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Research Article

EUROPEAN APPROACHES TO DIGITAL JUSTICE IN CENTRAL AND EASTERN EUROPE AND THE BALTIC STATES, WITH PERSPECTIVES FOR UKRAINE

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ABSTRACT

Background: This article examines European approaches to digital justice, focusing on how supranational regulatory models—ranging from digital rights principles to operational e-justice instruments—shape national practices across Central and Eastern Europe and the Baltic States. The study conceptualises digital justice as a multidimensional phenomenon that integrates technological tools, institutional design, data governance, and human-centred values. Particular attention is given to how these European developments may inform Ukraine’s justice sector reforms as the country progresses toward alignment with the EU acquis.

Methods: The research employs a doctrinal legal methodology combined with comparative analysis. It systematically examines EU regulatory frameworks, CEPEJ instruments, and the Digital Decade monitoring architecture alongside civil procedure legislation and e-justice platforms in eleven EU Member States. Empirical insights are drawn from the EU Justice Scoreboard 2024–2025 and Digital Decade Country

Reports. This methodological approach enables the identification of patterns, divergences, and implementation models, forming a basis for assessing Ukraine's digital justice trajectory.

Results and Conclusions: *The findings demonstrate that the European Union has developed a coherent, value-oriented architecture of digital justice that unites legally binding standards, interoperable technological solutions, and principles of inclusiveness, transparency, and human oversight—particularly in the context of high-risk AI. The Baltic States provide the most integrated and technologically advanced model, whereas Central and Eastern European jurisdictions exhibit more gradual or fragmented pathways. Systemic integration—characterised by mandatory electronic filing, unified data-exchange infrastructures, and machine-readable judicial data—correlates with stronger performance across EU indicators. Conversely, fragmented or parallel systems constrain accessibility, interoperability, and data-driven justice. Ukraine has achieved notable progress through UJITS, automated case management, and electronic document flow; however, substantial gaps persist in interoperability, machine-readability, user-centred design, and AI governance. Structural fragmentation and the absence of a comprehensive digital justice strategy limit its convergence with EU standards. Drawing on comparative insights, priority directions for Ukraine include full implementation of machine-readable formats (XML/JSON and ECLI), consolidation of fragmented subsystems into a unified ecosystem, mandatory digital procedures for professional participants, and the development of a rights-based AI governance framework aligned with the EU AI Act. Ensuring that digitalisation enhances—rather than restricts—access to justice requires balancing technological innovation with procedural safeguards, institutional resilience, and user inclusion.*

1 INTRODUCTION

Digitalisation and digital transformation are fundamental EU development areas that affect all spheres of public life, including justice. Within the framework of European integration and the implementation of strategic digital priorities, digital justice (e-justice) is not only a means of modernising judicial proceedings but also a means of ensuring effective access to justice, upholding human rights, and strengthening trust in legal institutions.

A clear conceptual foundation is essential for analysing the digital transformation of justice systems. In this manuscript, the terms *digitisation*, *digitalisation*, and *digital transformation* are used in accordance with contemporary scholarly systematisations. Following Derhachova and Koleshnia (2020),¹ and Saprykin (2024),² *digitisation* refers to the technical

1 Hanna Derhachova and Yana Koleshnia, 'Digital Business Transformation: Essence, Signs, Requirements and Technologies' (2020) 17 Economic Bulletin of National Technical University of Ukraine "Kyiv Polytechnical Institute" 283-4. doi:10.20535/2307-5651.17.2020.216367.

2 Viacheslav Saprykin, 'Digitization, Digitalization and Digital Transformation of Public Administration in Ukraine' (2024) 19(1) Bulletin of Taras Shevchenko National University of Kyiv: Public Administration 118-9. doi:10.17721/2616-9193.2024/19-19/22.

conversion of analogue information into digital formats, while *digitalisation* denotes the redesign of judicial procedures and workflows through the integration of digital technologies. In contrast, *digital transformation* is understood, in line with Elia et al. (2024)³ and Nadkarni and Prügl (2021),⁴ as a systemic and strategic reconfiguration of institutional structures, data governance models, and user experience, extending beyond technological upgrades to encompass organisational and cultural change. Within this broader framework, *e-justice* refers to the deployment of electronic tools and platforms to support judicial processes. In contrast, *digital justice* reflects a more comprehensive paradigm that integrates technological innovation with principles of fairness, transparency, accessibility, and accountability. The concepts of *justice platforms* and *data-driven justice* describe, respectively, integrated digital ecosystems that support procedural actions and interoperability, and the use of structured, machine-readable legal data to enhance decision-making, monitoring, and institutional performance. Establishing these distinctions ensures terminological precision and clarifies the analytical lens through which the subsequent comparative assessment of European jurisdictions is conducted.

EU legislation demonstrates a marked interconnection between digitalisation and the efficiency, transparency, and accessibility of justice.⁵ The digitalisation of judicial processes, the development of data infrastructure, and the implementation of innovative technologies, including artificial intelligence (AI), serve as instruments to improve access to justice and strengthen the rule of law. At the same time, the EU delineates the permissible limits by classifying AI systems in judicial proceedings as high-risk. Such technologies operate exclusively under human control, in compliance with ethics, legal certainty, and accountability. The EU establishes clear boundaries for AI in judicial proceedings through risk-based classification. Under the EU AI Act, systems assisting judicial authorities in

3 Gianluca Elia and others, 'The Digital Transformation Canvas: A Conceptual Framework for Leading the Digital Transformation Process' (2024) 67(4) Business Horizons 381. doi:10.1016/j.bushor.2024.03.007.

4 Swen Nadkarni and Reinhard Prügl, 'Digital Transformation: A Review, Synthesis and Opportunities for Future Research' (2021) 71 Management Review Quarterly 233. doi:10.1007/s11301-020-00185-7.

5 European Commission, *A Digital Single Market Strategy for Europe: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions* (COM(2015) 192 final, 6 May 2015) <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52015DC0192>> accessed 25 September 2025; European Commission, *A European Strategy for Data: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions* (COM(2020) 66 final, 19 February 2020) <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0066>> accessed 25 September 2025; European Commission, *2030 Digital Compass: the European way for the Digital Decade: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions* (COM(2021) 118 final, 9 March 2021) <<https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:52021DC0118>> accessed 25 September 2025; Regulation (EU) 2023/2854 of the European Parliament and of the Council of 13 December 2023 on Harmonised Rules on Fair Access to and Use of Data and Amending Regulation (EU) 2017/2394 and Directive (EU) 2020/1828 (Data Act) [2023] OJ L 2854/1.

interpreting facts and law or applying law to specific cases constitute high-risk AI.⁶ However, Regulation (EU) 2024/1689 (Article 6(3) and Recital 61) exempts ancillary administrative functions like scheduling or transcription from this classification, as they do not materially affect legal outcomes. While UNESCO's Guidelines provide an ethical framework,⁷ the EU's approach creates legally binding obligations for high-risk system providers and users. This transition from ethical guidelines to mandatory compliance ensures more effective risk management and the protection of fundamental rights in judicial AI deployment.

To identify systemic challenges and best practices for Ukraine, it is essential to analyse and characterise the experience of the EU Member States, particularly those in Central and Eastern Europe and the Baltic region, which have undergone transformations of their legal systems and recent judicial reforms. This will help to determine the ways to avoid the fragmented and inconsistent approach that is sometimes characteristic of the digital transformation of public services, and to ensure the coherent implementation of European standards, which are determinative for Ukraine, given the continued digitalisation of its judicial system.

2 METHODOLOGY

The study employs a legal methodology combined with comparative analysis to explore the normative foundations and practical implementation of European standards for digital justice, with particular emphasis on their relevance for Ukraine. The methodology integrates various analytical approaches to systematically evaluate the principles and objectives of digital transformation of justice, identifying its dynamics and structural-functional interrelations.

The study adopts a legal-analytical focus, prioritising analysis of legal acts, official monitoring instruments, and operational e-justice systems over theoretical e-justice scholarship. This methodological choice reflects the research objective: to identify normative and technical benchmarks relevant to Ukraine's legislative alignment with the EU acquis, rather than to develop conceptual frameworks of digital justice theory. EU regulatory and legal documents, as well as the national legislation of the EU Member States, serve as the primary data sources. At the same time, scientific publications, technical documentation, e-justice platforms, the EU Justice Scoreboard 2024–2025, and Digital Decade Country Reports 2024 are treated as sources that provide evidence

6 Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 Laying Down Harmonised Rules on Artificial Intelligence and Amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) [2024] OJ L 1689/1.

7 UNESCO, *Guidelines for the Use of AI Systems in Courts and Tribunals* (UNESCO 2025). doi:10.58338/LIEY8089.

regarding the state of implementation. Scientific publications are employed to contextualise regulatory developments and provide critical interpretations where official sources require academic elaboration. For instance, analysis of European court automation trajectories (2024) informs the classification of implementation models, while CEPEJ guidelines on e-filing and digitalisation (2021) provide normative benchmarks for assessing procedural standards. This approach ensures that findings remain grounded in enforceable legal standards and replicable institutional practices, which are essential for a candidate country's accession process.

The comparative analysis of digital justice includes: current legal regulation through civil procedural legislation governing electronic filing, remote participation, and digital signatures; technical infrastructure of national platforms (E-lietas, e-Toimik, LITEKO, eŽaloby, e-Sodstvo), including e-ID authentication, registry interoperability, and machine-readability standards; and monitoring via EU Justice Scoreboard 2024-2025 and Digital Decade Country Reports indicators. Based on these criteria, national approaches are distinguished by mandatory e-filing scope (universal for all participants vs. mandatory for professionals only vs. voluntary); platform integration level (unified system vs. multiple interconnected platforms vs. fragmented portals); machine-readability standards for court decisions, including structured formats with semantic markup and ECLI identifiers; and user-centric design. This framework enables the identification of national approaches through systemic integration, gradual transformation, and fragmented adoption, and facilitates their comparative evaluation in achieving data-driven justice, accessibility, effectiveness, and digital inclusion.

The comparative study covers Central and Eastern Europe and the Baltic region: Poland, Czechia, Hungary, Slovakia, Slovenia, Croatia, Romania, Bulgaria, Estonia, Latvia, and Lithuania. Country selection is justified by four criteria: post-socialist transformation experience and European integration (EU accession 2004–2013), relevant to Ukraine's candidate country trajectory; continental legal tradition comparable to Ukraine's civil procedure framework, using which the digitalisation of justice systems is examined; diversity in digital maturity (Estonia: 95.8% digital service coverage) to fragmented implementers (Romania: 52.2%, Croatia) enabling identification of alternative development pathways and the tracking of implementation challenges; systematic data availability through EU Justice Scoreboard and Digital Decade Country Reports, ensuring methodological rigor. Primary sources were selected based on legal validity, relevance (adopted between 2020 and 2025), and applicability to justice sector regulation.

During the study, several limitations were acknowledged. Temporal constraints arise from the recent adoption of key regulatory instruments (the European e-Justice Strategy 2024-2028, the EU AI Act 2024), which limit long-term impact assessment. data availability varies across Member States, particularly regarding technical specifications of national platforms and usage statistics beyond EU Justice Scoreboard indicators. The dynamic nature of digital transformation is evident within the boundaries of the most

recent monitoring period (2024–2025). The comparative analysis is limited to civil procedure regulation and does not extend to criminal or administrative proceedings, although digitalisation patterns often converge. These limitations justify the study's focus on regulatory frameworks, official monitoring data, and operational e-justice systems rather than experimental initiatives or conceptual reforms.

The chosen methodology has enabled the formulation of well-founded conclusions: the analysis of regulatory frameworks confirms the EU's human-centric and rights-based paradigm; the comparative study identifies implementation models; and the assessment of Ukraine highlights specific directions for adapting European approaches.

The applied methodology enables a systematic examination of three core dimensions: the European regulatory framework and standards for digital justice (Section 3.1), the national practices of implementation across Central and Eastern Europe and the Baltic States (Sections 3.2–3.3), and Ukraine's challenges, gaps, and alignment prospects with EU requirements (Section 3.4). This progression from pan-European regulatory frameworks to concrete national practices and monitoring data ensures that recommendations for Ukraine are grounded in comparative evidence rather than abstract principles. The normative regulation, technical infrastructure, and practical implementation as analytical frameworks facilitate the identification of causal relationships between legal approaches, technological solutions, and measurable outcomes, as reflected in EU Justice Scoreboard indicators and Digital Decade Country Reports data.

3 RESULTS AND DISCUSSION

3.1. European Standards and Regulatory Architecture of the Digital Justice in the European Union

The approaches to digitalisation of justice in the EU are implemented directly through digital solutions within a shared politico-legal framework for EU Member States. Strategic priorities, institutional instruments, and mechanisms of the digital transformation of justice at both supranational and national levels are presented as follows.

