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Romania's Digital Sovereignty: Reality, Myth, or Future Goal?

Cyfrowa suwerenność Rumunii: rzeczywistość, mit czy cel na przyszłość?

Abstract

In the age of artificial intelligence, countries need a national defence strategy that is aligned with existing and emerging technologies and social trends, while also laying the groundwork for a new legislative package that can adequately address the risks involved. Romanian President Nicuşor Dan recently announced that the latest national defence strategy will focus primarily on regulating and protecting the digital sphere, with particular emphasis on the country's digital sovereignty, the extension of data protection rights, and the regulation of digital infrastructure. But what does this actually mean? How can Romania achieve digital sovereignty, and what tools and legal frameworks are available to it in such an urgent matter?

Key words: national defence, sovereignty, AI, legal safeguards, digital infrastructure

Streszczenie

W epoce sztucznej inteligencji państwa potrzebują narodowej strategii obronnej, która będzie dostosowana do istniejących i pojawiających się technologii oraz trendów społecznych, a jednocześnie stworzy podstawy dla nowego pakietu ustawodawczego zdolnego właściwie adresować związane z tym ryzyka. Prezydent Rumunii Nicușor Dan ogłosił niedawno, że najnowsza strategia obrony narodowej skupi się przede wszystkim na regulacji i ochronie sfery cyfrowej, ze szczególnym uwzględnieniem

cyfrowej suwerenności kraju, rozszerzenia praw w zakresie ochrony danych oraz regulacji infrastruktury cyfrowej. Co to jednak oznacza w praktyce? W jaki sposób Rumunia może osiągnąć cyfrową suwerenność i jakimi narzędziami oraz ramami prawnymi dysponuje w tej pilnej sprawie?

Słowa kluczowe: obrona narodowa, suwerenność, sztuczna inteligencja, gwarancje prawne, infrastruktura cyfrowa

On the Origins of Sovereignty

What is sovereignty? Ever since the term first appeared, experts have been trying to find an adequate answer to this question, and until we thoroughly understand the issue, we cannot give an adequate answer to what digital sovereignty might be, as its fundamental meaning is changing. The answers that have emerged from different conceptual approaches in different countries and historical periods prove that there is no single “global concept” of sovereignty, while, paradoxically, the entire system of international relations is based on the “sovereign equality” of states.¹ The roots of the modern interpretation of sovereignty date back to 16th-century France. In Georg Jellinek’s interpretation, sovereignty is a concept that developed historically: it originally appeared as a political idea, then slowly took on legal meaning. Initially, it served a defensive function, protecting the independence of the ruling power against internal and external challenges, but later it became an offensive concept, expressing the claim to supreme power that could not be derived from anything else.² Its positive content became clear when state theory made sovereignty an essential element of the concept of the state.

Jellinek links the development of sovereignty primarily to the strengthening of French royal power. Internally, the French rulers sought to centralize power, establish exclusive jurisdiction, and, in particular, take over the legislative branch, while externally, they sought to become independent from the influence of the two universal powers, the Holy Roman Empire and the papacy. During the period of dualism, sovereignty appeared to be temporarily divided, but in the wake of the religious

¹ I. Kukorelli, *Alkotmánytan I., Alapfogalmak és alkotmányos intézmények*, Budapest 2007, p. 121.

² G. Jellinek, *The Declaration of the Rights of Man and of Citizens*, New York 1901.

wars, the need for a unified supreme power to ensure internal peace became increasingly apparent.³ The Reformation finally put an end to the idea of universal world power, thus eliminating the external threat to sovereignty. The theoretical foundations of sovereignty were entrenched by Roman law and canon law, which regarded supreme power as legally independent, unrestricted, and not derived from any other source.⁴

Jean Bodin is considered the creator of the modern concept of sovereignty; he was the first to provide a coherent, theoretically and legally sound definition of supreme power in the 16th century. According to Bodin, sovereignty is the absolute and perpetual power exercised by the ruler (or ruling body) within the republic.⁵ It is unified and indivisible, and does not reside in the state as an abstract entity nor derive from the consent of subjects or representative bodies. Internally, sovereignty means supreme authority within the territory: only the sovereign may legislate and exercise ultimate power over subjects. Externally, sovereignty implies independence from any higher earthly authority, and thus the equality of sovereign powers, which are free to enter into relations with other states.⁶

The holder of sovereign power is not legally subject to any other earthly power and is not bound by the laws of his predecessors or previous decrees, but remains subject to divine and natural laws. Thus, Bodin simultaneously affirmed the supremacy of royal power while setting theoretical limits on absolute arbitrariness. As such, he is widely recognized in authoritative history textbooks, and his authoritative works summarize an extremely prolific career: Bodin was a lawyer, historian, economist, philosopher, and political theorist, embodying the multifaceted knowledge of a leading figure of 16th-century French humanism.⁷ Bodin saw the subject of sovereignty in the ruler and considered the right to legislate to be the most important element of sovereign power. From the right to legislate, he derived further sovereign rights, such as taxation, coinage,

³ P. Takács, *A szuverenitás mint az állam fogalmi megragadásának kategóriája*, [in:] *Ünnepi tanulmányok Rácz Attila 75. születésnapja tiszteletére*, Á. Cserny (ed.), Budapest 2013, p. 553.

⁴ M. Bihari, *A modern szuverenitás elméleti alapjai. Kísérlet egy funkcionista rendszerszemléletű szuverenitáselmélet alapjainak kidolgozására*, MTA Law Working Papers 2014/51, p. 4.

