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POLICY BRIEF

UNPACKING AI SOVEREIGNTY

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EXECUTIVE SUMMARY

This policy brief examines the emerging notion of AI sovereignty. In response to the ubiquity of AI systems and their increasing control by a few large tech companies, governments worldwide are asserting their sovereignty over AI. Yet, both sovereignty and AI are broad, contested concepts. Their intersection generates multiple interpretations and policy responses, often reflecting divergent national interests and capacities. The brief unpacks these concepts, identifies three main areas of concern — the limits of state control, the risk of authoritarian misuse, and the strategic deployment of sovereign AI narratives by corporate players — and calls for a more informed and democratic debate on what forms of control are possible in an interconnected world. It recommends that policymakers clarify the scope and goals of AI sovereignty claims, adopt a comprehensive socio-technical view of AI, focus on areas of comparative advantage, strengthen representation of the Global South in governance, and guard against 'sovereignty washing.'

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1. SETTING THE STAGE

On 24 April 2025, Chilean President Gabriel Boric delivered a master class at the University of Brasilia. Warning about the growing influence of big tech companies, he stated: "Today we must be aware that there are transnational powers that exercise significant sovereignty over decisions that should correspond to our peoples." Boric also welcomed a new cooperation agreement with Brazil to develop Latam-GPT, a regional large language model, defining it as "a common language when it comes to developing artificial intelligence" and affirming, "This is also sovereignty."

After decades of political and academic debate suggesting that the traditional Westphalian, state-centric model had lost its explanatory power, recent global developments have revived discussions around sovereignty. The digital realm is no exception. As geopolitics and technological development become increasingly intertwined, digital sovereignty has become a central policy priority for many countries seeking to harness the opportunities offered by AI while safeguarding their autonomy. These concerns arise not only in relation to other states, but also in response to the increasing power of large tech companies.

With artificial intelligence (AI) rapidly becoming ubiquitous and dominating policy debates, AI sovereignty has emerged as a sub-variant of digital sovereignty. Rather than encompassing the entire digital ecosystem, AI sovereignty concentrates specifically on the elements and dynamics that enable the development and deployment of AI systems — from the water and energy needed to power data centres to the human talent that develops, trains, deploys, and uses AI models.

Despite its growing prominence, AI sovereignty remains an ambiguous and contested concept. While it broadly implies a degree of control over AI technologies and infrastructures, there is no consensus on its precise meaning or implications. For some countries, AI sovereignty is primarily a matter of national security; for others, it represents a pathway to economic growth. Still others emphasise the importance of ensuring that AI development and deployment comply with national laws and regulatory frameworks. For most, it reflects a combination of these concerns. Similarly, some governments seek to reduce their dependence on major technology companies, while others claim to be developing sovereign AI through partnerships with them.

Definitions matter in public policy, especially as narratives around technology development and deployment are increasingly shaped by corporate actors. The ways in which both sovereignty and AI are understood will be reflected in a diverse and sometimes contradictory range of policies. Grounding the concept of AI sovereignty will therefore be essential if we are to develop policies and governance frameworks that are both effective and democratically legitimate.

2. DIGGING INTO THE CONTENT

Sovereignty has always been, and still is, a highly debated concept. Contrary to popular belief, as IR scholar Stephen Krasner argued, "there has never been a golden age for sovereignty."[1] Several authors have shown its context-dependent nature and mutability, while many others have argued in favour of abandoning a concept that they no longer consider to be useful for explaining the current world. But despite repeated proclamations of its demise, sovereignty has proven its resilience and continues to be one of the most important concepts in political philosophy and international law in the contemporary world.

The classical view of sovereignty defines it as supreme authority over a territory. This traditional understanding has been widely challenged in an increasingly interdependent international order where, aside from a few highly closed states, it is hard to identify a single and ultimate source of authority within a given territory. Moreover, recognition of legitimate authority does not necessarily translate into the effective ability to exercise it, and the ability to exercise supreme authority does not necessarily imply that such authority is recognised as legitimate. Sovereignty is also often associated with notions of control and self-determination. Defining sovereignty

1 Krasner, Stephen D. "Rethinking the sovereign state model." *Review of international studies* 27.5 (2001): 17-42.

is, in itself, a political act, which means that any attempt to establish a single, universal understanding of the concept is ultimately doomed to fail. For this reason, many authors have preferred to treat it more as a rhetorical or argumentative tool than as a concrete practice that can be directly described.

The lack of consensus on the concept of sovereignty is logically reflected in current discourses around AI sovereignty. The debates surrounding sovereignty have always revolved around the questions of what sovereignty is and who holds it. When it comes to AI sovereignty, a third question should be added: what, precisely, is meant by 'AI.' While current policy debates tend to focus on machine learning and, in particular, deep neural network-based methods, the term 'artificial intelligence' has referred to several distinct approaches over the decades and will continue to evolve as the field itself strives for a consensus on what AI means.

