace labour without offering meaningful alternatives and those that expand the control over or surveillance of labour should be forbidden. Our new policy framework aims at protecting labour and enhancing its creative autonomy while contributing to the reinforcement of human and civil rights. One aspect of this could be a safety net in which **states offer training and employment for the development and operation of the public-led digital stack**.

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# Introduction

We live in a digital world dominated by a handful of large US companies, with emerging Chinese giants biting at their heels. Amazon, Microsoft, Google, and their peers have acquired enormous power over our social, economic, and political systems by seizing monopolistic control of key digital technologies. Those three companies alone control almost 70% of the cloud market, and over half of the world's undersea cables once Meta is included. The accelerated adoption of artificial intelligence (AI) has only made the situation more acute.

Around the world, many communities lack the capacity to chart their own technological paths. Entire societies and their institutions are forced into dependence on Big Tech, denying countries the right to shape their own development. That reality must change.

**Demands for digital sovereignty are growing, but they require a convincing and determined policy action plan. The Democratic and Ecological Digital Sovereignty (DEDS) coalition aims to fill this gap.**

Sovereignty classically refers to the *supreme authority within a territory*, but it can also allude to a community's empowerment and its ability to control its destiny. Digital sovereignty highlights how no community can aspire to any form of sovereignty without claiming some form of mastery over the production and deployment of the digital technologies it relies on.

In our globalized world, there is no such thing as pure sovereignty; it is more a matter of degree. Still, it is no less a vital issue for the fate of countries and their people, especially when it comes to digital technology. In light of these realities, digital sovereignty could be defined as "the right and ability of political entities to autonomously (independently and/or self-determinedly) use and control tangible and intangible assets and digital services that significantly impact democracy, the economy and society".[1] It recognizes that counter to the usual narratives we have about digital technology and the internet, that government does indeed have an important role to play in ensuring positive outcomes for all instead of just high returns for a few.

We must grapple then with the central question: **How do we enhance digital sovereignty for people and the planet, while contributing to a more democratic world?** In the following sections, we clarify the dilemmas that countries might face in regaining their digital sovereignty. We also identify key strategic principles and a comprehensive and interrelated set of policy recommendations for expanding the digital sovereignty of people and the countries they live in.

In this document we refer to the "digital stack" as the overlapping layers and nodes of technology and governance mechanisms that are necessary for the delivery of digital services. That means the material, immaterial and political means ensuring the robustness of the coevolution of everything from the infrastructure of undersea cables, data centres, and the computer hardware within them to the software and libraries of code necessary to deliver public platforms and digital services.

Our proposal is structured in 7 sections. Sections 1 to 4 begin to chart a vision with concrete recommendations for how to build a collective democratic digital stack for people and the planet, while sections 5 to 7 lay out ways to start clawing back power from the major tech companies to enhance our proposed vision. We finish with an open invitation and concrete starting points.

[1] BENHAMOU, Yaniv, BERNARD, Frédéric, DURAND, Cédric. Digital Sovereignty in Switzerland : the laboratory of federalism. In: *Risiko & Recht*, 2023, n° 1, p. 65–101. https://eizpublishing.ch/artikel/risiko-recht/01-2023-risiko-recht/digital-sovereignty-in-switzerland-the-laboratory-of-federalism/.

# I. A public-led digital stack

Sovereignty is about democratic control by states and their people. Democratic digital sovereignty requires we build up their capacities to steer the development of science and technology, so citizens can access, understand, and produce technology that truly improves their lives. Achieving that will be a difficult endeavour.

In some cases, it can be sufficient to constrain corporate power so other firms can develop competitive alternatives. But that is not always the case. Far too often, states have ceded power to large tech companies that are unaccountable and do not have the public's interest in mind. Governments often struggle to see another path, especially when the notion of the public sector developing technology of its own has become so discouraged, in favour of contracting with private firms and trying to encourage the development of a private tech sector that might birth a wildly successful 'unicorn' company.

To build an effective alternative, we recommend the following:

1. **Regain control of the infrastructure of the digital stack.** Building a truly[2] public, state-led cloud composed of public datacentres interconnected through public infrastructure should be an opportunity for international collaboration. A United Nations agency could be created to gather the scientific and technical competencies needed to launch such a cooperative project, similar to what has been done with postal services and telecommunications (see Section 3). But in the meantime, regional solutions could be explored, recognising the complexities of global coalitions.