⁵ J. Bodin, *Six Books of the Commonwealth*, Oxford 1967, p. 32.

⁶ Z.J. Tóth, *Az állami jelképek helye és védelme az európai alkotmányokban*, „Jogtudományi Közlöny” 2024, no. 4, pp. 157–167.

⁷ J. Búza, *Jean Bodin a drágaság okairól és a magyar aranyforintról*, [in:] *Jubileumi tanulmánykötet. Nagy Aladár professzor 70. születésnapjára*, Zs. Bekker, L. Besenyei, P.Á. Bod (eds.), Miskolc 2011, p. 54.

the declaration of war and peace, the appointment of senior officials, the exercise of supreme judicial power, and the granting of pardons.

According to Bodin, these powers are by their very nature inalienable and non-transferable, as they express sovereignty itself.⁸ Unlike his contemporaries, he did not seek to justify or criticize specific political actions, but rather revealed general laws.⁹

Bodin's concept of sovereignty was closely linked to the emergence of the modern state. His theory posited a unified, centralized public authority as opposed to the division of powers and the remnants of medieval universalism, which acts as the supreme legislative and judicial power within a defined territory. Bodin's work made sovereignty an essential feature of the state and served as the basis for later thinking on state theory and constitutional law.¹⁰

The concept of sovereignty is just as important for understanding the modern state and its functioning as constitutional supremacy is for interpreting the law. It could be said that sovereignty and constitutional supremacy are in fact two sides of the same coin of the modern state: one from a political perspective, the other from a legal perspective, both reflecting the supremacy of state power over any other entity. At the same time, the emergence of the European Union has called both into question. The doctrine of the primacy of Community law, including its primacy over the constitution, began to develop in the 1970s and has now become a well-known and well-studied topic. The last ten years, especially since the beginning of the von der Leyen Commission's mandate, have seen the emergence of new, related concepts, such as the technological or digital sovereignty of the European Union.¹¹

In order to provide a reference point for monitoring the future development of these new concepts, we will first attempt to establish a coherent perspective on digital sovereignty – no easy task, given the variety of different interpretations, even within EU institutions.

⁸ J. Bodin, *Az államról*, Budapest 1987, pp. 27–32.

⁹ P. Paczolay, *A legfőbb hatalom eredete. Újkori államelméletek*, „Rubicon” 1997, no. 8, pp. 25–29.

¹⁰ K. Kistelki, *Mozaikszerű szuverenitás: az Erdélyi Fejedelemség szuverenitásának nézőpontjai*, [in:] *Szuverenitás-kérdések, elméletek, történetek*, A. Karácsony (ed.), Budapest 2020, p. 141.

¹¹ A.-R. Lupu, *Digital sovereignty. Constitutionalist approach*, „AUB Drept Forum Juridic” 2023, no. 2, pp. 148–159.

Rethinking sovereignty, from Kings to Code

It should also be noted that the appearance of digital sovereignty in public discourse followed the emergence of another concept that sparked heated debate: European strategic autonomy. This term was first used in an official European Union document in connection with the December 2013 European Council conclusions,¹² referring to the need to strengthen Europe's strategic autonomy by developing technological and industrial bases capable of maintaining and developing defence capabilities. The term was later adopted by Federica Mogherini, the EU's High Representative for Foreign Affairs and Security Policy, who placed the concept at the heart of the European Union's Global Strategy on Foreign and Security Policy, published in June 2016.¹³ The strategy points out that the EU should aim for strategic autonomy to effectively promote peace and security both within and beyond its borders. In this context, the development of a sustainable, innovative, and competitive European defence industry is considered essential. While the concept was initially applied mainly to the common foreign and security policy and the European defence technological and industrial base, it was later introduced into official use in a broader sense.¹⁴

In previous years, the European Union has increasingly emerged as an independent, quasi-state actor, particularly in the areas of strategic autonomy and digital sovereignty. Among the initiators of the concept was former Internal Market Commissioner Thierry Breton, who aimed to position the EU as an active player operating on its own terms in various markets, from defence to microchips.¹⁵ An essential element of digital sovereignty is that states should be able to act independently in this digital world, while ensuring the fundamental rights of their citizens. The concept has gradually been incorporated into the EU's official

¹² M. Damen, *EU strategic autonomy 2013-2023: From concept to capacity*, European Parliamentary Research Service (EPRS), 2022, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733589/EPRS_BRI\(2022\)733589_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733589/EPRS_BRI(2022)733589_EN.pdf) [accessed: 6 August 2026].

¹³ European External Action Service, *Shared vision, common action – A stronger Europe: A global strategy for the European Union's foreign and security policy*, Luxembourg 2016, https://www.eeas.europa.eu/sites/default/files/eugs_review_web_0.pdf [accessed: 6 August 2026].

¹⁴ A.-R. Lupu, *Digital sovereignty...*, p. 150.