One of the key acts that form the foundation for digital justice tools is the European Commission's 2020 Communication, *Digitalisation of Justice in the European Union: A Toolbox*.⁸ Access to justice and the promotion of cooperation among Member States are central elements of the EU's area of freedom, security, and justice, as established by

8 European Commission, *Digitalisation of Justice in the European Union: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions* (COM(2020) 710 final, 2 December 2020) <<https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2020:710:FIN>> accessed 25 September 2025.

Article 67 of the Treaty on the Functioning of the European Union (TFEU).⁹ Article 47 of the Charter of Fundamental Rights of the EU guarantees the right to an effective remedy and to a fair trial.¹⁰ Efficient judicial systems are essential to economic growth, and digitalisation is a key element of justice modernisation. The Communication aims to support Member States in digitalising national justice systems and to enhance cross-border judicial cooperation across the EU. Its measures include online services, video conferencing, registry interconnectivity, and secure data exchange. The overarching goal is to strengthen judicial resilience through digital tools, promoting sustainable economic development, and upholding European values. The comprehensive “toolbox” of legal, financial, and IT instruments enables tailored implementation across justice systems. Digitalisation must safeguard fundamental rights, ensure accessibility for vulnerable groups, and maintain security and user trust. Ultimately, it serves to reinforce the rule of law within the European Union.¹¹

The Communication identifies persistent fragmentation in the digitalisation of justice across EU Member States. Despite individual progress, disparities remain in access to electronic case files and digital evidence. Many essential services and registries are still not digitalised, with paper-based processes causing delays, higher costs, and inefficiencies. Additionally, uncoordinated national IT systems result in digital incompatibility. Voluntary initiatives like e-CODEX lacked consistency, while EU justice and security bodies faced insufficient digital infrastructure for secure evidence exchange. These shortcomings hinder cross-border cooperation and must be overcome to ensure access to justice both at the national and cross-border levels within the EU’s Digital Decade framework.¹²

When discussing the challenges to the further development of digital justice, the key issues identified in the context of e-justice include technical imperfections, cybersecurity risks, dependency on digital infrastructure, limited accessibility, excessive formalisation, the erosion of the human factor, and the need for sustainable funding.¹³ As Fabri (2024) notes, complex digital solutions can hinder access to justice and compromise procedural equality. The key challenge lies not in technological progress but in institutional adaptation and the need for technological simplicity.¹⁴

To address current challenges and enhance justice in the EU, digitalisation must follow the principles of subsidiarity and proportionality, reduce the digital divide, and respect national contexts. The EU toolkit includes funding, legislation, interoperable and accessible IT

9 Treaty on the Functioning of the European Union (consolidated version) [2012] OJ C 326/47.

10 Charter of Fundamental Rights of the European Union [2012] OJ C 326/391.

11 European Commission, *Digitalisation of Justice in the European Union* (n 8).

12 *ibid*

13 Vira Pyrohovska and others, ‘E-Justice and the Development of Justice: Strengths, Challenges and Prospects’ (2024) 16(1) *Lex Humana* 426.

14 Marco Fabri, ‘From Court Automation to e-Justice and Beyond in Europe’ (2024) 15(3) *International Journal for Court Administration* 7. doi:10.36745/ijca.640.

solutions, and monitoring mechanisms. Tools may be mandatory or voluntary, with a focus on accessibility for vulnerable groups, safeguarding defence rights in criminal cases, and promoting party equality in civil proceedings.¹⁵

As Fierbințeanu and Nemeș (2022) note, EU digital tools such as e-CODEX, the European Case Law Identifier and secure electronic communication operate not merely as technical solutions but as structural guarantees of mutual trust and procedural efficiency in cross-border cooperation. Their analysis underscores that the effectiveness of digital justice depends on the seamless interoperability of national systems and the capacity to exchange information securely, promptly, and in a user-centred manner.¹⁶

If the Communication *Digitalisation of justice in the European Union: A toolbox of opportunities* (2020) outlines a strategic policy approach and proposes tools for the digitalisation of justice, the Working Document provides a solid empirical foundation, a methodologically grounded study, statistical context, mapping, and a dataset on the state of digitalisation in the Member States, based on which recommendations and proposals for the digitalisation of justice were formulated.¹⁷

The European Declaration on Digital Rights and Principles for the Digital Decade (2023) defines a set of values-oriented benchmarks relevant to the digitalisation of justice.¹⁸ It affirms that technological innovation must be guided by democratic principles, the rule of law, and fundamental rights. The principle of “Putting people at the centre of the digital transformation” establishes that technology in justice must enhance legal certainty and individual rights, with AI tools remaining subordinate to human control. “Solidarity and inclusion” requires that digital justice systems ensure equal access for all, particularly for disadvantaged or marginalised groups, through inclusive design and alternative formats. “Connectivity” highlights the need for high-quality internet access to support fair and effective participation in judicial processes, both nationally and across borders. “Digital education, training and skills” stresses the importance of digital literacy for users and legal professionals to ensure full and equal engagement with e-justice services. “Fair and just working conditions” addresses the impact of digitalisation on legal practitioners, calling for ethical safeguards, transparency, and protection of professional autonomy. “Digital public services online” promotes the integration of justice into broader e-government systems, supporting remote access, interoperability, and secure communication. “Interactions with algorithms and artificial intelligence systems” demand transparency, explainability, and human oversight in AI use to avoid bias and safeguard due process. “A fair digital environment” calls for transparency and openness in legal technologies, ensuring user

15 European Commission, *Digitalisation of Justice in the European Union* (n 8).

16 Gabriela Fierbințeanu and Vasile Nemeș, ‘Digital Tools for Judicial Cooperation across the EU – The Benefits of Digital Technologies in Judicial Proceedings’ (2022) 15(1) *Challenges of the Knowledge Society* 136.

17 European Commission, *Digitalisation of Justice in the European Union* (n 8).

18 European Declaration on Digital Rights and Principles for the Digital Decade [2023] OJ C 23/1.

choice and preventing monopolistic dominance in the justice sector. “Participation in the digital public space” ensures access to legal information and safeguards users from digital harms, reinforcing freedom of expression and informational inclusion. “A protected, safe and secure digital environment” emphasises cybersecurity and data protection as essential for procedural integrity and public confidence in justice. “Privacy and individual control over data” ensures that individuals retain control over their personal information, with legal protections against surveillance and unauthorised use. “Protection and empowerment of children and young people in the digital environment” affirms the need for child-sensitive justice services, focusing on clear communication, confidentiality, and digital awareness. “Sustainability” links digitalisation for justice to environmental objectives, encouraging energy-efficient infrastructure and the responsible use of digital technologies. Together, these principles articulate a rights-based, ethically grounded, and human-centred vision of digital justice that ensures both technological effectiveness and the protection of individual dignity.

An important, valid document for advancing the digital transformation of justice is the European e-Justice Strategy 2024–2028, which continues the technically oriented e-Justice strategies of previous periods (2014–2018, 2019–2023).¹⁹ European e-Justice Strategy 2024–2028, building upon the overarching framework of the European Declaration on Digital Rights and Principles for the Digital Decade (2023), articulates a coherent set of principles guiding the digital transformation of justice in the European Union, which are categorised into substantive (“Respect for fundamental rights and principles”, “Access to justice”, “People centricity”, “Bridging the digital divide”, “Digital empowerment of users”, “Sustainability”) and operational (“Once-only principle”, “Digital by default”, “Interoperability and cybersecurity”, “Dynamic justice”, “Data-driven justice”, “Open-source”) and jointly promote a cohesive, rights-based, and future-oriented approach of digital justice, rooted in legality, inclusiveness, and sustainability.²⁰ In addition, the act outlines key challenges and sets strategic and operational goals for digital justice, supported by an action plan and monitoring mechanisms at both EU and national levels. These goals include expanding access through universal digital services and bridging the digital divide; enhancing cross-border cooperation via interoperability and real-time services; improving efficiency through data-driven solutions and digitalisation of in-person processes; and fostering innovation by implementing advanced technologies and sharing best practices.²¹

As Makauskaite-Samuolė (2025) observes, the EU AI Act forms part of a broader transparency architecture aimed at preventing opaque algorithmic practices in judicial systems. Its requirements on documentation, traceability and explicability function as structural safeguards of judicial accountability, reinforcing the principle that AI must

19 Council of the European Union, *Draft Strategy on European e-Justice 2014-2018* [2013] OJ C 376/6; Council of the European Union, *2019-2023 Strategy on e-Justice* [2019] OJ C 96/3.

20 Council of the European Union, *European e-Justice Strategy 2024–2028* [2025] OJ C 437/1.

21 *ibid*

remain fully subordinate to human oversight and embedded within rights-protecting institutional frameworks.²²

The digitalisation of justice is also specifically addressed by the European Commission for the Efficiency of Justice (CEPEJ). In its Action Plan "Digitalisation for Better Justice" 2022–2025, CEPEJ identifies as a priority the support of states and courts in successfully transitioning to the digitalisation of justice in accordance with European standards.²³ CEPEJ promotes humane, effective, and high-quality justice through the following principles: efficiency (digitalisation of judicial management), transparency (greater public awareness of justice), shared justice (digital interconnection of participants), humane and human-centred justice (support and training for legal professionals), informed justice (use of evaluation results), and responsible and responsive CEPEJ (accessible tools and demonstrated expertise).²⁴

Regulation (EU) 2022/850 positions e-CODEX as a central instrument for cross-border judicial cooperation in civil and criminal matters. This decentralised system enables the secure, scalable, and interoperable exchange of electronic documents, evidence, and metadata between national judicial authorities. Aimed at enhancing access to justice for individuals and businesses, e-CODEX operates in accordance with the highest EU standards on cybersecurity and data protection, including the GDPR²⁵ and eIDAS²⁶. Although its use in civil matters remains voluntary, participating Member States must ensure technical compliance and regularly monitor system performance through non-personal data reporting, thereby reinforcing efficiency and institutional transparency.²⁷

22 Gintare Makauskaitė-Samuolė, "Transparency in the Labyrinths of the EU AI Act: Smart or Disbalanced?" (2025) 8(2) Access to Justice in Eastern Europe 38. doi:10.33327/ajee-18-8.2-a000105.

23 CEPEJ, 2022–2025 CEPEJ Action Plan: "Digitalisation for a Better Justice" (CEPEJ(2021)12Final, 9 December 2021 <<https://rm.coe.int/cepej-2021-12-en-cepej-action-plan-2022-2025-digitalisation-justice/1680a4cf2c>> accessed 25 September 2025; Council of Europe, *European Convention on Human Rights: as amended by Protocols Nos 11, 14 and 15, supplemented by Protocols Nos 1, 4, 6, 7, 12, 13 and 16* (ECHR 2013).

24 CEPEJ, 2022–2025 CEPEJ Action Plan (n 23).

25 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data (General Data Protection Regulation - GDPR) [2016] OJ L 119/1.

26 Regulation (EU) 910/2014 of the European Parliament and of the Council of 23 July 2014 on Electronic Identification and Trust Services for Electronic Transactions in the Internal Market [2014] OJ L 257/73; Regulation (EU) 2024/1183 of the European Parliament and of the Council of 11 April 2024 Amending Regulation (EU) No 910/2014 as Regards Establishing the European Digital Identity Framework [2024] OJ L 1183/1.

27 Regulation (EU) 2022/850 of the European Parliament and of the Council of 30 May 2022 on a Computerised System for the Cross-Border Electronic Exchange of Data in the Area of Judicial Cooperation in Civil and Criminal Matters (e-CODEX system), and Amending Regulation (EU) 2018/1726 [2022] OJ L 150/1.

Regulation (EU) 2023/2844 provides a unified legal framework for the digitalisation of judicial cooperation procedures in civil, commercial, and criminal matters with a cross-border element. It harmonises the use of electronic communication between judicial authorities and parties, establishes legal standards for videoconferencing, electronic signatures and seals, and defines the legal effects of electronic documents. The Regulation also introduces mechanisms for electronic payment of court fees. Its implementation is phased, beginning in 2025 with provisions on remote communication, and extending further in 2028 and 2031.²⁸ As noted in legal scholarship, the Regulation's reference to "access to justice" reflects its broader scope, which extends beyond the digitalisation of cross-border judicial cooperation. It also covers procedural mechanisms in European civil and criminal justice designed to facilitate access to justice in transnational disputes, even without the direct involvement of international cooperation mechanisms.²⁹

It should also be noted that in 2013, the EU Justice Scoreboard was initiated as a tool for comparative analysis of the efficiency, quality, and independence of judicial systems, with a particular focus on recovery following the 2008 financial crisis.³⁰ The EU Justice Scoreboard serves as an instrument to support the rule of law within the EU, providing a comparative basis for assessing judicial reforms, enhancing institutional transparency, integrating market indicators into justice analysis, and fostering coordination within the European Semester and the Rule of Law Mechanism.³¹

The 2025 edition of the EU Justice Scoreboard functions as a comparative monitoring tool for Member States' judicial systems, structured around three core dimensions: efficiency, quality, and independence. Efficiency is assessed through indicators such as caseloads, disposition time, and clearance rates. Quality is measured by the digitalisation of judicial services, accessibility for citizens and professionals, and support for vulnerable groups. Independence is evaluated through public perception and the governance of judicial appointments, while new indicators in 2025 extend to oversight bodies and market-related

28 Regulation (EU) 2023/2844 of the European Parliament and of the Council of 13 December 2023 on the Digitalisation of Judicial Cooperation and Access to Justice in Cross-Border Civil, Commercial and Criminal Matters, and Amending Certain Acts in the Field of Judicial Cooperation [2023] OJ L 2844/1.