2. A truly public cloud would make it possible to **expand digital sovereignty by developing public universal platforms, such as public search engines or public e-commerce marketplaces,** that centre the public good rather than shareholder returns. While an international cloud infrastructure would be ideal, platforms could be developed at many different scales — international, national, or much more local — depending on a whole range of factors: the type of service, sensitivities to data collection and government abuses, ecological footprint, and many others (see Sections 3 and 4). For example, e-commerce platforms could operate locally, promoting regional economies and mitigating trade's ecological footprint, while other platforms could operate nationally or regionally, such as data sharing platforms among hospitals and other facilities within public healthcare systems, ensuring that these data are not accessed to promote further privatization.

3. **Create a public marketplace for the development of digital services that will run on top of the publicly provided layers of material infrastructure and platforms**. This would offer start-ups and other organisations a space to offer solutions beyond Big Tech cloud marketplaces.

4. **Direct procurement and channel state subsidies to -develop and adopt- applications that will run on top of the state-led cloud** with the goal of terminating, as soon as legally possible, agreements with Big Tech. To ensure demand and therefore make sure that sufficient applications will be developed and offered on the public-led cloud, states must procure from this layer of services. This shall be complemented with state use of free software, with open protocols and the promotion of interoperability. States should also **subsidize the development and maintenance of free software** solutions where they do not currently exist that should run on the public-led cloud.

[2] We emphasize the "truly" in our formulation because Big Tech calls their cloud a "public" cloud, yet this is a closed and for-profit business.

# I. A public-led digital stack

We also recommend the following to reinforce a public-led digital stack:

1. **Ensure statistical sovereignty**, encompassing legal and political protection of free, public, and state-owned official statistics controlled by national statistical systems comprised of state institutions and user's consultive bodies. This should include legal protection of the public nature of data for official statistics, including access to privately held data for statistical purposes by national statistical systems, and a review of international agreements for statistics development that involve the participation of large tech companies.

2. Promote low-tech implementations of digital technologies that require less resource consumption where possible, instead of accepting industry pressure to always adopt the most resource-intensive solutions.

3. Promote the digital solidarity economy through privileged funding and access to public and open digital tools for cooperatives providing digital products. Initiatives should also be taken to promote their federation and encourage collaboration between universities and non-profit organisations.

4. Enhance state capacity to democratically plan and govern the digital stack through strategic sensing, foresight, analytical, and planning abilities. This should entail targeted and sustained investment in expertise and resources within government departments.

# II. A sovereign research and development strategy

The rapid spread of AI (including, but not limited to, generative AI) has intensified the already overwhelming pressure to adopt all sorts of digital technologies without the proper assessment of their potential benefits and drawbacks. Big Tech and their allies are pushing to make AI the general method of invention, which presents clear concern for researchers but also has serious societal implications. As it stands, this would mean that only a few giants will control what is relevant research, how and what problems can be asked and solved, and even how creativity should be defined. But we have many choices between indiscriminate adoption, in which even states become digital subjects of large tech companies, on the one hand and the outright rejection of digital technologies on the other.

Concretely we propose the following:

1. **Set an independent research agenda** that is not driven by the hype or pressures of technological solutionism but requires focusing on relevant outcomes for people and the planet, moving away from a market-oriented approach. This is especially acute in the face of ecological breakdown and the incredible amounts of energy, water, and computer hardware required to train and run AI models.

2. **Promote public knowledge networks led by a new public international research agency** (or regional agencies) that can counterbalance the expanded concentration of private and closed science. Such an agency should work independent from private funds and collaborations with specific for-profit actors shall be discouraged to keep solutions focused on people and planetary priorities in the public space.

3. Bring talent back from large tech companies to work in such agency leveraging on access to sufficient resources (see Section 1), adequate access to data (see Section 7) and the overall purpose of building a democratic digital stack for people and the planet.

4. Adopt a systemic view where the ethical, economic, ecological, and political impacts of AI and other digital technologies are fully considered, and adoption is only pursued when positive impacts have been proven, and alternative solutions have been deemed impractical.

# III. Ecological internationalism

A new wave of technological nationalism will only pour more fuel on the violent geopolitical times we increasingly live in — and they would be doomed to fail. While sovereignty is mostly seen as an endeavour involving individual states, digital sovereignty is out of reach for most states if they operate on their own. The massive investments required to take on entrenched digital giants are too great for most countries in the world to take on alone. It is also too late to build islands free from their power.