¹⁵ European Commission, *Speech by Commissioner Thierry Breton at Hannover Messe Digital Days*, 15 July 2020, https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_20_1362 [accessed: 6 August 2026].

political discourse, starting with Ursula von der Leyen's initiatives,¹⁶ through European Parliament documents,¹⁷ to Charles Michel's 2021 statement, in which he emphasizes that he considers the future of the EU unthinkable without digital sovereignty.¹⁸ At the same time, from a legal and theoretical point of view, the question arises as to whether sector-specific sovereignty is acceptable,¹⁹ or whether we can even talk about sovereignty in the case of non-state entities.²⁰

Bodin's concept of the gold ducat can be easily reinterpreted in today's debates on digital sovereignty, as for him, high-quality gold ducats, especially Venetian and Hungarian ducats,²¹ were not merely a means of payment, but an imprint of a sovereign political order: money whose value was guaranteed not by the arbitrary will of the prince, but by its stable metal value, international acceptance, and trust.²² The deliberate debasement of currency was rejected in this theory, based on the idea that those who manipulate the value of money ultimately destroy the economic autonomy of the community.²³ This conclusion can be paralleled in today's world with the issue of control over financial infrastructures. The discourse on digital sovereignty, particularly in relation to Central Bank Digital Currencies (CBDCs), raises a dilemma similar to that of the quality of gold coins in Bodin's time. In just as Bodin treated stable ducats as a measure of the moral and economic health of the political order, digital payment systems today appear as technological carriers of state sovereignty. It's also emphasizing that an EU-wide digital euro and centralized regulation could threaten the monetary and institutional autonomy of member states, especially smaller countries. From Bodin's

¹⁶ K. Rippich, V.H. Diaz, *Tales of Digital Sovereignty and Child Online Safety: Von der Leyen's State of the Union Address*, Dublin 2023.

¹⁷ The Digital Networks Act.

¹⁸ European Council, *Speech by President Charles Michel at „Masters of digital 2021” online event: Digital sovereignty is central to European strategic autonomy*, 3 February 2021, <https://www.consilium.europa.eu/en/press/press-releases/2021/02/03/speech-by-president-charles-michel-at-the-digitaleurope-masters-of-digital-online-event/> [accessed: 6 August 2026].

¹⁹ K. Linask-Goode, *Data sovereignty and privacy in financial services: Adapting faster with data-centric architecture*, 10 October 2025.

²⁰ B. de Cordoue, *Sovereignty, did you say sovereignty?*, Paris 2024, <https://institutdelors.eu/en/publications/sovereignty-did-you-say-sovereignty/> [accessed: 6 August 2026].

²¹ J. Búza, *A magyar és a török dukát árfolyama a 16. század közepén*, „Századok” 2001, vol. 135, no. 4, pp. 889–906.

²² J. Búza, *Jean Bodin a drágaság okairól és a magyar aranyforintről*, [in:] *Jubileumi tanulmánykötet. Nagy Aladár professzor 70. születésnapjára*, Zs. Bekker, L. Besenyi, P.Á. Bod (eds.), Miskolc 2011, pp. 54–72.

²³ D. Molnar, P. Gyimesi, *David's Sovereignty vs. Goliath's Centralisation regarding CBDCs in the EU*, „Regional Law Review” 2025, p. 68.

perspective, this centralization can be interpreted as the modern equivalent of “bad money”²⁴: it is not the material that deteriorates, but control that becomes concentrated. In this context, historical monetary theories warn that sovereignty is realized not only in legal declarations, but also in practical forms of value transfer. The question of digital sovereignty is thus not primarily a technological problem, but a constitutional and political one: who determines the conditions under which money operates, who controls the infrastructure, and what room for manoeuvre remains for member state or national decisions.²⁵ In this sense, the history of early modern gold coins is not a precedent, but a cautionary analogy.

The debates surrounding digital sovereignty can be well illustrated by the metaphor of David and Goliath, which refers not only to a difference in size, but also to different power logics. In this sense, “Goliath”²⁶ has centralized, technologically integrated, and uniform regulatory systems at its disposal, and in order to achieve greater efficiency, it exercises ever greater control over digital infrastructure.²⁷ In contrast, states and institutions playing the role of “David”²⁸ seek to preserve their decision-making autonomy in the digital space not through technological superiority,²⁹ but through institutional self-defence, legal means, and strategic adaptation.

In this context, control over digital financial systems, data flows, platform regulation, and technological standards is becoming one of the most critical dimensions of sovereignty. The loss of autonomy in the digital space poses not only economic risks, but also governance and security risks, as the ability of states to act is increasingly linked to digital infrastructure. Digital sovereignty is therefore no longer a complementary element of state strategies, but one of their defining foundations, along which resilience, risk management, and long-term strategic thinking can also be interpreted.

²⁴ J. Búza, *A magyar és a török dukát árfolyama...*, p. 890.

²⁵ D. Molnar, P. Gyimesi, *David's Sovereignty vs. Goliath's Centralisation...*, p. 69.

²⁶ D. Molnar, P. Gyimesi, *David's Sovereignty vs. Goliath's Centralisation...*, p. 69.

²⁷ P.B. Király, *A digitális jegybankpénz bevezetésének jogi kérdései*, [in:] *Kriptoeszközök világa a jog és a gazdaság szemszögéből*, Zs. Bujtár et al. (eds.), Pécs 2021, pp. 34–45.

²⁸ D. Molnar, P. Gyimesi, *David's Sovereignty vs. Goliath's Centralisation...*, p. 70.

²⁹ H. Cui, T. Yasseri, *AI-enhanced collective intelligence*, arXiv 2024, p. 16.