29 Fernando Gascón Inchausti, 'The New Regulation on the Digitalisation of Judicial Cooperation in the European Union: Something Old, Something New, Something Borrowed and Something Blue' (2023) 24 ERA Forum 535, doi:10.1007/s12027-024-00782-z.

30 European Commission, 'EU Justice Scoreboard: European Commission Broadens the Scope of its Analysis of Member States' justice systems: Press release' (*European Commission*, 27 March 2013) <https://ec.europa.eu/commission/presscorner/detail/en/ip_13_285> accessed 25 September 2025.

31 'EU Justice Scoreboard' (*European Commission*, July 2025) <https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/upholding-rule-law/eu-justice-scoreboard_en> accessed 25 September 2025; Jenny Gesley, 'FALQs: The Rule of Law in the European Union' (*Library of Congress blogs*, 12 August 2022) <<https://blogs.loc.gov/law/2022/08/falqs-the-rule-of-law-in-the-european-union/>> accessed 25 September 2025.

institutions. A distinct focus in the 2025 EU Justice Scoreboard is placed on the digitalisation of justice, which is viewed as a key driver of institutional modernisation. The data indicate a rise in Member States allowing digital evidence (from 6 to 9) and enabling fully online initiation of judicial proceedings (in 26 countries). The EU Justice Scoreboard 2025 confirms steady progress in justice digitalisation, improved service quality, strengthened judicial independence, and greater legal harmonisation across the EU. Its findings provide an essential evidence base for assessing legal reforms and guiding strategic planning within the EU's rule of law framework.³²

The analysis of EU legal acts on the digitalisation of justice demonstrates a consistent development of a unified regulatory and instrumental framework for the digital transformation of national judicial systems within the EU's legal space. The key dimensions of this process include: value-based orientation (the European Declaration on Digital Rights and Principles for the Digital Decade (2023), strategic planning (the European e-Justice Strategy 2024–2028), operationalisation of digital tools (the 2020 Communication "Digitalisation of Justice in the European Union: A Toolbox" and e-CODEX), methodological support (the CEPEJ Action Plan), and progress monitoring (the EU Justice Scoreboard). Digitalisation is recognised as an instrument of modernisation aimed at ensuring equal access to justice, enhancing the efficiency of cross-border cooperation, strengthening the resilience of judicial systems, and upholding fundamental rights. At the same time, emphasis is placed on bridging the digital divide, ensuring the interoperability of technical solutions, securing data exchange, and preserving the human dimension of justice. The digital transformation of the judiciary in the EU is multidimensional, encompassing legal, organisational, technological, and social aspects, and is aimed at the long-term consolidation of the rule of law within Europe's Digital Decade. Similarly, Razmetaeva and Razmetaev (2021) contend that digital justice must be assessed beyond technological efficiency, with attention to risks such as expanded surveillance, reduced procedural fairness, and weakened individual autonomy. They emphasise that digitalisation can enhance rights only where institutional safeguards preserve the human-centred nature of adjudication.³³

32 European Commission, *The 2025 EU Justice Scoreboard: Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions* (COM (2025) 375, Publications Office of the EU 2025).

33 Yulia Razmetaeva and Sergiy Razmetaev, 'Justice in the Digital Age: Technological Solutions, Hidden Threats and Enticing Opportunities' (2021) 4(2) Access to Justice in Eastern Europe 104. doi:10.33327/AJEE-18-4.2-a000061.

3.2. National Practices of Digital Justice in the Countries of Central and Eastern Europe

The effectiveness of European standards depends on their practical implementation at the national level. The realisation of the European paradigm of digital justice demonstrates significant variability in approaches among the EU Member States. The study, alongside digital platforms that mediate the possibilities of judicial proceedings and the implementation of the principles and objectives of digital justice, encompasses civil litigation due to the following factors: the significant share of judicial workload and the involvement of the broadest range of individuals, the fullest manifestation of the challenges of ensuring equal access to justice, the greatest diversity of technological solutions, and the variety of approaches to safeguarding procedural guarantees among the EU Member States. For comparative analysis, the Member States of Central and Eastern Europe and the Baltic region have been selected, as they have undergone transitions to democratic legal states and EU membership over recent decades. Their experience in implementing European principles of digital justice within the context of relatively recent judicial modernisation offers an opportunity to assess the challenges of adapting European standards during European integration, providing valuable insights for Ukraine as a candidate country.

Comparative scholarship likewise highlights the regional relevance of this analysis. Piatyhora (2024) observes that, although EU-aligned standards offer a coherent normative model, e-justice implementation in Central and Eastern Europe remains uneven due to infrastructural, organisational, and regulatory fragmentation.³⁴ This underscores the value of examining Central and Eastern Europe jurisdictions as a testing ground for post-transition digital justice reform.

Poland. The 2024 EU Justice Scoreboard indicates that Poland meets 8 of 12 indicators for online judicial information, though chatbots, online legal aid, citizens' rights resources, and online training are lacking. The legal framework for digital technologies is moderately developed, but blockchain and AI are not applied. Judicial decisions lack machine-readable modelling, metadata, ECLI support, and automated downloads. Digital support for initiating and tracking civil cases remains weaker than in administrative proceedings.³⁵ As of 2025, the majority of these indicators remain unchanged.³⁶

34 Kristina V Piatyhora, 'International Experience of Implementing E-Justice: Best Practices and Challenges' (2024) 1(25) *Theory and Practice of Jurisprudence* 107. doi:10.21564/2225-6555.2024.1(25).305796; Kristina V Piatyhora, 'E-justice in Administrative Process: European Standards and Foreign Experience' (2024) 2(24) *Theory and Practice of Jurisprudence* 39. doi:10.21564/2225-6555.2023.2.293064.

35 European Commission, *The 2024 EU Justice Scoreboard: Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions* (COM (2024) 388, Publications Office of the EU 2024) 35-7, 40.

36 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 33-40.

Based on the Digital Decade Country Report 2024, Poland's digitalisation indicators for public services are at a moderate level, scoring 63.7 for citizens and 72.9 for businesses, compared to the EU averages of 79.4 and 85.4 respectively, with only moderate growth observed.³⁷

According to the Polish Code of Civil Procedure,³⁸ electronic access to case materials is available, including the ability to review documents, obtain copies, duplicates, or extracts (Article 9), and to track the progress of case proceedings. Interoperability, along with inclusion, empowerment, and adherence to the "once-only" principle, is facilitated by the rule that professional representatives, authorities, and individuals specified in Article 67 are not required to confirm their authorisations if this information is already available to the court through official registers (Article 68). In cases defined by law or where chosen by a party, procedural documents must be submitted exclusively via the Electronic Information System (EIS) (Information Portal³⁹) (Article 125), with electronically certified copies of attachments (Article 128). Court hearings may be conducted remotely, either at the initiative of the presiding judge or upon request by a participant (submitted within seven days of the summons' delivery date). Persons deprived of liberty are obliged to participate remotely. The judge may require physical presence in another court building to ensure the necessary technical conditions (Article 151). Within EIS proceedings, judgments are recorded using the judge's QES (§ 4, Article 324).⁴⁰

According to Wrzaszcz (2023), Poland's e-justice trajectory reveals a tension between formal regulatory preparedness and practical implementation. Despite detailed rules for electronic communication, progress is constrained by uneven institutional capacity, limited user readiness, and the lack of a unified digital justice ecosystem.⁴¹

Electronic delivery of documents is carried out in accordance with the Polish Code of Civil Procedure and the special act issued by the Minister of Justice.⁴² Starting on 1 January 2025, electronic communication with a public authority, by default, will take

37 European Commission, *Digital Decade Country Report 2024: Poland* (Publications Office of the EU 2024) <<https://ec.europa.eu/newsroom/dae/redirection/document/106821>> accessed 28 September 2025.

38 Code of Civil Procedure of the Republic of Poland of 17 November 1964 'Kodeks postępowania cywilnego' (amended 1 January 2025) <<https://sip.lex.pl/akty-prawne/dzu-dziennik-ustaw/kodeks-postepowania-cywilnego-16786199>> accessed 28 September 2025.

39 Ministerstwo Sprawiedliwości, *Podręcznik Użytkownika: Portalu Informacyjnego Sądów Powszechnych 2.5 (Portal Informacyjny Sądów Powszechnych*, 17 June 2025) <<https://portal.wroclaw.sa.gov.pl>> accessed 28 September 2025.

40 Code of Civil Procedure of the Republic of Poland (n 38).

41 Paweł Wrzaszcz, 'E-justice in Poland – Polish Experiences' (2023) 16(1) Teka Komisji Prawniczej PAN Oddział w Lublinie 381. doi:10.32084/tkp.5288.

42 Regulation of the Minister of Justice of the Republic of Poland 'On the Procedure and Method of Electronic Service' (20 October 2015) <<https://sip.lex.pl/akty-prawne/dzu-dziennik-ustaw/tryb-i-sposob-dokonywania-doreczen-elektronicznych-18235252>> accessed 28 September 2025.

place via the state-registered electronic delivery service.⁴³ This method constitutes the general mechanism for electronic delivery, either at the recipient's choice or by initiating proceedings in electronic form (Article 131-1).⁴⁴

For electronic simplified proceedings, under the pan-European procedure,⁴⁵ the E-Court System (EPU) for simplified proceedings (Articles 505.28–505.39) provides for the creation of a user account via a registration form, accompanied by detailed instructions for various categories of users: computer setup, registration, login, profiles for judicial staff, bailiffs, professional lawyers, basic users, and mass claimants. The guides embody the principles of inclusion, accessibility, and security by explaining authentication procedures. Claims are signed either with a QES or a simple electronic signature, allowing automatic, free signing with an active account. The Minister of Justice determines the formats of documents, taking into account the minimum requirements for public registers (§ 5, Article 129). Within the EPU, documents submitted by any other means have no legal effect, which is consistently indicated on the website.⁴⁶

Romania. The 2024 EU Justice Scoreboard notes Romania's progress in online information access and case management but highlights persistent gaps, including incomplete integration of judicial actors, limited digital access for defendants, and insufficient use of advanced technologies. To align with EU standards, Romania should adopt chatbots for information services, apply AI in judicial processes, implement machine-readable judgment models, include metadata in decisions, and enable automatic publication of judicial information.⁴⁷ Procedural rules defining the use of digital technologies in courts are at the stage of development and improvement, particularly regarding the electronic submission of documents and confirmation of receipt. The 2025 EU Justice Scoreboard predicts progress in ICT regulation; however, chatbots, online legal aid assessment, case outcome evaluation tools, and interactive learning platforms are still absent.⁴⁸

Indicators of digitalisation of public services in Romania remain low (52.2 for citizens and 50 for businesses, compared to 79.4 and 85.4, respectively, in the EU); however, there is a positive upward trend. Romanian citizens attach significant importance to digitalisation for accessing public services (64%). In 2023, only 1.6% of Romanians used the ROeID electronic identification scheme with a high level of assurance to access public services, compared to 35.8% across the EU. In January 2024, a law was adopted obliging public authorities to

43 Rafał Bułach, 'E-doręczenia w administracji publicznej' (*Wolters Kluwer*, 13 August 2024) <<https://www.wolterskluwer.com/pl-pl/expert-insights/e-doreczenia-w-administracji-publicznej>> accessed 28 September 2025.

44 Code of Civil Procedure of the Republic of Poland (n 38).

45 *Elektroniczne Postępowanie Upominawcze (Rzeczpospolita Polska)* <<https://www.e-sad.gov.pl>> accessed 28 September 2025.

46 Code of Civil Procedure of the Republic of Poland (n 38).

47 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 40.