States should act together and build a global democratic alternative while laying the groundwork for a more conscious and responsible management of our social and ecological futures. **Democratic digital sovereignty should build a shield against digital companies' capture of public data and technologies while expanding collective knowledge**. **International cooperation should assess the development of digital technologies (especially new AI tools) against environmental pressures** like their energy and water consumption, as well as mineral extraction and pollution. It should also take the bold step to recognise that **any technology that puts people, the planet, and democracy first requires that private economic gains take the back seat.**

The Digital Compact adopted by the UN Summit for the Future in September 2024 explicitly states that "The United Nations provides a critical platform for the global digital cooperation we need" and sets out a broad, ambitious and nominally progressive agenda in digital infrastructures, data, and AI governance, acknowledging the importance of promoting cultural and linguistic diversity, inclusion, and human rights.

Yet, if the United Nations would be a natural place to gather the scientific and technical competencies to advance such cooperation, taking inspiration from the historical achievements of UN agencies such as the Universal Postal Union and the International Telecommunication Union, one must also be aware of its current weaknesses and divisions. Lobbying by Big Tech and their state sponsors deprives the Digital Compact of any venue to properly tackle how countries and their people are held hostage by intellectual monopolists.

A digital agenda that is both ecological and internationalist should advance alongside any efforts within the United Nations**. We welcome efforts toward a Non-Aligned Technologies Movement (NATM) with regional and civil society chapters dedicated to the provision of a universal public option of open-access, non-profit digital services** (see Section 1). Non-aligned, non-commercial public provision of those basic digital services will allow states to share capabilities they cannot develop on their own while allowing the flourishing of a much richer ecosystem of communities than those curated by the US and Chinese corporations. The NATM could also foster an assessment and redefinition of digital technology standards to be conducted at the UN level and aimed at reversing large tech companies' use of standard setting to impose their technologies.

The ecological dimension of digital internationalism should not be limited to simply assessing the environmental footprint of digital technologies. We hope that our vision of universal public digital services running on public datacentres (see Section 1) will aid in relaxing the debt burden on developing countries, which will reduce the pressure to close their developmental gap through resource extraction. Moreover, a public-led stack and the international knowledge agency would provide the resources and skills to continuously update an inventory of nature, which is a prerequisite for pervasive and effective ecological policymaking.

# IV. A democratic stack: expanding human and civil rights

Building digital sovereignty should not be a guise for surveillance or restrictions on people's rights; rather, it should be a way to expand democratic values since there is no real democracy if societies do not have effective control over the technologies they use. The protection of human and civil rights and social justice cannot be an afterthought.

Our vision of democratic digital sovereignty stands as a third option between accepting the dominance of US tech companies on one side or the embrace of their Chinese competitors on the other. We do not want a world where multinational corporations from global superpowers dominate the technological horizons of countries the world over, restricting their domestic capacities and giving them little authority to make choices over their own futures. We also wish to promote a form of digital sovereignty that eschews heavy-handed measures that violate citizens' fundamental rights, whether online or off.

However, we also do not feel that Western governments have a right to choose which states are allowed to pursue digital sovereignty and which are not, all while the dominance of largely US tech firms allow governments to surveil people around the world, violate their rights, and unilaterally decide when to cut them off. **We encourage states to negotiate an enforceable agreement stating that the use of digital technologies for surveillance, targeting, and extermination against their citizens and those beyond their borders is strictly forbidden.**

We propose the following:

1. **Develop new spaces of citizen participation** — both online and off — to allow communities to have input on the development and use of digital tools. This should also include the development of public education initiatives to allow citizens to develop the necessary knowledge, skills, and sense of empowerment to defend their digital rights and participate in the governance of public technology.

2. Create human-centred design principles that will apply to public digital services and **allow people to choose when their data will be transferred between services** — private or public.

3. Establish measures to defend and expand human rights and freedom of expression that are currently being curtailed by digital corporations. This could involve UN negotiations to devise clear guidelines to stop illegitimate forms of censorship or the creation of independent institutions to establish clear **rules on online content moderation** on social networks according to democratic values, respecting cultural differences and human and civil rights, with fines applied based on companies' global revenues.