National defence strategy in Romania

President Nicușor Dan's central thesis regarding Romania's "Digital Decade"³⁰ national action plan is that Romania is not struggling with theoretical shortcomings, but rather with institutional fragmentation and implementation deficits. President Nicușor Dan emphasizes that digitization is not an end in itself, but rather a government tool whose primary function is to "free up time" for citizens and radically reduce the transaction costs of public administration.³¹ From a technical point of view, he highlights the lack of system-level interoperability, which currently forces citizens to act as "data couriers" between individual administrative silos, thereby hindering the implementation of the "once-only data provision"³² principle in accordance with EU directives.³³

From a political-economic perspective, the president defines digitalization as a technocratic solution to systemic corruption and tax evasion. He argues that the strict algorithmizing of digital workflows reduces the discretion of public servants, thereby reducing the risk of corruption at the system level.³⁴ Among the priorities for 2026, the integration of artificial intelligence and cloud-based infrastructure is highlighted, which are treated not only as opportunities for innovation, but also as cornerstones of national security and cyber sovereignty.³⁵ According to the president's vision, the success of the digital ecosystem is based on synergies between the private sector and the state, as well as on the development of human capital's digital competencies (DESI indicators³⁶), avoiding technological progress generating further social inequalities.

³⁰ European Commission, *Digital Decade – Policy programme*, <https://digital-strategy.ec.europa.eu/en/policies/digital-decade-policy-programme> [accessed: 29 January 2026].

³¹ European Commission, *2025 State of the Digital Decade package*, <https://digital-strategy.ec.europa.eu/en/policies/2025-state-digital-decade-package> [accessed: 29 January 2026].

³² B. Bălu, *Digitalizarea statului: Nicușor Dan propune acces rapid la cele mai folosite servicii*, Digi24, 25 November 2025, <https://www.digi24.ro/digieconomic/digital/digitalizarea-statului-nicusor-dan-propune-acces-rapid-la-cele-mai-folosite-servicii-76081> [accessed: 6 August 2026].

³³ A. Seceleanu, *Președintele Nicușor Dan: În materie de digitalizare avem strategii, avem legislație, dar ele nu sunt puse împreună*, Ziarul Financiar, 26 November 2025, <https://www.zf.ro/business-hi-tech/presedintele-nicusor-dan-materie-digitalizare-avem-strategii-avem-22959830> [accessed: 6 August 2026].

³⁴ Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune privind deceniul digital pentru România*, Bucharest 2024, https://www.mcid.gov.ro/wp-content/uploads/2024/05/Plan-national-de-ac-tiune-roadm-ap-pentru-publicare_corectat.pdf [accessed: 6 August 2026].

³⁵ Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune privind deceniul digital pentru România*, Bucharest 2024, https://www.mcid.gov.ro/wp-content/uploads/2024/05/Plan-national-de-ac-tiune-roadm-ap-pentru-publicare_corectat.pdf [accessed: 6 August 2026].

³⁶ European Commission, *Digital Economy and Society Index (DESI)*, <https://digital-strategy.ec.europa.eu/en/policies/desi> [accessed: 6 August 2026].

Examining the National Action Plan for Romania's Digital Decade, it is clear that the document treats digitization not merely as administrative modernization, but as a structural foundation for national security and digital sovereignty. The introductory section already establishes that digital transformation constitutes a fundamental prerequisite for the security, competitiveness, and resilience of the state, thereby directly embedding digitalization within the framework of national security discourse.³⁷ One of the most concrete elements of the draft from a national security perspective is the creation of the Government Cloud (Cloudul Guvernamental), which the Romanian state explicitly defines as a digital strategic infrastructure. The involvement of the institutions responsible for implementing the project, the Romanian Digitalization Authority (Autoritatea pentru Digitalizarea României), the Special Telecommunications Service (Serviciul de Telecomunicații Speciale), and the Romanian Intelligence Service (Serviciul Român de Informații), suggests that the cloud is not just an ordinary technological system, but may be an integral part of national security surveillance. The relevant legal framework is provided by Government Emergency Ordinance No. 89 of 2022 and its approving law, which specifically mentions data security, the regulation of access to state data, and the protection of state sovereignty. The document makes it clear that state data assets cannot be transferred to uncontrolled external infrastructures, which is one of the most concrete manifestations of digital sovereignty in Romania.³⁸

Closely related to this is the National Interoperability Platform (Platforma Națională de Interoperabilitate), established by Law No. 242 of 2022. This platform ensures secure, standardized, and controlled data exchange between state institutions, eliminating parallel databases and information silos. This is a key issue from a national security perspective, as crisis management, civil protection, border management, and public health response are based on data-driven decision-making. Also explicitly emphasizes high availability and scalability, which are essential requirements in crisis and conflict situations.³⁹ The issue of digital identity is also explicitly linked to national security. Romania considers electronic ID cards to be important for achieving digital sovereignty. The National Action Plan for Digitalization also highlights the positive

³⁷ Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune...*, pp. 1–2.

³⁸ Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune...*, p. 4.

³⁹ Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune...*, p. 143.

impact that ROeID has on society, which obviously needs no explanation, as fast administration is a real treasure in today's bureaucratic world. In practice, this means that digital identity is becoming a critical national infrastructure, the compromise of which poses a direct risk to national security.⁴⁰

This would obviously be the aim, but in practice this opportunity is not as positive as initially expected. There are also serious problems with the efficiency and operation of the €17 million project. According to a report published in July 2025 by the Authority Responsible for Digitalization, by the end of 2025, more than 100 government portals and systems had adopted ROeID-based authentication, covering virtually all areas: taxation, healthcare, education, and justice.⁴¹ Although there are nearly 14,000 public institutions in Romania, only 29 platforms currently allow users to log in using ROeID.⁴² Among the participating institutions are 15 local governments. On their platforms, ROeID identification can be used to submit applications and documents, check the status of administrative procedures, and make online payments. The catalog listing the 29 platforms also has two buttons that lead to the roeid.ro and eid.as websites, but these are not digital services, only informational websites.⁴³ According to ADR's announcement, 252,000 digital identities had been validated via ROeID by September, and the app had been downloaded 205,700 times.⁴⁴ This represents 1.32% digitization.