48 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 33-5.

publish information and application forms in electronic format, to accept electronic copies of identity documents, and to refrain from requiring paper-based documentation.⁴⁹

The digitalisation of civil proceedings in Romania includes electronic communication as the preferred method of delivery, while maintaining traditional methods (paper, fax) if such details have been provided by a party (Article 154 of the Civil Procedure Code of Romania)⁵⁰ Electronic notifications are accompanied by a QES or an advanced electronic signature, which substitutes the court's stamp (Article 154(6)). Decisions are delivered by email, signed electronically, provided the party's electronic contact details are available (Article 154-1(1)). Documents are deemed received when the system notifies the sender of the recipient's receipt (Articles 154(6-1) and 154-1). Where electronic delivery is not possible, alternative methods are applied (Article 154-1(3)). Courts have direct access to electronic databases of public authorities to retrieve necessary data (Article 154(8)). Digital technologies accelerate court proceedings and enable prompt summonses (Article 241). Electronic documents are admissible provided they meet the same requirements as written documents and comply with the provisions of a special law that also regulates the application of electronic signatures (Articles 266–268).

In Romania, the National Electronic File has been introduced.⁵¹ This IT platform, provided by the Ministry of Justice, is designed to facilitate online access for parties and participants, or, where applicable, their legal representatives, to procedural documents and case-related information pending before the courts.⁵² For authentication and access to judicial data—such as requests, summonses, and court documents—users must provide an email address and mobile phone number. Requests are completed and submitted online through a personal user account. Additionally, separate portals for individual appellate courts and tribunals—such as the Craiova Court of Appeal⁵³ and the Bucharest Tribunal⁵⁴ – have implemented their own “Electronic File” systems. The portal of the High Court of Cassation and Justice of Romania⁵⁵ also provides access to case files. The National Electronic File guidelines govern user registration, interface use, password recovery, data protection, and

49 European Commission, *Digital Decade Country Report 2024: Romania* (Publications Office of the EU 2024) 4-5, 22 <<https://ec.europa.eu/newsroom/dae/redirection/document/106692>> accessed 28 September 2025.

50 Civil Procedure Code of Romania No 134/2010 of 1 July 2010 ‘Codul De Procedură Civilă’ (amended 10 April 2015) <<https://legislatie.just.ro/public/detaliidocument/140271>> accessed 28 September 2025.

51 *Dosarul Electronic Național (DEN): Serviciul electronic de acces la justiția României* <<https://den.just.ro>> accessed 28 September 2025.

52 ‘Informații utile’ (*Dosarul Electronic Național (DEN)*, 2025) <<https://den.just.ro/informatii>> accessed 28 September 2025.

53 ‘Dosar Electronic’ (*Curtea de Apel Craiova*, 2025) <<https://www.curteadeapelcraiova.eu/dosar-electronic>> accessed 28 September 2025.

54 ‘Dosar Electronic’ (*Tribunalul București*, 2025) <<https://tribunalulbucuresti.ro/index.php/informatii/anunturi/anunt-dosar-electron>> accessed 28 September 2025.

55 ‘Dosar Electronic’ (*Înalta Curte de Casație și Justiție*, 2025) <<https://www.iccj.ro/acasa/dosar-electronic/>> accessed 28 September 2025.

cookie policies. Access, however, requires an active court case, registration data, and two-factor authentication via a mobile app. Transitional challenges persist, including parallel use of outdated applications, restricted online access to archived files, and difficulties for legal entities with shared contact data.

Czechia. The 2024 EU Justice Scoreboard shows that Czechia's judicial digitalisation remains moderate, with electronic case management still developing. Digital limitations persist in criminal and civil proceedings, particularly regarding procedural actions, fee payments, and access to closed cases. Blockchain and AI are not applied, court decisions lack machine-readable formats, and anonymisation is only partially automated. Although all decisions are available online, they remain unsuitable for automated data processing.⁵⁶ According to 2025 data, progress has been made in anonymisation and pseudonymisation, as well as in tracking the progress of criminal cases. However, court decisions still fail to comply with machine-readable modelling standards.⁵⁷

According to the Digital Decade Country Report 2024, significant efforts are being made in Czechia to digitalise key public services. A total of 78% of the Czech population believes that the digitalisation of everyday public and private services facilitates their lives. The indicators of digitalisation of public services for citizens (76.3) and businesses (83.8) in Czechia lag behind the EU averages (79.4 and 85.4, respectively). There is widespread use of e-ID, with ten banking institutions providing related services. To enhance the security of IT tools in public administration, information systems considered critical were updated in 2023, and solutions for threat detection were implemented (for example, within the police system). Czechia has been advised to provide more information regarding the implementation of digital rights and principles.⁵⁸

Digital facilities for filing applications and accessing case information are provided via email, the data mailbox, the ePodatelna web application, or an electronic form. The website of the Ministry of Justice of Czechia contains a link to the Citizen Identification Portal⁵⁹, where a Czech data mailbox can be set up.⁶⁰ This mailbox serves as a key tool for electronic interaction with public authorities in Czechia. The Information System of Data Mailboxes (ISDS) has been operational since 1 July 2009. The Czech Code of Civil Procedure provides for delivery via the Datová schránka (§ 45–47, § 49): if a document is not delivered during the hearing, the court sends it through the data mailbox, which is

56 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 36–40.

57 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 38–40.

58 European Commission, *Digital Decade Country Report 2024: Czechia* (Publications Office of the EU 2024) 3, 5, 17, 23 <<https://ec.europa.eu/newsroom/dae/redirection/document/106708>> accessed 28 September 2025.

59 *Portál Identity občana (Česká Republika)* <<https://www.identita.gov.cz/>> accessed 28 September 2025.

60 *Datová schránka (Česká Republika)* <<https://info.mojedatovaschranka.cz/info/cs/>> accessed 28 September 2025.

considered equivalent to personal delivery. When using email, a signed confirmation from the recipient is required (§ 50f(2)). If delivery via the data mailbox is not possible, email may be used with the recipient's prior consent, provided receipt is confirmed within three days; otherwise, the delivery is invalid (§ 47(2–3)). In urgent cases, telephone or fax may be used (§ 51(1)). Where a party is represented, documents are sent to the representative, including electronically (§ 50b(2))⁶¹. The ePodatelna web application, operational since 2007, enables the submission of electronic applications and attachments, provided they bear a QES. The document web wizard allows users to fill in an electronic form and generate a PDF file.⁶² Exclusively in electronic form and using established templates, it is possible to submit proposals for the issuance of an electronic payment order (§ 174a–175)⁶³, certain documents required for initiating insolvency proceedings, requests for specific information to public registers, and particular documents intended for catchpoles and notaries.⁶⁴ Instructions for the relevant public templates are provided to facilitate their use.

Croatia. The 2024 EU Justice Scoreboard indicates a low level of digital implementation, with limited secure communication between courts and detention facilities, no use of blockchain, and no confidential remote contact between suspects and attorneys. Electronic document service, online legal aid assessment, and remote court participation are unavailable. Automated uploading with metadata, algorithmic anonymisation, and AI tools are absent, while the machine-readability of decisions remains below the EU average⁶⁵, although seminars on automatic anonymisation are being conducted to support default digitalisation.⁶⁶ The 2025 EU Justice Scoreboard reports progress in civil, commercial, and particularly administrative proceedings, marked by the introduction of online legal aid, digital evidence formats, fully remote hearings, and the deployment of chatbots.⁶⁷

The submission of claims in civil proceedings is carried out via the “e-Komunikacija” system (Article 106a of the Civil Procedure Act of Croatia),⁶⁸ integrated into the e-Gradanin

61 Civil Procedure Code of the Czech Republic No 99/1963 Coll of 4 December 1963 ‘Občanský soudní řád’ (amended 1 July 2025) <<https://www.zakonyprolidi.cz/cs/1963-99>> 28 September 2025.

62 ‘Informace – příjem podání v elektronické podobě soudy’ (Ministerstvo spravedlnosti České republiky, 2025) <<https://epodatelna.justice.cz/ePodatelna/info-el-podani>> accessed 28 September 2025.

63 Civil Procedure Code of the Czech Republic (n 61).

64 ‘Formuláře ke stažení’ (Ministerstvo spravedlnosti České republiky, 2025) <<https://epodatelna.justice.cz/ePodatelna/form>> accessed 28 September 2025.

65 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 37–40.

66 ‘Croatia to use AI for Greater Transparency and Efficiency in Judiciary’ (Council of Europe: Implementation of standards - Human Rights, Justice and Legal Co-Operation, 6 March 2024) <<https://www.coe.int/en/web/implementation/-/croatia-to-use-ai-for-greater-transparency-and-efficiency-in-judiciary>> accessed 28 September 2025.

67 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 33–4, 37.

68 Civil Procedure Act of the Republic of Croatia ‘Zakon o parničnom postupku’ (amended 30 December 2023) <<https://www.zakon.hr/z/134/zakon-o-parni%C4%8Dnom-postupku>> accessed 28 September 2025.

portal,⁶⁹ provided they are signed with a QES in accordance with the special law. Access to the system requires identification through the National Identification System. State authorities, the prosecution service, attorneys, notaries, court experts, and other legal professionals are obliged to submit documents electronically. In cases where a submission is inadmissible, the applicant is notified of the possibility of making corrections. Electronic delivery is carried out via the portal, either with the party's consent or automatically upon electronic submission of a claim (Article 133d). Documents are sent to a secure inbox with a 15-day confirmation period, after which delivery is deemed completed. Both electronic and scanned documents bearing a qualified seal may be delivered (Article 143). If electronic delivery is not possible, written form is used instead. Forms for claims under the European Small Claims Procedure may be submitted either by fax or electronically (Article 507).⁷⁰

The “e-Komunikacija” system serves judicial professionals and private users but faces significant access challenges. These include mandatory use of QES, strict security standards, automatic deletion of unverified addresses, and user liability for technical failures. The system remains fragmented: land cases use a separate ZIS/OSS platform, and major municipal courts are unconnected. Managed via eSpis, from which data are transferred, errors require direct court contact, and unavailable eSpis decisions cannot be accessed. Additional complexity arises from the separate “e-Ovlaštenja” system for employee authorisation. Only QES-signed PDF documents up to 20 MB are accepted; scanned signatures are rejected.⁷¹

Bulgaria. The 2024 EU Justice Scoreboard shows that Bulgaria offers chatbots for judicial information but lacks online case assessment and legal aid eligibility checks. While most indicators exceed the EU average, electronic communication and advanced digital technologies remain poorly implemented. In criminal proceedings, victims and defendants can access case files and apply for legal aid online. Bulgaria nonetheless achieves the highest machine-readability of court decisions in the EU.⁷² The 2025 EU Justice Scoreboard notes major progress in civil proceedings, especially in electronic case initiation and tracking, while other indicators show little change.⁷³

According to the Digital Decade Country Report 2024, Bulgaria recorded an increase in the digitalisation of public services for citizens (13.4% between 2022 and 2023). However, the absolute value (67.5) remains below the EU average (79.4), while the score for businesses is 91.9, which is above the EU average (85.4). Legislative amendments in 2023 introduced the “Once-Only Principle”. At the time of the report, the National Electronic

69 e-Komunikacija: Elektroničke komunikacije sudionika sudskih postupaka sa sudovima' (*e-Gradani: Informacije i usluge*, 2025) <<https://e-komunikacija.pravosudje.hr/>> accessed 28 September 2025.

70 Civil Procedure Act of the Republic of Croatia (n 68).

71 Ministarstvo Pravosuđa i Uprave Republike Hrvatske, *E-Komunikacija: Priručnik za korištenje* (verzija 0.9, listopad 2025) 74-5, 83 <<https://e-komunikacija.pravosudje.hr/>> accessed 28 September 2025.

72 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 35-6, 38, 40.

73 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 37.

Identification System was still under development. In 2023, 6.09% of Bulgaria's population used existing e-ID solutions, while 35.5% of the population possessed basic digital skills (compared to 55.6% in the EU).⁷⁴ There is an underdeveloped culture of data sharing within public administrations, high cybersecurity risks, and a low proportion of public services provided entirely online.

Starting on 1 July 2025, the judicial process in Bulgaria should undergo significant changes: more than half of civil cases in local courts will transition to a fully electronic format with centralised allocation, allowing cases to be adjudicated by a judge in any region, regardless of traditional rules of territorial jurisdiction.⁷⁵ These changes affect all participants in judicial proceedings, including legal entities, individuals, attorneys, and other participants with professional roles. Borgesano et al. (2025), in their systematic review of Justice 5.0 frameworks, argue that large-scale transitions towards fully digital judicial ecosystems require robust governance mechanisms to prevent institutional overload and ensure users' ability to adapt.⁷⁶ Bulgaria's ambitious reforms must therefore be evaluated not only through the lens of efficiency but also in light of their capacity to sustain human-centred adjudication and avoid creating new forms of procedural vulnerability.