4. Address cybersecurity concerns and the risk that foreign and criminal actors can interfere with national politics and pursue disruptive measures.

5. **Prohibit certain uses of AI,** including for assessment of eligibility for social supports, immigration processing, workforce management, surveillance, and weaponry.

# V. Regulation and taxation

Taking on large tech companies may seem like an insurmountable challenge, but that is no reason not to try to reclaim our power over them. A combination of regulation, trade, and tax measures provide another set of tools to achieve that objective. Such policies can ensure existing platforms are more in tune with the societies they operate in and that companies pay their fair share into national treasuries. These set of proposals can be seen as contributing to national and continental industrial policy (see Sections 1 and 2) by eroding the economic dominance of giant corporations and creating the necessary breathing space for other platforms to emerge.

To achieve these goals, we propose to pursue the following:

1. **Implement a tax on large digital companies**, **targeting their total revenues** in each jurisdiction where they operate. Many digital companies utilise tax loopholes and have placed their fiscal residence in jurisdictions that guarantee low taxation. Where possible, this tax could be charged at the continental level to enable a fair redistribution.

2. Force companies to **pay country-by-country withholding taxes for their monetization of freely harvested data**, with considerations for the percentage of the population with internet connectivity and the number of hours spent on the internet.

3. **Pressure the World Trade Organization to rescind its moratorium on digital tariffs**, which prohibits countries from taxing digital imports. Tariffs to give domestic capacities the space they need to develop are preferable to more strong-handed measures such as filtering out those companies from the national internet.

4. **Avoid state functions becoming dependent on corporate clouds and other forms of digital technologies lock-in**. State agreements with digital giants should be made public and open to consultation.

5. **Create strict planning rules on the construction of new data centres** to ensure they do not stress local water supplies or threaten energy availability. **A specific levy on new facilities to go into water infrastructure or renewable energy construction** shall also be considered. Facilities should be forbidden in the vicinity of natural parks or other territories with protected flora and fauna.

6. **Implement strict digital privacy protection measures**, including a requirement for explicit approval for the processing of personal data, personalised profiling with synthetic data, and against the re-use or selling of personal data.

7. Pass legislation outlawing forms of social injustice and discrimination enabled by digital technologies. This could include algorithmic systems that manipulate people's decisions or exploit their vulnerabilities, systems that evaluate or classify people based on their social behaviour or personal traits, and systems that claim to predict the risk of committing a crime.

8. Forbid the use of marketing tactics and platform design that intentionally triggers people’s responses to increase engagement or encourage a purchase. This can result in addictive behaviour and harmful outcomes to the individual and the wider society.

9. Force tech companies to allow governments to review their transparency practices, gender, racial, and religious policies, to ensure accountability and ethical compliance.

# V. Regulation and taxation

## V.1 Labour policy

**Digital services and particularly AI are developed by highly skilled workers, experienced programmers, and through the mass mobilisation of click workers**. To make the role of workers more visible, to better reward and to expand workers' rights globally, and to contribute to a developmental agenda while also addressing the impacts of technology on labour, we propose the following:

1. **Hold lead firms accountable for the working conditions endured by data workers and make international collective bargaining mandatory** for the provision of digital and AI services, under the auspices of the International Labour Organization.

2. **Forbid employers from deploying algorithmic management tools that violate the fundamental rights of workers.**

3. Bolster public digital capabilities by funding training for workers specialised in complex digital processes under the condition of a long-term commitment to work for or contribute to the public sector. They could work at the international and public research and development initiative discussed in Section 2.

4. Regularly assess how the adoption of digital technologies impacts labour to mitigate harm and collaborate with workers on potential solutions, being vigilant of impacts on gender, racial, and other minorities.

## V.2 Monetary and financial policy

Our current financial system works against collective goals of building technology and a society that deliver tangible benefits for people and the planet. Domestically, it keeps people in debt and denies too many inclusive the access to necessary financial services, while on the global stage it keeps the majority of countries at the whim of an economic order that ensures they remain underdeveloped and trapped by crippling debt burdens.

Digital technologies are already transforming payment processing, while data analytics and AI are being used for fraud detection and hold promising applications for further improving the identification of suspicious transactions. **There are significant opportunities to support fairer governance of international transfers and to address global issues like money laundering and tax evasion. But all this requires using sovereign digital technologies** (see Section 1) instead of deploying solutions on the clouds of or directly outsourcing them to large tech companies.