The collection of tangible and intangible elements that enable AI systems to function is often described as a 'stack.' At minimum, this stack includes energy and water, which power and cool computational processes; chips (particularly GPUs), the specialised hardware that performs AI computation; data centres and cloud infrastructure, where computational resources are concentrated; AI models and algorithms, which process information and generate outputs; data, the key input shaping system performance; and human labour, which designs, trains, and maintains AI systems. All these layers are, in turn, shaped and constrained by regulations and governance frameworks, which define the social, environmental, economic, and political limits within which these technologies operate. This description is just one of several ways to represent how the AI stack functions. Alternative analyses emphasise particular layers or use different terminology, which also reflects AI's evolving and interdisciplinary nature.[2]

A handful of large tech companies – mostly from the US and, to a lesser extent, China – are aggressively seizing control over key segments of this AI 'value chain,' generating lock-in effects and further deepening existing structural dependencies.[3] Aware of the vulnerabilities this concentration creates, governments worldwide are moving to assert their sovereignty over AI. This trend has accelerated since the beginning of the second Trump administration, which exposed the political alignment of US tech companies and just how far they are from remaining neutral in the geopolitical arena. For instance, the European Commission has just unveiled its Apply AI strategy, aimed at strengthening EU's sovereignty. Meanwhile, Brazil's Artificial Intelligence Plan identifies the protection of national sovereignty as one of its core objectives, and the African Declaration on Artificial Intelligence recognises sovereignty as its first guiding principle.

3. THREE DIMENSIONS OF CONCERN

The idea of digital sovereignty, and more recently that of AI sovereignty, has attracted significant attention and scrutiny due to both the broad scope of the concept of sovereignty and the complex, socio-technical nature of AI. Underlying all these analyses is the fear that an argument that may sound convincing at first blush could prove counterproductive. These concerns can be grouped into at least three distinct but overlapping categories:

1. Some analysts argue that applying the notion of sovereignty to the digital realm risks importing institutions and logics from the analogue world into a fundamentally new socio-technical ecosystem. They characterise such an approach as technically inadequate, as it overlooks the complexity of digital technologies and AI systems. While a few large tech companies are gaining control over more dimensions of the AI stack, AI remains, by its nature, transnational. Each layer of its supply chain depends on cross-border interactions and interdependencies that no single state fully controls — not even the United States. From this perspective, claims of state control over

2 For an in-depth analysis of the digital stack, see Bria/Timmers/Gernone (2025): EuroStack – A European Alternative for Digital Sovereignty. Bertelsmann Stiftung. Gütersloh.

3 Rikap, Cecilia. *A Progressive Roadmap for Expanding European Digital Sovereignty*. FEPS Policy Brief, 2025, https://feps-europe.eu/publication/a-progressive-roadmap-for-expanding-european-digital-sovereignty

the entire AI stack may sound appealing but are hardly feasible or realistic in practice.

2. Others warn that framing AI sovereignty as increased state control could merely replace corporate concentration of power with governmental concentration of power. According to proponents of this view, AI sovereignty could open the door to more state surveillance and authoritarian practices. Excessive efforts to control AI could thus prove just as dysfunctional as a loss of control. From this line of reasoning, it follows that effective AI governance should revolve around expanding and improving international frameworks, rather than resorting to sovereignty schemes that make national governments the sole guarantors of rights. This is especially relevant for developing countries, which often lack the capacity to advance their own AI technologies and infrastructures. At the same time, it should be noted that international institutions themselves suffer from legitimacy deficits and limited inclusion of countries from the so-called Global South, which constrains truly representative multilateral AI governance.

3. A third concern points to an emerging paradox — namely, that the concept of AI sovereignty is now also being exploited by tech companies as a way to expand their markets. Through "sovereign AI" branding, Nvidia promotes its products and services worldwide as essential to national AI strategies. Amazon Web Services advances a similar approach with its "European Sovereign Cloud." OpenAI for Countries offers infrastructure collaborations to help partner countries develop data centre capacities, framing these investments as a path to "data sovereignty" and a more "democratic AI." Ironically, the company advertises these infrastructure investments insisting on the need for close alignment with the current US administration.