The Bulgarian Code of Civil Procedure provides for electronic delivery through the Unified Portal of Electronic Justice, qualified electronic mail in accordance with Regulation (EU) No 910/2014, or a secure delivery system, with the possibility of withdrawing consent and reverting to traditional methods if electronic service is not feasible (Art. 38). If an address is changed without prior notification, documents are considered delivered once attached to the case file, and confirmation is recorded in the system or provided by a qualified service provider (Art. 44). Procedural actions are carried out electronically in accordance with Regulation (EU) No 910/2014 and require a qualified electronic signature, with automatic verification of standards, formats, and identification (Arts. 102g, 183). Information on electronic functionalities is provided on court websites and the justice portal (Art. 102v). Electronic payment of court fees is enabled, with a 15% discount applied (Arts. 71, 73), while submission of certified paper copies is also permitted (Art. 184). Since 1 July 2025, writ proceedings should be conducted electronically, unless otherwise provided (Article 409a). The writ contains the judge's electronic signature (Article 412), and enforcement officers gain access through the

74 European Commission, *Digital Decade Country Report 2024: Bulgaria* (Publications Office of the EU 2024) 4, 28-30 <<https://ec.europa.eu/newsroom/dae/redirection/document/106715>> accessed 2 October 2025.

75 'Information Service: User Guide' (*Electronic Court Cases: A Single Portal for Electronic Justice in the Republic of Bulgaria*, 2023) <<https://ecase.justice.bg/help/epep-manual-public.pdf>> accessed 2 October 2025.

76 Francesco Borgesano and others, 'Artificial intelligence and justice: a systematic literature review and future research perspectives on Justice 5.0' (2025) 28(11) *European Journal of Innovation Management* 349. doi:10.1108/EJIM-01-2025-0117.

Unified Portal (Article 418). Public auctions in enforcement proceedings are also conducted via the Ministry of Justice's online platform (Article 501a).⁷⁷

Hungary. The 2024 EU Justice Scoreboard indicates that Hungary performs well in judicial digitalisation overall. However, there is no online data on interactive training, legal aid simulations, or chatbots. Judicial decisions remain non-machine-readable, lacking automatic downloads, metadata integration, algorithmic anonymisation, and standardised modelling.⁷⁸ The 2025 EU Justice Scoreboard reports on the recognition of the admissibility of fully digital evidence, with other indicators remaining unchanged.⁷⁹

Hungary demonstrates significant progress in the digitalisation of public services. Over 70% of the Hungarian population possesses a national e-ID, although its use remains largely limited within the country. The Digital Citizenship Mobile App is intended to enable cross-border use of digital identification and related services. However, a key limiting factor for unlocking the full digital potential of public services, including judicial processes, lies in the existing legal framework. Current regulations require personal presence for certain procedural actions, which restricts the seamless implementation of fully digital solutions.⁸⁰

The Hungarian Act of Civil Procedure provides detailed regulation of electronic communication, the submission of documents, delivery, and remote participation in court hearings. Electronic service constitutes the primary method for parties engaged in electronic communication, with mandatory electronic filing required for professional representatives (§ 608(1)). For other participants, electronic communication remains voluntary at any stage of the proceedings (§ 605(1)). Documents are digitised and retained in paper form (§ 613(1)). A “fiction of delivery” is established in cases of refusal to accept delivery or failed delivery attempts, with explicit legal consequences for non-compliance with electronic formats (§§ 137, 618). The evidential value of both public and private electronic documents bearing an electronic signature is formally recognised (§ 323(3a)). Electronic means are also employed for court hearings, witness examinations, and the inspection of evidence, with participants permitted to use their own devices for these purposes (§§ 622–627)⁸¹.

Slovakia. The 2024 EU Justice Scoreboard shows that Slovakia achieves high levels of judicial digitalisation. It provides comprehensive online access to information and procedural ICT rules across all proceedings, with strong electronic communication within

77 Civil Procedure Code of the Republic of Bulgaria No 59/2007 (effective 1 March 2008, amended 8 July 2025) <<https://lex.bg/laws/ldoc/2135558368>> accessed 2 October 2025.

78 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 35, 40.

79 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 33–40.

80 European Commission, *Digital Decade Country Report 2024: Hungary* (Publications Office of the EU 2024) 6, 21–2 <<https://ec.europa.eu/newsroom/dae/redirection/document/106697>> accessed 2 October 2025.

81 Civil Procedure Code of Hungary No CXXX/2016 ‘A polgári perrendtartásról’ (amended 19 August 2025) <<https://net.jogtar.hu/jogszabaly?docid=A1600130.TV>> accessed 2 October 2025.

courts. Advanced digital tools for case initiation, management, and support exceed EU benchmarks, and machine-readability standards are fully met.⁸² In 2025, Slovakia improved access to closed civil cases and introduced fully remote hearings in criminal proceedings.⁸³

Electronic filing of claims is facilitated via the Slovak Ministry of Justice portal⁸⁴ or directly through the designated platform.⁸⁵ Particular emphasis is placed on inclusivity and the accessibility of information regarding electronic public services. Thus, the authorisation process and related procedures are designed to ensure user-friendly access, offering the option to engage with information through video tutorials⁸⁶ and PDF-based instructions⁸⁷ to accommodate diverse user needs.

The Slovak Code of Civil Procedure stipulates that unauthorised electronic submissions must be additionally filed in paper form or in an authorised electronic form within ten days (§ 125(2)). Priority is given to electronic delivery via an authorised electronic mailbox or to an electronic address; this service is deemed completed after three days, even if the document has not been read (§ 105). When a decision is made without a hearing, the court informs the parties of the place and time of its publication on the official notice board and the court's website (§ 219(3))⁸⁸. Simplified proceedings for monetary disputes are conducted exclusively in electronic form before the District Court of Banská Bystrica.⁸⁹

Assessment of the "eŽaloby" system against the 2023 Declaration on Digital Rights and Principles highlights its accessibility, inclusiveness, and transparency, allowing users to track submissions and receive status updates via the [slovensko.sk](https://www.slovensko.sk) portal and email. Privacy and data protection comply with Act No. 122/2013 through QES and secure eID mailboxes. Security and reliability are ensured by qualified signatures, document

82 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 35-8, 40.

83 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 34, 37.

84 'Ežaloby' (*Ministerstvo Spravodlivosti Slovenskej republiky*, 2025) <<https://obcan.justice.sk/ezaloby>> accessed 2 October 2025.

85 'Elektronické podanie žaloby' (*Slovensko.sk: Ústredný portál verejnej správy (ÚPVS)*, 14 September 2018) <https://www.slovensko.sk/sk/zivotne-situacie/zivotna-situacia/_elektronicke-podanie-zaloby1> accessed 2 October 2025.

86 'Fyzické osoby, fyzické osoby – podnikatelia, právnické osoby: Videonávody' (*Slovensko.sk: Ústredný portál verejnej správy (ÚPVS)*, 25 February 2025) <<https://www.slovensko.sk/sk/navody/videonavody>> accessed 2 October 2025.

87 'Návody pre fyzické osoby' (*Slovensko.sk: Ústredný portál verejnej správy (ÚPVS)*, 2025) <<https://www.slovensko.sk/sk/navody/navody-pre-fyzicke-osoby>> accessed 2 October 2025.

88 Civil Procedure Code of the Slovak Republic No 160/2015 Coll 'Civilný sporový poriadok' (amended 1 July 2024) <<https://www.epi.sk/zk/2015-160>> accessed 2 October 2025.

89 Law of the Slovak Republic No 307 on Reminder Proceedings and on Amendments to Certain Acts 'O upomínanom konaní a o doplnení niektorých zákonov' (25 October 2016) <<https://www.slovlex.sk/ezbierky/pravne-predpisy/SK/ZZ/2016/307/>> accessed 2 October 2025; Ministerstvo spravodlivosti Slovenskej republiky, *Používateľská príručka oblasti eŽaloby* (Rozvoj elektronických služieb súdnictva, Informačný systém elektronických služieb súdnictva 2018) 9, 19, 22 <<https://obcan.justice.sk/documents/20229/0/EZA+Pr%C3%ADru%C4%8Dka+v14.5/77d634a7-4f29-4aa2-b8f7-7b315bd33f13>> accessed 2 October 2025.

validation, and error warnings, with a total of 50 MB and an 8 MB per-file limit. Efficiency is supported by electronic forms, reusable templates, and integration with the Bar Association's information system.⁹⁰

Slovenia. In 2024, Slovenia demonstrated strong ICT-based communication among courts, prosecutors, and legal professionals, but lacked chatbots and information on alternative legal aid providers. While procedural ICT use is established, blockchain and AI remain unimplemented. Case initiation and management – especially in administrative and criminal matters – rank among the lowest in the EU. Machine-readability standards are supported, though algorithmic anonymisation and pseudonymisation are absent.⁹¹ In 2025, indicators remain almost unchanged.⁹²

In 2023, Slovenia launched a national electronic identification scheme (e-ID) and an electronic signature system, forming the basis for e-justice through secure authentication and legally valid digital documents. Digital public service indicators rose from 71.4% to 77.0% for citizens and from 82.7% to 84.0% for businesses, yet a digital divide and low usage persist due to limited digital literacy.⁹³ The Unified Justice Portal (Portal e-Sodstvo) has simplified the procedure for submitting documents by ensuring their legal validity through a digital signature and enhancing transparency.⁹⁴ The overall accessibility of the system confirms an adequate level of development of digital governance in the field of justice in Slovenia.

The Slovenian Civil Procedure Act establishes equal legal force for electronic and written procedural documents, including their evidentiary value (Article 16a), and, in particular, for electronic public documents (Article 224). Applications are submitted electronically through the Portal e-Sodstvo information system, which provides automatic confirmation of receipt; the court generates either electronic or paper copies for delivery to the other party (Articles 105.b, 106). Applying electronically automatically implies consent to electronic delivery via the information system unless the party explicitly states otherwise. For state authorities, attorneys, and other individuals defined by law, documents are always delivered electronically (Article 132). Access to case materials for parties and case tracking is also provided via e-Sodstvo (Article 150). Remote hearings are permitted with the parties' consent (Article 114.a), during which the court may record the minutes using technical means, including audio or video recording (Articles 125, 125.a). Court decisions are produced electronically and signed with the electronic signature of the presiding judge (Article 323) and delivered electronically to the parties.

90 Ministerstvo pravosodja Republike Slovenije (n 89) 5, 7, 9, 13, 19, 30 56, 63, 92-3, 95.

91 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 35-8.

92 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 33-40.

93 European Commission, *Digital Decade Country Report 2024: Slovenia* (Publications Office of the EU 2024) 4, 7, 25 <<https://ec.europa.eu/newsroom/dae/redirection/document/106696>> accessed 2 October 2025.

94 *Portal e-Sodstvo (Republike Slovenija)* <<https://evlozisce.sodisce.si/esodstvo/index.html>> accessed 2 October 2025.

Court orders that are automatically processed within the information system are certified with an electronic seal (Article 329). Case transfers between instances (appeal, cassation, remand) are carried out electronically (Articles 345, 361, 375).⁹⁵ Thus, the Portal e-Sodstvo⁹⁶ functions as a centralised gateway for interaction with the judicial system. Access requires registration using an email address and password, while advanced services require “qualified user” status.⁹⁷ The system mandates digital signing of documents in PDF/A format using Adobe Acrobat Reader or LibreOffice to ensure integrity and legal validity.⁹⁸ The portal is available daily from 08:00 to 20:00 and supports compatibility with multiple operating systems (Windows, macOS, Linux).⁹⁹ The user guides provide detailed instructions on registration, password recovery, data modification, and account deletion, making the system accessible to a wide range of users.¹⁰⁰

Central and Eastern European countries demonstrate a differentiated implementation of European standards, with a gradual transformation of justice systems. Thus, Poland achieves a balanced application of human-centricity, inclusivity, transparency, and security through multi-level authentication but faces gaps in informational accessibility and technological innovation. The Czech Republic and Slovakia implement access principles through ISDS/eŽaloby platforms with QES and promote human-centricity via inclusive instructions; however, their realisation of data-driven justice remains limited. Slovenia develops a human-centred e-Sodstvo Portal with multi-level support and effectively implements transparency and security principles. Bulgaria demonstrates the most ambitious implementation of the “digital by default” approach and achieves the highest indicators of data-driven justice, but faces challenges related to the digital divide. Hungary achieves high technical performance while facing systemic challenges to the principle of respect for fundamental rights. Croatia and Romania ensure human-centricity, transparency, and security through QES and GDPR compliance, but exhibit fragmented implementation. Common challenges across the region include the implementation of bridging the digital divide due to uneven complexity of access; limited enhancement of

95 Civil Procedure Act of the Republic of Slovenia of 25 March 1999 ‘Zakon o pravdnem postopku (ZPP)’ (amended 25 October 2024) <<https://pisrs.si/pregledPredpisa?id=ZAKO1212>> accessed 2 October 2025.

96 *Portal e-Sodstvo* (n 94)

97 Vrhovno sodišče Republike Slovenija, ‘Uporabniška navodila: E-Vloga V Civilnih Postopkih - Navodila za uporabo’ (*Portal E-Sodstvo*, 12 February 2021) <<https://evlozisce.sodisce.si/esodstvo/index.html>> accessed 2 October 2025.