To democratise financial digital technologies and build a fairer, more stable global financial system, we propose the following:

# V. Regulation and taxation

## V.2 Monetary and financial policy

1. **Establish domestic public banks -and instruct existing ones- to provide inclusive (digital) banking services** to the public, with a specific focus on minority communities and the unbanked. In some regions, this could take advantage of public postal systems and their vast network of physical stores and could explore additional digital solutions. A direct relationship to the public would more easily allow the delivery of social supports and financial aid.

2. Develop government-controlled, democratically accountable, safe national digital payment systems that are supported and hosted in public, non-profit data centres (see Section 1).

3. Consider the creation of Central Bank Digital Currencies (CBDCs) and central bank e-wallets, but ensure that any implementation is citizen-centred and public to reduce systemic reliance on private banks.

4. **Utilise advanced financial technology to establish an alternative international transfer system governed by multilateral organisations**, reducing reliance on systems like SWIFT that are controlled and weaponised by a few developed countries.

# VI. Retrofitting markets authorities for the digital age

We must revive the original purpose of antitrust policy — its role as a tool to prevent the accumulation of economic power that harms democracies. But it must also be adapted to the nature of a networked society.

Big Tech companies have positioned themselves in economic chokepoints and panopticons, giving themselves a window into the full digital stack where they can weaponize interdependence and exercise a form of **networked market power**. Their strategy isn't always to curtail competition. They play a much more sophisticated game that combines cornering and imitating some rivals while subordinating others, capturing value from them while keeping them at bay.

Expanding the scope of antitrust policy should consider the **influence over complementary products** as a form of market power, including the scrutiny of:

- Corporate venture capital investments and acquisitions by incumbents.
- Collusive agreements that contribute to concentration and perpetuate the power of incumbents, sometimes described as "strategic partnerships" or "strategic alliances".
- Indiscriminate data hoarding and how data concentration is used to appropriate value.

To realize this agenda, some previous mergers will need to be unwound, such as the case of Meta's acquisitions of Instagram and WhatsApp, with firm rules against data sharing between divested companies.

While promoting competition will be preferred in some areas, other services offered by Big Tech are prone to **natural monopolisation**. In a natural monopoly, a single company is more efficient than multiple competitors, generally due to economies of scale from high fixed costs. Consider how effectively Google's search engine dominates its market, and how the scale of its use and the data it processes allows it to improve its algorithms faster than competitors. In those areas, trying to boost competition could come at the expense of efficiency and worsen the quality of services.

Instead, **the company offering the service could be regulated as a utility**, with strict rules on ad pricing and placement, or even a mandate to license its proprietary algorithms, as has been done with companies like IBM in the past. Another, preferred option given the centrality of these digital services, would be to offer a public alternative (see Section 1).

# VII. Dismantling intellectual monopolies

Big Tech captures data on everything we do, from our private lives and consumption habits to wider cultural trends and how we move around the city. One way or another, our activities reverberate in the digital machinery they control — and now that they've done it, other companies want to do the same.

**Intellectual monopoly is not just about data; it is about knowledge. It is an ability to structure and wield information to act upon our world.** These monopolies capture publicly funded science, sophisticated coding capabilities, and concentrate the infrastructure it all depends on, including submarine cables, satellites, servers, and processors.

That process has substantial consequences. Many regions of the world, particularly those outside the poles of technological superiority, become subordinated to major tech companies, which capture the knowledge those societies produce for their exclusive use in their products and services. Meanwhile, **Big Tech maintains the power to shape social norms, structure the public sphere to its benefit, and even influence the society at scale** through its control of data and the digital platforms we depend on.

Regulators' tougher stance against the tech industry is a welcome development, but too often traditional solutions backfire. Most of the time, data is generated through social interaction, so that individual data is usually only meaningful when combined with data on everyone else. That means that **simply protection of the fundamental right of individuals to control their personal data doesn't address most of the problem**. We suggest the following principles to tackle tech companies' intellectual monopoly:

1. Require that data extracted from a specific country —which should always be retrieved anonymously and without profiling individuals — should be put at the service of improving the lives of that country's citizens. A public institution could be created as its steward. These data should be used only for public research and policy on a principle of data solidarity in which citizens are clearly requested to grant permission for using their data.