The National Action Plan for Digitalization dedicates a separate chapter to cybersecurity and makes direct reference to Romania's Cybersecurity Strategy (2022–2027)⁴⁵, approved by the Government of Romania. It identifies five nationally significant objectives, including the development of resilient IT systems and the strengthening of Romania's international

⁴⁰ Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune...*, pp. 4–6.

⁴¹ Autoritatea pentru Digitalizarea României, *De la ghișeu la un click distanță: ROeID simplifică accesul românilor la serviciile publice*, <https://www.adr.gov.ro/articole/de-la-ghiseu-la-un-click-distanța-roeid-simplifică-accesul-romanilor-la-serviciile-publice> [accessed: 6 August 2026].

⁴² M. Toma, *Parlamentarii USR vor să impună prin lege utilizarea ROeID în administrația publică, după ce Context.ro a arătat că sistemul nu funcționează corespunzător*, Context.ro, 11 December 2025, <https://context.ro/usr-propune-o-lege-prin-care-sa-oblige-administratia-publica-sa-implementeze-roeid-proiectul-de-lege-a-fost-depus-dupa-ce-context-ro-a-aratat-ce-slabiciuni-are-mecanismul/> [accessed: 6 August 2026].

⁴³ I. Stanoiu, *Digitalizare pe butuci. Aplicația statului care trebuia să scape cetățenii de ghișee, între milioane de euro cheltuite și erori*, Context.ro, 11 November 2025, <https://context.ro/digitalizare-pe-butuci-aplicatia-statului-care-trebuia-sa-scape-cetatenii-de-ghisee-intre-milioane-de-euro-cheltuite-si-erori/> [accessed: 6 August 2026].

⁴⁴ Autoritatea pentru Digitalizarea României, *De la ghișeu la un click distanță...*

⁴⁵ Adopted via Government Decision No. 1321 of 2021, Romania's Cybersecurity Strategy

cybersecurity role. The plan also establishes that the protection of critical national infrastructures, both in the public and private sectors, is a state responsibility.⁴⁶

So far, we have examined the issue of digital sovereignty as a framework, plan, and concept for ensuring control over national data assets, infrastructure, and digital services. However, the document also outlines a cyber strategy for the next four to five years, which sets out specific goals and measures in the field of cybersecurity. This raises the question: what is the relationship between digital sovereignty and cyber sovereignty, and how do these concepts differ? Is the cyber strategy merely a tool for achieving digital sovereignty, or can it also be interpreted as an independent political and security priority?

Cyber sovereignty refers to the creation and control of a “national cyberspace” under domestic law, with the aim of achieving complete control over cyberspace and the internet and separating it from the global network. Although this approach is presented as ensuring equality among member states, differences in technological development led to a fragmented environment that restricts fundamental rights, particularly freedom of expression and access to information. In contrast, a free and global cyberspace provides equal access for all, allowing cyber standards to continue to function as a geopolitical tool.⁴⁷ However, cyber sovereignty in reality increases the gap between developed and developing countries. So, it is conceivable that the effects of digital sovereignty would be similar to those of cyber sovereignty, especially in a country where households are still struggling to get electricity in their homes. According to the Intelligent Energy Association, in 2024, approximately 11,611 Romanian households will not be connected to the electricity grid.⁴⁸

The section on the security of 5G networks has particularly strong national security implications. The National Action Plan for Romania's Digital Decade details the implementation of Law No. 163 of 2021,⁴⁹ which stipulates that technologies, equipment, and software used in 5G

⁴⁶ Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune...*, pp. 144–145..

⁴⁷ C. Moldova, *Mirror, Mirror on the Wall, Who's the most Authoritative of Them All? Cyber Sovereignty from a Critical Perspective*, „ELTE Law Journal” 2024, no. 2, p. 42..

⁴⁸ Ministerul Mediului, *AEI finalized the National Register of houses without electricity*, Energyconomics, 15 April 2024, <https://www.energyconomics.ro/en/aei-finalized-the-national-register-of-houses-without-electricity/> [accessed: 6 August 2026].

⁴⁹ Law No. 163 of 11 June 2021 on the adoption of measures relating to information and communications infrastructure of national interest and the conditions for the implementation of 5G networks.

infrastructure must come from manufacturers with Supreme Council for National Defence approval and the prime minister approval.⁵⁰ This is one of the most direct examples of how the protection of digital infrastructure has been elevated to the level of national security decision-making in Romania. In addition, Law No. 163 of 2021 introduces licensing measures that apply to manufacturers of technologies, equipment, and software used in information and communications infrastructures of national interest and in 5G electronic communications networks providing electronic communications services. The aim of the regulation is to prevent, manage, and eliminate risks, threats, and vulnerabilities affecting national security and defence, thereby strengthening the security of critical digital infrastructures.⁵¹ Pursuant to Article 9 of Law No. 163 of 2021, only technologies, equipment, and software produced by authorized manufacturers may be used in the provision of networks and services in 5G networks.⁵² Pursuant to Article 10 of the Act, technologies, equipment, and IT programs used in information and communications infrastructures of national interest and in networks providing 5G electronic communications services, whose manufacturers do not obtain authorization in accordance with the provisions of the Act, may be used for a maximum of seven years; with the exception of core network elements, for which the period of applicability is a maximum of 5 years.⁵³ These deadlines shall be calculated from the date of entry into force of Law No. 163 of 2021. The National Authority for Management and Regulation in Communications of Romania is authorized to monitor compliance with the regulations. In

⁵⁰ Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune...*, p. 106.