98 Vrhovno sodišče Republike Slovenija, ‘Uporabniška navodila za registrirane uporabnike portala e-Sodstvo’ (*Portal E-Sodstvo*, 29 March 2011) <<https://evlozisce.sodisce.si/esodstvo/index.html>> accessed 2 October 2025.

99 ‘Vrhovno sodišče Republike Slovenija, ‘Uporabniška navodila: Navodila za namestitvev podpisne komponente ProXSign’ (*Portal E-Sodstvo*, 1 December 2022) <<https://evlozisce.sodisce.si/esodstvo/index.html>> accessed 2 October 2025.

100 Vrhovno sodišče Republike Slovenija, ‘Uporabniška navodila: Navodila Podpisovanje PDF Dokumentov: Navodila za digitalno podpisovanje’ (*Portal E-Sodstvo*, 2024) <<https://evlozisce.sodisce.si/esodstvo/index.html>> accessed 2 October 2025.

digital capabilities caused by the lack of innovative technologies and interactive tools for assessing legal aid; insufficient implementation of data-driven justice due to gaps in machine-readability; disruption of interoperability caused by fragmented systems; constraints on dynamic justice in criminal proceedings; and an ongoing imbalance between security and accessibility.

3.3. National Practices of Digital Justice in the Countries of the Baltic Region

Latvia. Latvia demonstrates a comprehensive and well-regulated digital judiciary, ranking among Europe's leaders. Electronic communication across judicial actors and robust ICT regulation in all types of proceedings ensure high system performance. However, digital tools for criminal cases remain limited, blockchain and AI are unused, and the machine-readability of court decisions is hindered by missing metadata and ECLI integration.¹⁰¹ According to 2025 data, the availability of online legal aid has increased.¹⁰²

Latvia exceeds the EU average in both public services for citizens (88.2% compared to 79.4% in the EU) and for businesses (87.2% compared to 85.4% in the EU). 78.4% of Latvians use e-government services, which is above the EU average. However, limited use of centralised applications and the once-only principle contribute to fragmented digital governance, affecting justice administration. Electronic document submission, party identification, and authentication are supported through e-ID, e-signature, and eSignature mobile systems.¹⁰³ The online platform E-lietas¹⁰⁴ provides electronic services in pre-trial and judicial proceedings as well as in the enforcement of decisions.¹⁰⁵ The platform operates exclusively with documents certified by a qualified electronic stamp, signature, and time label in accordance with EU Regulation No. 910/2014 (eIDAS).¹⁰⁶ The Court Administration controls personal data to organise access (Art. 9(1)).¹⁰⁷ Enforcement applications are submitted exclusively electronically (§ 149, § 150). Since 1 December 2021, an electronic signature has been mandatory for documents within the online system and for court decisions (§ 170, § 171). Electronic copies of paper documents have the same legal force as originals if standards are met, and courts have begun

101 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 36-40.

102 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 37.

103 European Commission, *Digital Decade Country Report 2024: Latvia* (Publications Office of the EU 2024) 22-4 <<https://ec.europa.eu/newsroom/dae/redirection/document/106714>> accessed 4 October 2025.

104 *E-lietas portāls (Latvijas Republika)* <<https://elieta.lv>> accessed 4 October 2025.

105 Law of the Republic of Latvia on the State Platform for Electronic Proceedings 'Procesu norises elektroniskā vidē valsts platformas likums' (10 March 2022) <<https://likumi.lv/ta/id/330962-procesu-norises-elektroniska-vide-valsts-platformas-likums>> accessed 4 October 2025.

106 Civil Procedure Law of the Republic of Latvia of 14 October 1998 'Civilprocesa likums' (amended 1 April 2025) <<https://likumi.lv/ta/id/50500-civilprocesa-likums>> accessed 4 October 2025.

107 Regulations of the Cabinet of Ministers of the Republic of Latvia No 217 'E-case Platform Data Processing Regulations' (5 April 2022) <<https://likumi.lv/ta/id/331413-e-lietas-platformas-datu-apstrades-noteikumi0>> accessed 4 October 2025.

converting paper-based records into electronic form (§ 172, § 167). For electronic communication, the claimant provides consent and an electronic address or indicates registration in the online system (§ 128(2)). Representatives outside Latvia may only provide an email address or indicate registration (§ 128(2)).¹⁰⁸

Estonia. Estonia, according to the 2024 EU Justice Scoreboard, demonstrates the highest indicators of digitalisation in justice across the EU. Areas identified for improvement include enhancing the machine-readability of court decisions, in particular by implementing decision modelling in accordance with relevant standards.¹⁰⁹ The 2025 EU Justice Scoreboard highlights the absence of interactive rights training, online legal aid eligibility assessment, and informational chatbots in Estonia. Nonetheless, Estonia leads the EU in producing machine-readable court decisions.¹¹⁰

Estonia leads the EU in digital public services, with 95.8% coverage for citizens and 98.8% for businesses. Over 80% of the population holds an e-ID, and 89% use it for online services, far exceeding EU averages. National law requires all citizens over 15 years old to possess an EU-recognised e-ID, ensuring secure identification and data protection. Estonia also outperforms the EU in digital skills and cybersecurity, reinforcing digital inclusion and a human-centred digital transformation.¹¹¹

The e-Toimik portal¹¹² serves as Estonia's central electronic justice system for managing procedural data, handling electronic case files, and facilitating interaction with the courts (§ 60¹ (1) of the Estonian Code of Civil Procedure). The e-Toimik portal ensures a full cycle of digital justice, including case review, court workflow organisation, statistical reporting, and electronic document transmission (§ 60¹). The Ministry determines the procedures for transitioning to mandatory digital case management and establishes the relevant technical requirements (§ 61). Digital case files are handled with chronological storage of documents from all court instances. Paper documents are automatically scanned and substituted by their digital versions, with the originals kept temporarily until the decision becomes final (§ 56). In cases of technical malfunctions, paper case files may be temporarily handled and subsequently converted into digital form (§ 57¹). Participants have full access to their case files, with the option to obtain electronic copies or printed versions (§ 59). Electronic delivery of documents is carried out via the information system, with notifications sent to email addresses, mobile numbers, and social media accounts. A document is considered delivered upon opening or confirmation, with automatic registration (§ 311¹). For legal professionals (including attorneys, notaries, bailiffs, and government bodies), electronic delivery is mandatory; failure to comply may

108 Civil Procedure Law of the Republic of Latvia (n 106).

109 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 36-40.

110 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 33.

111 European Commission, *Digital Decade Country Report 2024: Estonia* (Publications Office of the EU 2024) 20-1 <<https://ec.europa.eu/newsroom/dae/redirection/document/106705>> accessed 4 October 2025.

112 *E-toimik (Eesti Vabariik)* <<https://www.e-toimik.ee>> accessed 4 October 2025.

result in temporary restrictions on access to integrated systems (§ 311¹). Electronic documents are submitted with a digital signature or another sender authentication method. However, the court may accept unsigned documents if there is no doubt about their authenticity and digital copies are generated automatically (§ 336, § 340).¹¹³

Lithuania. The 2025 EU Justice Scoreboard shows that Lithuania performs strongly in judicial digitalisation and offers extensive online information on the justice system. However, chatbots, AI, and blockchain remain unimplemented, and defendants in criminal cases cannot apply for legal aid online.¹¹⁴ Compared to the 2024 Scoreboard, there are no significant dynamics, which is generally explained by Lithuania's already high performance indicators.¹¹⁵

The digitalisation of public services in Lithuania exceeds the EU average, both for citizens (86.7% compared to 79.4% in the EU) and for businesses (95.9% compared to 85.4% in the EU), with an ambition to reach 100% by 2030. Lithuania is a leader in the use of e-ID. An updated version of the Law on the Management of State Information Resources has been adopted to enhance governance and interoperability of digital systems. At the same time, the use of AI remains limited, and 88% of Lithuanians believe that public authorities should provide better support to help citizens adapt to digital technologies.¹¹⁶

In Lithuania, the Lithuanian Court E-Services Portal (LITEKO) serves as the central platform for judicial digitalisation.¹¹⁷ Electronic technologies are extensively integrated into civil proceedings, including the automated allocation of cases without altering jurisdiction (Articles 622, 622-3 of the Code of Civil Procedure), the conduct of court hearings, the exchange of documents, and the remote participation of parties via video or teleconferencing, either using court-provided tools or personal devices, except in written procedures (Article 175-2). Upon a reasoned request or when necessary, the court may schedule an in-person hearing. An electronic signature is mandatory for all electronic documents. The exchange, delivery of documents, and summons are carried out through LITEKO, with mandatory notifications sent to the participants' email addresses, phone numbers, and fax numbers. For legal professionals, including attorneys, assistants, bailiffs, and notaries, delivery is conducted exclusively electronically (Articles 175-1, 113, 122), with the date of delivery deemed to be the following working day. In cases involving a court order,

113 Code of Civil Procedure of the Republic of Estonia of 20 April 2005 'Tsiviilkohtumenetluse seadustik' (amended 13 April 2025) <<https://www.riigiteataja.ee/akt/104072012019?leiaKehtiv>> accessed 4 October 2025.

114 European Commission, *The 2025 EU Justice Scoreboard* (n 32) 34, 37-8.

115 European Commission, *The 2024 EU Justice Scoreboard* (n 35) 33-40.

116 European Commission, *Digital Decade Country Report 2024: Lithuania* (Publications Office of the EU 2024) 4, 18, 22 <<https://ec.europa.eu/newsroom/dae/redirection/document/106704>> accessed 4 October 2025.

117 Lietuvos teismų elektroninių paslaugų portalas <<https://e.teismas.lt/en/public/home/>> accessed 4 October 2025.

the applicant must receive the documents electronically (Article 432-1).¹¹⁸ An order of the Ministry of Justice regulates the digital procedures.¹¹⁹

The Baltic countries most comprehensively implement the European paradigm through the integrated application of the principles of the Declaration of Digital Rights and Principles for the Digital Decade (2023) and the European e-Justice Strategy 2024–2028. Estonia demonstrates exemplary implementation of human-centricity through universal e-ID, inclusivity through widespread digital literacy, “digital by default” with mandatory electronic procedures for professionals, and a “fair digital environment” through open technologies. Security and privacy principles are ensured by reliable authentication within the e-Toimik system, interoperability is achieved through the full integration of judicial systems, and access to justice is facilitated by the 95.8% digitalisation of public services. Latvia effectively realises the principles of “once-only” and dynamic justice through the E-lietas platform with automated case distribution, exceeding EU average performance indicators. Lithuania implements efficiency principles through the LITEKO system with automated routing. Shared challenges include the incomplete implementation of data-driven justice due to gaps in machine-readability; constraints on dynamic justice in criminal proceedings; the need to strengthen inclusivity due to the lack of chatbots and online training; and the limited implementation of innovative digital justice resulting from the lack of AI and blockchain technologies in core activities, which remains acceptable at the current stage considering the gradual introduction of the AI Act.

The analysis of the digitalisation of justice in the selected countries enables us to identify the approaches that meet the stated criteria. Systemic integration (Estonia, Latvia, Lithuania) combines universal mandatory electronic filing with unified interoperable platforms, achieving stronger performance across the evaluation indicators. Gradual transformation (Poland, Czechia, Slovakia) mandates electronic filing for legal professionals while retaining traditional channels, supported by partially integrated systems with moderate levels of machine-readability and human-centred design. Implementation, notably characteristic of Croatia, Romania, and Bulgaria, is technologically advanced; however, the portals are not integrated, voluntary electronic filing is inconsistent, and gaps persist in platform integration and the quality of user guidance, despite certain advantages (for example, machine-readable decisions in Bulgaria). The comparative analysis of the criteria for digital justice quality reveals divergences among countries. Estonia and Bulgaria employ XML/JSON formats with ECLI identifiers, whereas Poland, Czechia, and Croatia rely on

118 Civil Procedure Code of the Republic of Lithuania No IX-743 of 28 February 2002 ‘Civilinio proceso kodeksas’ (amended 31 August 2025) <<https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.162435/asr>> accessed 4 October 2025.

119 Order of the Minister of Justice of the Republic of Lithuania No 1R-332 ‘On Approval of the Procedure for Submission of Procedural Documents to the Court and Their Service to Persons by Electronic Means’ (13 December 2012) <<https://www.e-tar.lt/portal/lt/legalAct/TAR.A527F4DF2B60/asr>> accessed 4 October 2025.

PDF formats. Slovakia's eŽaloby, Czechia's ePodatelna, and Slovenia's e-Sodstvo exhibit a human-centred design through the provision of video instructions and reusable templates, in contrast to Croatia's user manual and Romania's access limitations. Platform integration is most advanced in Estonia and Lithuania due to universal digital case processing and automated routing. By contrast, Croatia and Romania exhibit fragmented architectures and multiple parallel portals. A clearer distinction emerges between jurisdictions with universal mandatory electronic filing, exemplified by Estonia and Latvia, and those that rely on voluntary systems. Common elements include the universal adoption of qualified electronic signatures (in line with the eIDAS Regulation 910/2014), the use of videoconferencing, and mandatory electronic service for legal professionals. The corresponding data provide evaluation criteria for Ukraine, which is pursuing systemic reforms of its justice system.