2. Regulate the activities of digital corporations according to socio-ecological developmental goals and implement a principle of **algorithmic responsibility** by making corporations liable for the consequences of the specific features of their digital services.

3. Forbid the unauthorized use of internet content for training AI models and require companies to actively request such permission using easy-to-understand, one-click forms.

4. Guarantee that the use of public-funded research by tech companies has fiscal, social, and ecological conditions, including **public access to the results, models, and data used**.

5. **Create an obligation to share data in case of public procurement**, where every company with a procurement, tender, or licensing contract must share with the public sector all the data harvested as part of providing the service in an editable format.

6. **Provide the state with a golden share**[3] in systematically important digital corporations. Outside the companies' countries of origin, a golden share in local affiliates will expand chances to supervise the deployment of new services.

7. Require large digital corporations to **disclose their agreements with other organisations** and a summary of their content, including their investments in think tanks, universities, and consumer organisations.

[3] A type of share of stock that lets its owner outvote all other shareholders in certain circumstances.

## A first yet decisive step

**Another digital reality is possible.** However, it will not spring from minor adjustments or large investments in the same old policies that reinforce the status quo. **A digital stack for people and the planet requires the commitment of communities and their governments to work together in a coordinated way to reclaim power from unaccountable tech companies, regain access to collectively created knowledge and data, and redistribute concentrated tech profits**. The current approach to technology allows a small few to profit from the collective work of the many, and enables a vast surveillance apparatus used to control people in all areas of their lives.

The ultimate success of our proposals depends on a concerted international effort. But we believe that individual countries can advance their degrees of digital sovereignty by implementing key regulations and fostering the first steps of a truly public digital stack. Such an international effort requires a coalition of willing governments and regional organizations to succeed.

Each jurisdiction can advance the building blocks that will be necessary to realize our proposed strategy at the local, national, and regional levels. Above all, these are: **a truly public, international, and ecological public-led stack** (with public material infrastructure, universal platforms, and a public marketplace for computing services), **and an expansion of citizens' education on the risks, limitations, and effects of digital technologies**, particularly of today's Big Tech-controlled stack. While the former is a pre-condition for the construction of an alternative, the latter is essential for making it democratic and to build a new common sense on why large tech companies cannot be part of the solution. Otherwise, regulators and antitrust efforts will face opposition from parts of the population enchanted by the tech industry's deceptive narratives.

These measures are only the beginning. For instance, the public-led cloud requires talent and to be populated with digital services, which connects us to other proposals outlined in this document. **Our recommendations are part of an interrelated plan**, not a menu from which to choose a few items. This is particularly the case with digital public infrastructures (DPIs), including things like electronic payments and data exchange. In isolation, DPIs become another service that will run on Big Tech clouds — another way to make every single individual and organisation on Earth join their platforms.

Only with a truly public and ecologically sustainable material digital infrastructure would it be possible to expand free software and build DPIs that are not an avenue to entrench Big Tech's undemocratic control over our societies.

***Only with a truly public and ecologically sustainable material digital infrastructure would it be possible to expand free software and build DPIs that are not an avenue to entrench Big Tech's undemocratic control over our societies.***

# A first yet decisive step

As a final note, we wish to highlight that this document is the result of a deliberative exercise that sprang from a support letter that we all signed against Big Tech's authoritarian reactions and attempts to impose their technologies on the public sector in Brazil. Most of us have been working for years to thoroughly scrutinise today's digital capitalism and uncover the concrete mechanisms used by Big Tech and other corporations to systematically extract data, knowledge, value, and nature for their own ends. Since these were uncoordinated efforts, they were not enough. So, we decided to work on a concrete alternative. We did it as fast as we could, gathering and systematising contributions from over 40 people and organisations in less than two months.

Far from closing the democratic conversation we opened among us, this white paper aims to expand it. Here, we have offered a first step by attempting to outline a comprehensive set of recommendations for a digital stack for people and the planet in a single document. The result is a departure point, but also a provocation; one that results from an ongoing creative exercise to imagine bold but urgent changes needed to build a better world for all.

**As Big Tech keeps expanding, entering new sectors and geographies, and developing new strategies, our counteroffensive must be equally agile — but always democratic**. We invite you to engage with us in what we feel is a mandatory step forward and, collectively, put our political imagination at the service of making these proposals, and those to come, a reality.

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