⁵¹ Law No. 163 of 11 June 2021...

⁵² Law No. 163 of 11 June 2021, art. 9: „Providers of electronic communications networks and services authorized under Government Emergency Ordinance No. 111 of 2011, approved with amendments and additions by Law No. 140 of 2012, with subsequent amendments and additions, may only use technologies, equipment, and software in 5G networks manufactured by manufacturers authorized in accordance with the provisions of Article 3.”

⁵³ Law No. 163 of 11 June 2021, art. 10: „The technologies, equipment, and software programs used in IT and communications infrastructures of national interest, as well as in electronic communications networks through which 5G electronic communications services are provided, whose manufacturers do not obtain authorization in accordance with the provisions of this law, may be used for a period of 7 years, except for those in the core of the network, which may be used for a period of 5 years, calculated from the date of entry into force of this law.”

the event of a breach of the provisions, offenders may be fined between 1% and 5%⁵⁴ of their turnover.

The EU Decision of December 14, 2022, on establishing a digital decade policy programme until 2030 defines technological sovereignty as a fundamental condition for national security, economic competitiveness, and innovation.⁵⁵ In line with this strategic framework, Romania participates in several European-level technological collaborations aimed at strengthening key digital capabilities and promoting EU-level integration.⁵⁶

Within this framework, Romania is actively involved in European high-performance computing collaborations: through the EuroCC project,⁵⁷ a national HPC (High Performance Computing) Competence Center operates as a national contact point for training, professional support, and access to computing resources.⁵⁸

In the field of quantum technologies, Romania is developing its national quantum communication infrastructure under the RoNaQCI project, which, with the support of the Digital Europe program and national funds,⁵⁹ is aligned with the EuroQCI pan-European initiative.⁶⁰ In the field of semiconductors, the country is participating in the IPCEI project for low-energy processors and chips, with a significant budget contribution.⁶¹ In addition, Romania is cooperating with other Member States in the creation of European digital infrastructure consortia in the fields of blockchain, genomics, and language technologies.

⁵⁴ The National Authority for Management and Regulation in Communications of Romania, *Telekom Mobile was fined over RON 1,000,000 for the security incident occurred in March 2018*, https://www.ancom.ro/en/amenda-de-pest-1000000-de-lei-aplicata-telekom-mobile-pentru-incidentul-de-securitate-din-luna-martie-2018_5924 [accessed: 6 August 2026].

⁵⁵ Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030, <https://eur-lex.europa.eu/eli/dec/2022/2481/oj/eng> [accessed: 6 August 2026].

⁵⁶ Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune...*, p. 145.

⁵⁷ European High Performance Computing Joint Undertaking (EuroHPC JU), *EuroCC Project Overview*, https://www.eurohpc-ju.europa.eu/research-innovation/our-projects/eurocc_en [accessed: 6 August 2026].

⁵⁸ Institutul Național de Cercetare – Dezvoltare în Informatică ICI București, *Proiecte Europene*, <https://www.ici.ro/ro/proiecte-in-derulare/proiecte-europene/> [accessed: 6 August 2026].

⁵⁹ RoNaQCI, *Objectives of the Romanian National Quantum Communication Infrastructure*, <https://www.ronaqi.upb.ro/objectives/> [accessed: 6 August 2026].

⁶⁰ European Quantum Communication Infrastructure (EuroQCI), *EuroQCI Overview*, <https://digital-strategy.ec.europa.eu/en/policies/european-quantum-communication-infrastructure-euroqci> [accessed: 6 August 2026].

⁶¹ European Commission, *Member States and Semiconductor Industry take stock of the innovation and advancement of the IPCEI in Microelectronics and Communication Technologies*, 27 November 2025, <https://digital-strategy.ec.europa.eu/en/news/european-commission-member-states-and-semiconductor-industry-take-stock-innovation-and-advancement> [accessed: 6 August 2026].

Taken together, these initiatives show that technological sovereignty is not merely a declared strategic goal for Romania, but a concrete policy priority implemented through EU cooperation.