3.4. Ukraine's Digital Justice Landscape: Challenges, Gaps and Alignment with EU Standards

Legal literature emphasises that the judiciary's efficiency constitutes the foundation of the contemporary rule of law, compelling Ukraine to comply with its international obligations under the Association Agreement between Ukraine and the EU (2014).¹²⁰ Thus, within the framework of fulfilling obligations under the Association Agreement, Ukraine is carrying out a phased adaptation of national legislation to the EU *acquis* in the field of digital transformation, including the digitalisation of justice.¹²¹ According to the results of the first stage of the legislative screening (2023), Ukraine identified the need to bring some regulatory acts into compliance with European standards in the areas of electronic identification, cross-border data exchange, digital public services, and e-governance, which are directly related to the development of e-justice,¹²² while the inclusion of these priorities in the Rule of Law Roadmap (2025) became an important step towards the implementation of the *acquis* EU, particularly in terms of personal data protection and the resilience of judicial infrastructure.¹²³ Tsuvina (2025) notes that Ukraine's integration of AI into the judiciary lacks the conceptual and regulatory maturity required under the emerging EU

120 Iryna Izarova and others, 'Advancing Sustainable Justice through AI-Based Case-Law Analysis: Ukrainian experience' (2024) 7(1) *Access to Justice in Eastern Europe* 127. doi:10.33327/AJEE-18-7.1-a000123.

121 Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Ukraine, of the other part (signed 27 June 2014, effective 1 September 2017) <<https://www.consilium.europa.eu/en/documents/treaties-agreements/agreement/?id=2014045>> accessed 8 October 2025.

122 Cabinet of Ministers of Ukraine, *Report on the Initial Assessment of the Progress in the Implementation of the European Union Legal Acts (EU Acquis)* (European Union 2023) <https://eu-ua.kmu.gov.ua/wp-content/uploads/Zvit_EN.pdf> accessed 8 October 2025.

123 Cabinet of Ministers of Ukraine, 'Roadmap on the Rule of Law' (*Ministry of Justice of Ukraine*, 14 May 2025) <<https://minjust.gov.ua/news/ministry/ukraina-zatverdila-dorojni-karti-v-mejah-vstupu-does-opublikovano-teksti-dokumentiv>> accessed 8 October 2025.

acquis. Although pilot initiatives exist, the absence of clear safeguards, risk classification, and accountability mechanisms places Ukraine in an early pre-compliance stage with respect to EU AI governance.¹²⁴

Digital transformation of judicial proceedings in Ukraine can be characterised by the implementation of the Law of Ukraine "On Access to Court Decisions"¹²⁵ and the "Procedure for Maintaining the Unified State Register of Court Decisions".¹²⁶ The Unified Judicial Information and Telecommunication System (UJITS)¹²⁷ in Ukraine has been officially functioning since 5 October 2021 and was introduced gradually¹²⁸. Access to information about the judiciary in Ukraine, including its components,¹²⁹ the procedure for using the UJITS, the submission of procedural documents through the "Electronic Court" subsystem for citizens and organisations, and user instructions, is provided in an accessible form.¹³⁰

Ukraine, like other European states, accelerated the implementation of the electronic court system during the COVID-19 pandemic. The concept was formulated as early as 2012 and was legally established in 2018 through the creation of UJITS. Relevant amendments were introduced into all procedural codes. In 2021, the full functioning of the subsystems "Electronic Court," "Electronic Cabinet," and videoconferencing was officially announced, along with the presentation of the mobile application "Court in a Smartphone," designed to ensure full access to e-court services via mobile devices.¹³¹ Although users consistently reported instability in its operation.¹³²

124 Tetiana Tsuvina, 'Artificial Intelligence Technologies in the Judiciary: European Standards and Ukrainian Practice' (2025) 139(2) Foreign Trade: Economics, Finance, Law 4. doi:10.31617/3.2025(139)03.

125 Law of Ukraine No 3262-IV of 22 December 2005 'On Access to Court Decisions' (amended 25 March 2025) <<https://zakon.rada.gov.ua/laws/show/3262-15#Text>> accessed 8 October 2025.

126 Decision of the High Council of Justice No 1200/0/15-18 'On Approval of the Procedure for Maintaining the Unified State Register of Court Decisions' (19 April 2018) <<https://zakon.rada.gov.ua/go/v1200910-18>> accessed 8 October 2025.

127 Law of Ukraine No 1416-IX of 27 April 2021 'On Amendments to Certain Legislative Acts of Ukraine Regarding Ensuring the Phased Implementation of the Unified Judicial Information and Telecommunication System' [2021] Official Gazette of Ukraine 42/2502.

128 Law of Ukraine No 3200-IX of 29 June 2023 'On Amendments to Certain Legislative Acts of Ukraine Regarding Mandatory Registration and Use of Electronic Cabinets in the Unified Judicial Information and Telecommunication System or its Separate Subsystem (Module) that Ensures Document Exchange' [2023] Official Gazette of Ukraine 70/4041.

129 *Website of the Supreme Court of Ukraine* <<https://court.gov.ua>> accessed 8 October 2025.

130 'Functioning of the Unified Judicial Information and Communication System' (*State Judicial Administration of Ukraine*, 2025) <https://dsa.court.gov.ua/dsa/inshe/func_ecits/> accessed 8 October 2025.

131 Olexander P Svitlychnyy and others, 'Electronic Justice as a Mechanism for Ensuring the Right of Access to Justice in a Pandemic: The Experience of Ukraine and the EU' (2023) 37(3) International Review of Law, Computers & Technology 325. doi:10.1080/13600869.2023.2221820.

132 'eCourt Mobile Application' (*Google Play Store*, 24 May 2023) <<https://play.google.com/store/apps/details?id=com.floor12apps.ecourt&hl=uk>> accessed 8 October 2025.

Kaniuka (2023) similarly observes that Ukraine's e-justice ecosystem, while normatively ambitious, remains technologically inconsistent and structurally under-integrated. She identifies recurring problems, including uneven digital readiness across courts, limited interoperability between registries, and insufficient user support, all of which hinder the realisation of EU-level standards of accessibility and transparency.¹³³

It is also worth supporting the position of Maika (2022), who argues that electronic access to justice is an urgent need that requires improving regulatory frameworks and ensuring adequate technical and organisational preconditions: establishing procedures for submitting and evaluating electronic evidence; standardising and certifying IT infrastructure within the e-justice system; developing legal education in the field of e-governance; and enhancing the digital literacy of citizens and public officials.¹³⁴

At present, Ukraine has a solid foundation and an ambitious concept for improving its e-justice, but the existing infrastructure still requires significant modernisation to meet European standards. According to the Rule of Law Roadmap (2025), during 2026–2027, several key initiatives are planned to enhance access to justice, transparency, and the efficiency of courts through digital transformation. These include the development and approval of a comprehensive Concept and Roadmap for the creation of IT solutions within the judicial system, the adoption of a financing plan with clearly defined funding sources and institutional responsibilities, and the establishment of an effective management framework to oversee IT reforms and support within the justice (p. 18). Moreover, Ukraine intends to adopt new legislation to harmonise national regulations with the EU *acquis* regarding the digitalisation of justice within the European Union and to implement the necessary IT solutions in line with the European e-Justice Strategy for 2024–2028.¹³⁵

The Civil Procedure Code of Ukraine regulates the use of digital tools for accessing and conducting civil proceedings via the UJITS. It establishes mandatory automated registration of documents (Art. 14(2)) and automated case distribution (Art. 14(3)), ensuring full electronic document flow between courts and participants (Art. 14(4)), including video conferencing and recording of court hearings. A differentiated approach to registering electronic accounts is provided: mandatory for professional participants in judicial proceedings and state authorities (Art. 14(6)), with procedural sanctions for non-compliance (Arts. 117(4), 153(10)), and voluntary for other individuals. Electronic documentation is carried out through UJITS, which requires a mandatory qualified electronic signature (QES) (Art. 43(8)) and requires proof that copies of documents were sent to other participants (Art. 43(7)), thereby safeguarding the principle of adversarial

133 Natalia Kaniuka, 'Trends and Problems of e-Justice Enforcement in Ukraine' (2023) 1 *Visegrad Journal on Human Rights* 95. doi:10.61345/1339-7915.2023.1.13.

134 Maika Maksym, 'The Implementation of E-Justice within the Framework of the Right to a Fair Trial in Ukraine: Problems and Prospects' (2022) 5(3) *Access to Justice in Eastern Europe* 249. doi:10.33327/AJEE-18-5.2-n000320.

135 Cabinet of Ministers of Ukraine, 'Roadmap on the Rule of Law' (n 123).

proceedings in a digital environment. The legislator maintains a transitional approach, allowing mixed document management (Art. 14(8)). Remote participation in court hearings is regulated concerning the specifics of the parties: general opportunity for parties and their representatives to participate via video conference outside the courtroom (Art. 212(1)) and limited participation for procedural assistants, who may participate exclusively within court premises (Art. 212(6)). Court decisions and procedural documents are created in electronic form and signed with a qualified electronic signature (Art. 259(8)), ensuring the legal validity of digital acts. The UJITS security system provides protection for information and establishes legal liability for unauthorised interference (Arts. 14(11–12)), thereby meeting the minimum requirements for digital security in judicial proceedings.¹³⁶

In Ukraine, a clear strategy or conceptual framework for justice sector reform in the context of digitalisation has not yet been articulated, and the criteria for implementation and their evaluation remain undefined and, overall, not institutionalised. Consistent and transparent monitoring has not been a firmly established element of Ukraine's legal tradition. Considering this, the vectors of Ukrainian justice reforms and the assessment of the state of digitalisation of justice may be presented—and, in the future, conducted—using the indicators proposed by the EU Justice Scoreboard. Ukraine demonstrates strong progress in several areas: the extensive use of automated document management systems across all courts, electronic court decisions, a centralised automatic case allocation system, integration with state registers, widespread use of electronic signatures, and the provision of electronic offices for all professional participants. The system also offers automatic notifications about procedural actions, integration with the Automated Enforcement Proceedings System, and basic-level video conferencing, including dedicated functionality for courtrooms, detention centres, correctional facilities, and medical institutions. Additionally, remote participation is enabled for various types of proceedings. However, significant challenges remain. The lack of structured metadata and machine-readable standards (e.g. XML/JSON formats, semantic tagging of elements, ECLI identifiers, automated extraction of legal norms from texts, linking cases to decisions, multilingualism, automated translation, and open APIs for developers and researchers) limits efficiency and transparency. Other shortcomings include outdated interface design, confusing navigation, and the necessity to work simultaneously with several disparate systems (Unified State Register of Court Decisions (USRCD), electronic offices, video conferencing tools, and registers). There is also a lack of user guidance, lengthy registration and authorisation procedures, and service fragmentation across multiple subsystems. Moreover, Blockchain/DLT technologies are neither implemented nor foreseen in current strategic planning. Effective implementation of EU e-justice standards in Ukraine requires the consistent integration of innovative technologies and the establishment of a secure electronic communication system. A key determinant of this

136 Civil Procedure Code of Ukraine No 1618-IV of 18 March 2004 (amended 17 July 2025) <<https://zakon.rada.gov.ua/laws/show/1618-15>> accessed 8 October 2025.

process's effectiveness is maintaining a balance between digital innovation, the protection of fundamental rights and personal data, and the resilience of the electronic judicial infrastructure.¹³⁷ However, achieving interoperability with EU systems remains a significant challenge. Ukraine lacks standardised APIs and shared data protocols necessary for intersystem integration. Court decisions are not presented in machine-readable XML/JSON formats, which limits automated processing. The absence of ECLI identifiers further impedes integration with EU judicial networks.

The challenges faced by Ukraine mirror those identified by Ramos Maqueda and Chen (2025) in jurisdictions that have not transitioned to data-driven justice. In the absence of structured datasets, stable identifiers, and interoperable information architectures, digitalisation remains superficial and cannot support advanced analytics, automation, or evidence-based judicial governance.¹³⁸ Razmetaeva and Razmetaev (2021) warn that such infrastructural fragmentation poses bigger constitutional risks, as digital uncertainty and opacity may undermine legal certainty and equality of arms. They emphasise that Ukraine's digitalisation must advance through both technological consolidation and robust protection of procedural rights.¹³⁹

The absence of a comprehensive digital justice strategy and action plan, alongside the ambitious UJITS concept, creates a paradoxical situation: while funding for UJITS reform (which encompasses more than ten subsystems and modules) has been suspended, professional discussions increasingly focus on AI implementation¹⁴⁰ without an appropriate legal framework or strategic vision. This reflects Ukraine's fragmented approach to e-justice development, where advanced technologies are discussed without addressing fundamental infrastructure gaps. There is a discrepancy between European standards on the use of AI in justice and the current understanding of the application of such technologies in professional activities,¹⁴¹ without taking into account the EU AI Act.¹⁴² The Code of Judicial Ethics only provides that the use of AI by a judge is permissible, provided that judicial independence

137 Oleh Syniehubov, Oksana Bortnik and Olena Chernenko, 'Strategic Goals and Principles of Digitalisation of Justice in the EU in the Context of European Integration Challenges for Ukraine' (2024) 5 Law Herald 184. doi:10.32782/yuv.v5.2024.21.