In an unexpected twist, it is the same companies over which some countries are demanding greater sovereignty that are now selling 'sovereign AI' themselves. The advantage they stand to gain in doing so is clear: by providing critical infrastructure, they enable countries to develop some AI capabilities while creating new dependencies and enhancing their control over key segments of the stack. In this vein, a recent policy study warned that non-European companies may be using the sovereign AI argument as a Trojan horse to establish strategic dependencies in European countries. To existing practices of 'greenwashing' and 'openwashing,' we can now add what might be called 'sovereignty washing.' In this emerging dystopian landscape, sovereignty can be marketed as a service.[4]

4. INSIGHTS FROM POLITICAL PHILOSOPHY

The complexity of the contemporary world increasingly forces us to trust — whether in representatives, experts, or algorithms. Like institutions, technologies help us navigate this complexity. Both in the analogue and in the digital world, we are constantly delegating, which involves giving up, or at least limiting, our control. The fact that we, as users and citizens, are sovereign individuals does not necessarily mean that we are always able or inclined to exercise this sovereignty. In fact, there are times when we may prefer to limit, share, or even relinquish our own sovereignty to achieve other goals. For example, the rapid advancement of large language models (LLMs) has been possible, at least in part, because the humans who develop them cede some degree of control over the models' behaviour and outcomes.

From time to time, the trust that underpins our democratic systems and allows societies to function amid complexity is breached, prompting a countermovement aimed at regaining control. This desire for greater control may be legitimate and justified, but it overlooks the fact that we have always lived in environments over which we have only partial control. Philosophical constructs like Hobbes' social contract or Rousseau's delegation of sovereign power to the people are fictions (or,

4 Grohmann, R., & Costa Barbosa, A. (2025). Sovereignty-as-a-service: How big tech companies co-opt and redefines digital sovereignty. *Media, Culture & Society,* 0(0). https://doi.org/10.1177/01634437251395003

at best, stylised representations of reality) that help explain where the legitimacy of political processes comes from. When we fail to understand this, we close ourselves off to the exploration of alternative forms of compromise between control and delegation — or between oversight and trust —, that are essential both for the functioning of our democracies and for our relationship with technology.

Sovereignty has been defined as democratic control by states and their people. In response to those who argue that AI is too complex to regulate and too powerful to reject, we may better ask what kind of democratic control we can exercise over it to guide it toward what each society defines as the common good. We should consider what type of control is appropriate in the face of increasingly sophisticated technologies, and what forms of accountability are viable and democratically legitimate in complex societies and global networks. In this sense, the key question of our time seems to be: What kind of sovereignty is possible in a world and a domain where total control is no longer possible (nor desirable)? The answer to this question will be neither simple nor universal — mainly because the capacities, priorities, and interests of states vary significantly, both within and across state boundaries.

5. POLICY RECOMMENDATIONS

1. **Clarify the terms of the debate.** When referring to AI sovereignty, policymakers should specify which stages of the AI development-to-deployment lifecycle are under discussion, for what purposes, and through which means. Making these distinctions explicit, and acknowledging the trade-offs they entail, will help facilitate the design and implementation of more sustainable and widely accepted policies.
2. **Adopt a comprehensive view of AI.** AI should be understood not merely as a particular technology, but instead as a socio-technical phenomenon: an interdependent ecosystem of natural resources, technological infrastructure, human labour, and governance frameworks. Because all of these dimensions are interconnected, a state's capacity to regulate or influence one layer of the AI stack will inevitably be shaped by its exposure, dependence, or relative weakness in others.
3. **Focus on areas of comparative advantage.** This recommendation may appear to contradict the previous one, yet the complexity of these times requires governments to combine a grasp of the broader picture with the identification of strategic areas of focus. While a maximalist view of AI sovereignty may serve as a valuable normative horizon, effective policymaking often requires prioritising the specific layers of the stack where a country holds comparative advantages. This is particularly relevant for developing countries, which may lack technological or financial capacity but possess bargaining power in other domains (such as natural resources or data).
4. **Strengthen multilateral cooperation with stronger representation of Global South countries.** When negotiating with large tech companies, countries stand to gain greater influence and bargaining power by coordinating their efforts. Multilateral cooperation can help reduce asymmetries, increase transparency, and ensure that the terms of engagement with the private sector serve the public interest. In this area, more is indeed better.
5. **Guard against 'sovereignty washing.'** Sovereignty may mean many things, but it certainly does not mean letting large tech companies exploit a country's natural resources indiscriminately or placing strategic infrastructure and public services entirely under these companies' control. True AI sovereignty should enhance national development and capacities, not deepen dependence.

6. CONCLUSION

In an era that favours the simplification of political debate and rewards easy answers, the worst we can do is settle for that simplicity. Understanding AI sovereignty as a multifaceted political concept – one

grounded in interconnected infrastructures and technologies, which are themselves shaped by specific socio-political and historical contexts – should not be a matter of academic concern alone. Rather, it is a fundamental political task and a necessary starting point for crafting more effective and genuinely democratic policies that place technology at the service of the common good.

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