The Intersection of Expectations and Realities

Building digital infrastructure, skills, and capacity, and digitizing businesses and public services is not enough to secure the EU's digital future, all European citizens must be able to take full advantage of digital opportunities and technologies. Offline rights must also be fully accessible in the digital space. However, in order to thrive in the digital world, people need affordable, secure, and high-quality network connections, and they must be able to acquire basic digital skills, which will enable them to participate fully in social and economic activities. This does not seem like an impossible challenge, unless we take into account the fact that in Romania, 42% of students were functionally illiterate in the 2022 PISA test (again).⁶² Cloud computing allows people to access software, services, and content anywhere, anytime. Artificial intelligence enables systems to learn and solve problems, blockchain is transforming the concepts of money, contracts, and identity, and the list of paradigm-shifting innovations goes on. This is relatively well accommodated by Law No. 242 of 2022, which provides an appropriate national legal framework for certain terms, as its purpose is to adopt measures that apply to technologies, equipment, software programs, and the data they use, in order to contribute to increasing the level of interconnection between the IT systems of public authorities and institutions and to facilitate data exchange between them, building on the principles and objectives of the European interoperability framework. These new technologies do not only affect certain activities, but modernize all industries and activities, changing social and economic norms, which calls for changes in legislation. According to the Romanian president,⁶³ the problem in the country is not with theories and concepts, but with implementation, and although

⁶² A. Grigoras, *Romania Scores Low in PISA Tests Once Again: Second to Last in EU*, RomaniaJournal.ro, 5 December 2023, <https://www.romaniajournal.ro/society-people/romania-scores-low-in-pisa-tests-once-again-second-to-last-in-eu/> [accessed: 6 August 2026].

⁶³ A. Seceleanu, *Președintele Nicușor Dan: În materie de digitalizare avem strategii, avem legislație, dar ele nu sunt puse împreună...*

this is an indisputable statement, it may also have something to do with the quality of the theories. This is because Law No. 163 of 2021 aims to adopt measures to protect IT and communications infrastructures of national importance, as well as electronic communications networks (including networks providing 5G-type electronic communications services) and the technologies, equipment, and software used in them, in order to prevent, counteract, and eliminate risks, threats, and vulnerabilities to national security and the defence of the country. Considering that this is a law concerning national security, it has only 17 short articles, and although it refers to several other pieces of legislation, it does not really provide a comprehensive legal framework for the subject.

In conclusion, it can be said that Romania's goals regarding digital sovereignty are ambitious given the country's current situation, but the reality is far from reflecting the goals that have been set. With regard to Romania's protection of digital sovereignty, it should be emphasized that current activities should not be merely reactive, but should move toward a more proactive approach. With regard to Romania's protection of digital sovereignty, it should be emphasised that its current activities should not be merely reactive, but should instead adopt a more proactive stance.

Bibliography:

- Bihari M., *A modern szuverenitás elméleti alapjai. Kísérlet egy funkcionista rendszerszemléletű szuverenitáselmélet alapjainak kidolgozására*, „MTA Law Working Papers” 2014, no. 51
- Bodin J., *Az államról*, Budapest 1987
- Bodin J., *Six Books of the Commonwealth*, Oxford 1967
- Búza J., *A magyar és a török dukát árfolyama a 16. század közepén*, „Századok” 2001, vol. 135, no. 4
- Búza J., *Jean Bodin a drágaság okairól és a magyar aranyforintról*, [in:] *Jubileumi tanulmánykötet. Nagy Aladár professzor 70. születésnapjára*, Zs. Bekker, L. Besenyei, P.Á. Bod (eds.), Miskolc 2011
- Cui H., Yasserli T., *AI-enhanced collective intelligence*, „arXiv” 2024
- Jellinek G., *The Declaration of the Rights of Man and of Citizens*, New York 1901
- Király P.B., *A digitális jegybankpénz bevezetésének jogi kérdései*, [in:] *Kriptoeszközök világa a jog és a gazdaság szemszögéből*, Zs. Bujtár et al. (eds.), Pécs 2021
- Kistelki K., *Mozaikszerű szuverenitás: az Erdélyi Fejedelemség szuverenitásának nézőpontjai*, [in:] *Szuverenitás- kérdések, elméletek, történetek*, A. Karácsony (ed.), Budapest 2020
- Kukorelli I., *Alkotmánytan I., Alapfogalmak és alkotmányos intézmények*, Budapest 2007
- Lupu A.-R., *Digital sovereignty. Constitutionalist approach*, „AUB Drept Forum Juridic” 2023, no. 2
- Moldova C., *Mirror, Mirror on the Wall, Who’s the most Authoritative of Them All? Cyber Sovereignty from a Critical Perspective*, „ELTE Law Journal” 2024, no. 2
- Molnar D., Gyimesi P., *David’s Sovereignty vs. Goliath’s Centralisation regarding CBDCs in the EU*, „Regional Law Review” 2025
- Paczolay P., *A legfőbb hatalom eredete. Újkori államelméletek*, „Rubicon” 1997, no. 8
- Rippich K., Diaz V.H., *Tales of Digital Sovereignty and Child Online Safety: Von der Leyen’s State of the Union Address*, Dublin 2023
- Takács P., *A szuverenitás mint az állam fogalmi megragadásának kategóriája*, [in:] *Ünnepi tanulmányok Rácz Attila 75. születésnapja tiszteletére*, Á. Cserny (ed.), Budapest 2013
- Tóth Z.J., *Az állami jelképek helye és védelme az európai alkotmányokban*, „Jogtudományi Közlöny” 2024, no. 4

Legal Documents, Official Reports, and Online Sources

- Autoritatea pentru Digitalizarea României, *De la ghișeu la un click distanță: ROe-ID simplifică accesul românilor la serviciile publice*, <https://www.adr.gov.ro/articole/de-la-ghiseu-la-un-click-distanta-roeid-simplifica-accesul-romanilor-la-serviciile-publice>
- Bălu B., *Digitalizarea statului: Nicușor Dan propune acces rapid la cele mai folosite servicii*, Digi24, 25 November 2025, <https://www.digi24.ro/digieconomic/digital/digitalizarea-statului-nicusor-dan-propune-acces-rapid-la-cele-mai-folosite-servicii-76081>
- Cordoue B. de, *Sovereignty, did you say sovereignty?*, Paris 2024, <https://institutdelors.eu/en/publications/sovereignty-did-you-say-sovereignty/>
- Damen M., *EU strategic autonomy 2013-2023: From concept to capacity*, European Parliamentary Research Service (EPRS), 2022, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733589/EPRS_BRI\(2022\)733589_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733589/EPRS_BRI(2022)733589_EN.pdf)
- Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030, <https://eur-lex.europa.eu/eli/dec/2022/2481/oj/eng>
- European Commission, *2025 State of the Digital Decade package*, <https://digital-strategy.ec.europa.eu/en/policies/2025-state-digital-decade-package>
- European Commission, *Digital Decade – Policy programme*, <https://digital-strategy.ec.europa.eu/en/policies/digital-decade-policy-programme>
- European Commission, *Digital Economy and Society Index (DESI)*, <https://digital-strategy.ec.europa.eu/en/policies/desi>
- European Commission, *Member States and Semiconductor Industry take stock of the innovation and advancement of the IPCEI in Microelectronics and Communication Technologies*, 27 November 2025, <https://digital-strategy.ec.europa.eu/en/news/european-commission-member-states-and-semiconductor-industry-take-stock-innovation-and-advancement>
- European Commission, *Speech by Commissioner Thierry Breton at Hannover Messe Digital Days*, 15 July 2020, https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_20_1362
- European Council, *Speech by President Charles Michel at „Masters of digital 2021” online event: Digital sovereignty is central to European strategic autonomy*, 3 February 2021, <https://www.consilium.europa.eu/en/press/press-releases/2021/02/03/speech-by-president-charles-michel-at-the-digitaleurope-masters-of-digital-online-event/>
- European External Action Service, *Shared vision, common action – A stronger Europe: A global strategy for the European Union’s foreign and security policy*, Luxembourg 2016, https://www.eeas.europa.eu/sites/default/files/eugs_review_web_0.pdf
- European High Performance Computing Joint Undertaking (EuroHPC JU), *EuroCC Project Overview*, https://www.eurohpc-ju.europa.eu/research-innovation/our-projects/eurocc_en

European Quantum Communication Infrastructure (EuroQCI), *EuroQCI Overview*, <https://digital-strategy.ec.europa.eu/en/policies/european-quantum-communication-infrastructure-euroqci>

Government Decision No. 1321 of 2021 on the approval of Romania's Cybersecurity Strategy

Grigoras A., *Romania Scores Low in PISA Tests Once Again: Second to Last in EU*, RomaniaJournal.ro, 5 December 2023, <https://www.romaniajournal.ro/society-people/romania-scores-low-in-pisa-tests-once-again-second-to-last-in-eu/>

Institutul Național de Cercetare – Dezvoltare în Informatică ICI București, *Proiecte Europene*, <https://www.ici.ro/ro/proiecte-in-derulare/proiecte-europene/>

Law No. 163 of 11 June 2021 on the adoption of measures relating to information and communications infrastructure of national interest and the conditions for the implementation of 5G networks

Linask-Goode K., *Data sovereignty and privacy in financial services: Adapting faster with data-centric architecture*, 10 October 2025

Ministerul Mediului, *AEI finalized the National Register of houses without electricity*, Energyconomics, 15 April 2024, <https://www.energyconomics.ro/en/aei-finalized-the-national-register-of-houses-without-electricity/>

Ministry of Research, Innovation, and Digitalization, *Planul Național de acțiune privind deceniul digital pentru România*, Bucharest 2024, https://www.mcid.gov.ro/wp-content/uploads/2024/05/Plan-national-de-actiune-roadm-ap-pentru-publicare_corectat.pdf

RoNaQCI, *Objectives of the Romanian National Quantum Communication Infrastructure*, <https://www.ronaqci.upb.ro/objectives/>

Seceleanu A., *Președintele Nicușor Dan: În materie de digitalizare avem strategii, avem legislație, dar ele nu sunt puse împreună*, Ziarul Financiar, 26 November 2025, <https://www.zf.ro/business-hi-tech/presedintele-nicusor-dan-materie-digitalizare-avem-strategii-avem-22959830>

Stanoiu I., *Digitalizare pe butuci. Aplicația statului care trebuia să scape cetățenii de ghisee, între milioane de euro cheltuite și erori*, Context.ro, 11 November 2025, <https://context.ro/digitalizare-pe-butuci-aplicatia-statului-care-trebuia-sa-scape-cetatenii-de-ghisee-intre-milioane-de-euro-cheltuite-si-erori/>

The National Authority for Management and Regulation in Communications of Romania, *Telekom Mobile was fined over RON 1,000,000 for the security incident occurred in March 2018*, https://www.ancom.ro/en/amenda-de-pest-1000000-de-lei-aplicata-telekom-mobile-pentru-incidentul-de-securitate-din-luna-martie-2018_5924

Toma M., *Parlamentarii USR vor să impună prin lege utilizarea ROeID în administrația publică, după ce Context.ro a arătat că sistemul nu funcționează corespunzător*, Context.ro, 11 December 2025, <https://context.ro/usr-propune-o-lege-prin-care-sa-oblige-administratia-publica-sa-implementeze-roeid-proiectul-de-lege-a-fost-depus-dupa-ce-context-ro-a-aratat-ce-slabiciuni-are-mecanismul/>