138 Manuel Ramos-Maqueda and Daniel L Chen, 'The Data Revolution in Justice' (2025) 186 World Development 106834. doi:10.1016/j.worlddev.2024.106834.

139 Razmetaeva and Razmetaev (n 33).

140 Order of the Cabinet of Ministers of Ukraine No 1556-p 'On the Approval of the Concept for the Development of Artificial Intelligence in Ukraine' (2 December 2020) <<https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#n8>> accessed 8 October 2025; Order of the Cabinet of Ministers of Ukraine No 457-p 'On the Approval of the Action Plan for the Implementation of the Concept for the Development of Artificial Intelligence in Ukraine for 2025–2026' (9 May 2025) [2025] Official Gazette of Ukraine 45/3085.

141 Yan Bernaziuk, 'Artificial Intelligence and Ukraine's Justice System: Results of Cooperation Over the Past Year' (*Supreme Observer*, 7 January 2025) <<https://so.supreme.court.gov.ua/authors/934/shtuchnyi-intelekt-ta-systema-pravosuddia-ukrainy-rezultaty-spiivpratsi-u-rotsi-sh%D1%81ho-mynuv>> accessed 8 October 2025.

142 Regulation (EU) 2024/1689 (n 6).

and impartiality are maintained, that it does not relate to the assessment of evidence or the decision-making process, and that it does not violate legislative requirements (Art. 16).¹⁴³ The concept of the UJICS indicates the lack of details on AI control mechanisms and lacks a clear list of prohibitions; nevertheless, the approach remains responsible and considers AI solely in an assistive role within judicial systems. Limited functions and specificity characterise the concept through a precise list of permitted uses, including OCR, speech-to-text and text-to-speech technologies, translation, grammar checking, case law search, generation of draft documents, and virtual assistant avatars. Quality control functions include identifying deviations during court proceedings or inconsistencies with general judicial practice, as well as providing basic legal assistance to users. Transparency in accordance with the concept that reflects European standards must be ensured through mandatory system self-learning and the preservation of human control over all decisions.¹⁴⁴

Further implementation of EU e-justice standards requires a comprehensive approach. Technical modernisation must include not only the transition to machine-readable formats but also the creation of unified data-exchange protocols. Ensuring full interoperability requires integrating fragmented systems into a single ecosystem using semantic technologies. It is critically important to enhance the user experience by simplifying procedures and developing an inclusive design for vulnerable groups. Regulatory harmonisation should encompass the full spectrum of EU requirements—from eIDAS to cross-border data exchange. Successful transformation is possible only if technological innovation is balanced with the protection of human rights and the resilience of judicial infrastructure, while learning from both successful implementations (Estonia, Latvia) and the fragmentation challenges (Romania, Croatia) observed across EU Member States.

4 CONCLUSIONS

The European approach to digital justice demonstrates a systemic shift in the understanding of technology's role, from tools aimed at increasing efficiency to instruments for strengthening fundamental rights. Unlike approaches to technological determinism, the EU establishes a value-oriented digitalisation process in which each technical solution is subordinated to legal principles and guarantees. EU's normative basis ensures the protection of procedural rights in digital environments, while value-oriented instruments reinforce legitimacy by framing digital justice as inclusive, human-centred, and rights-compliant. Strategic frameworks outline long-term priorities, supported by operational tools for implementation and secure cross-border cooperation. Institutional coherence is achieved

143 Decision of the Congress of Judges of Ukraine 'On the Approval of the Code of Judicial Ethics' (18 September 2024) <<https://zakon.rada.gov.ua/go/n0001415-24>> accessed 8 October 2025.

144 Order of the State Judicial Administration of Ukraine No 178 'Concept of the Unified Judicial Information and Telecommunication System' (30 April 2025) <https://court.gov.ua/storage/portal/dsa/normatyvno-pravova%20baza/N_178_2025_dodatok.pdf> accessed 8 October 2025.

through methodological recommendations focused on efficiency, transparency, and inclusiveness, while progress is monitored via performance assessments and comparative indicators. Together, these instruments establish a structured and layered governance model that integrates soft and hard law, ethical values, and technical standards, and enables both EU-wide coordination and national adaptation in the field of digital justice. An analysis of the European legal acts underpinning digital transformation and national practices reveals the distinctive nature of this approach: digital rights are directly integrated into the architecture of judicial systems through specific technical standards, procedural requirements, and prohibitions on fully automated decision-making.

A study of civil procedural legislation and e-justice platforms in Central and Eastern Europe and the Baltic states reveals consistent patterns in the implementation of European standards, confirming the European paradigm's flexibility while maintaining shared value-based foundations. The Baltic states are developing a regional strategy for systemic integration with high levels of automation and mandatory electronic document management, with Estonia achieving the best results. The approach of Central and Eastern European countries is more differentiated. The experiences of Poland, the Czech Republic, and Slovakia illustrate a gradual e-transformation that balances digital and traditional access channels. The Polish practice of mandatory electronic delivery for professional participants, while retaining alternative channels for citizens, demonstrates the possibilities of a phased transition to digital procedures. The Bulgarian approach represents a radical transformation: the shift of many civil cases to an electronic format with centralised allocation from July 2025 contrasts sharply with evolutionary approaches. The Hungarian case highlights the complexity of the interaction between technological and institutional contexts: high levels of digitalisation coexist with systemic challenges to democratic principles. The Croatian and Romanian experiences reveal fragmentation issues, where technologically advanced solutions fail to integrate into a unified judicial ecosystem.

The analysis identifies an important trend: machine-readable standards for court decisions are a critical prerequisite for achieving data-driven justice. Structured metadata, semantic markup, and API compatibility create a technological foundation for judicial analytics, predictive modelling, and legal assistance. Machine-readability is not merely a technical characteristic but forms the basis of the justice of the future. Data from the EU Justice Scoreboard 2024–2025 and national e-platform analyses confirm steady progress in digital transformation. At the same time, an examination of user instructions highlights significant differences in accessibility, ranging from user-friendly interfaces to multi-step authentication procedures, which pose risks to equitable access to justice.

Ukraine finds itself in a unique position on the path to European integration and the digitalisation of justice. Despite an ambitious UJITS concept and wartime experience that accelerated digitalisation, the country still lags behind European standards of inclusivity and system integration. While Ukraine has adopted certain digital mechanisms—such as electronic court services and remote hearings—these remain fragmented and unevenly

applied. Gaps persist in institutional interoperability, legal certainty, digital accessibility, and the protection of vulnerable groups. Challenges remain in implementing the “digital by default” principle due to process duplication. The primary risk lies in focusing on technical excellence while neglecting real user needs. The European approach of e-justice illustrates the evolution of access to justice from merely removing barriers to actively enabling opportunities through digital education, technical support, and intuitive interfaces. The principle of technological subsidiarity becomes a critical element of judicial systems: technologies perform an assistive role rather than replacing human judgment, ensuring transparency in automated processes. Estonia’s experience offers an alternative strategy, emphasising simplified interaction with the system and creating positive incentives for a voluntary transition to digital procedures.

The findings suggest that Ukraine’s digital justice agenda must adopt a systemic and standards-based approach. The comparative analysis of the selected jurisdictions reveals important lessons and data-driven priorities for the development of digital justice in Ukraine. Drawing on the state of normative regulation, technical infrastructure, and the assessment of the functioning of digital justice, the following directions may be identified which, within the framework of European integration processes, require particular attention beyond technical enhancement: the introduction of machine-readable formats for court decisions (XML/JSON and, in the longer term, with ECLI identifiers), since structured data enable more effective and automated legal analysis; the prioritisation of user-centred design through video tutorials, reusable templates, and intuitive interfaces, as successfully implemented in Slovakia and Czechia, which significantly reduces user barriers; the establishment of mandatory electronic filing for justice sector professionals, public authorities, and legal entities, while maintaining alternative channels for citizens in line with a balanced approach, such as that applied in Poland, which achieves digitalisation without exclusion; the consolidation of fragmented subsystems (USRCD, Electronic Court, videoconferencing, and others) into a unified API-compatible ecosystem, as the contrast between the integrated system in Estonia and the fragmentation in Croatia and Romania demonstrates that isolated technological sophistication without integration does not ensure comprehensive quality and efficiency; and the development of a legal framework for transparent AI governance in accordance with the requirements of the EU Artificial Intelligence Act, with a clear distinction between assistive systems and high-risk decision-support tools, particularly in view of the regulatory gap in Ukraine. These priorities, derived from comparative findings in Central European and Baltic countries, should be implemented through a unified governance structure that avoids ministerial fragmentation and is supported by institutionalised monitoring mechanisms and participatory policy-making. Success requires balancing institutional efficiency with citizen accessibility, ensuring a digital transformation that enhances rather than restricts access to justice for all population groups.

The research demonstrates that successful e-justice transformation requires balancing institutional efficiency with citizen accessibility. For Ukrainian citizens, this means ensuring that digital services do not exclude vulnerable populations while improving access to justice. For institutions, it necessitates comprehensive staff training, adequate funding, and sustained political commitment to avoid fragmentation, inconsistency, lack of transparency, and lack of accountability.

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АНОТАЦІЯ УКРАЇНСЬКОЮ МОВОЮ

Дослідницька стаття

ЄВРОПЕЙСЬКІ ПІДХОДИ ДО ЦИФРОВОГО ПРАВОСУДДЯ В КРАЇНАХ ЦЕНТРАЛЬНОЇ ТА СХІДНОЇ ЄВРОПИ ТА БАЛТІЙСЬКОГО РЕГІОНУ З ОГЛЯДУ НА ПЕРСПЕКТИВИ ДЛЯ УКРАЇНИ

Олег Синегубов, Оксана Бортнік та Олена Черненко*

АНОТАЦІЯ

Вступ: У статті досліджуються європейські підходи до цифрового правосуддя з акцентом на тому, як наднаціональні регуляторні моделі – від принципів цифрових прав до операційних інструментів е-правосуддя – формують національні практики в країнах Центральної та Східної Європи та Балтійського регіону. У дослідженні цифрове правосуддя концептуалізується як багатовимірне явище, що поєднує технологічні інструменти, інституційний дизайн, управління даними та людиноцентричні цінності. Окрема увага приділена тому, яким чином ці європейські напрацювання можуть сприяти реформуванню сектору правосуддя України в умовах наближення її законодавства до *acquis* ЄС.

Методи: Дослідження ґрунтується на доктринальному правовому аналізі у поєднанні з компаративним підходом. Системно розглядаються нормативні акти ЄС, інструменти СЕРЕІ, моніторингова архітектура «Цифрового десятиліття», а також законодавство з цивільного процесу та платформи е-правосуддя в одинадцяти державах-членах ЄС. Емпіричну базу доповнюють дані EU Justice Scoreboard 2024–2025 та Digital Decade Country Reports. Такий методологічний підхід дозволяє виявити спільні закономірності, відмінності та моделі імплементації, що формують основу для оцінки траєкторії цифрового правосуддя в Україні.

Результати та висновки: Дослідження показує, що Європейський Союз сформував цілісну, ціннісно орієнтовану архітектуру цифрового правосуддя, яка поєднує юридично обов'язкові стандарти, інтероперабельні технологічні рішення та принципи інклюзивності, прозорості й людського контролю – особливо у контексті високоризикових систем ШІ. Найбільш інтегровану та технологічно розвинену модель демонструють Балтійські держави, тоді як країни Центральної та Східної Європи характеризуються поступовими або фрагментованими підходами. Системна інтеграція – обов'язкове електронне подання, уніфіковані інфраструктури обміну даними та машиночитані судові дані – корелює з вищими показниками за індикаторами ЄС. Натомість фрагментовані або паралельні системи обмежують доступність, інтероперабельність і можливості правосуддя, заснованого на даних. Україна демонструє суттєвий поступ через ЄСІТС, автоматизоване управління справами та електронний документообіг; однак зберігаються суттєві прогалини у сфері інтероперабельності, машиночитаності, людиноцентричного дизайну та врядування ШІ. Структурна фрагментація та відсутність комплексної стратегії цифрового правосуддя стримують наближення до стандартів ЄС. На основі компаративного аналізу визначено пріоритети для України: повноцінна імплементація машиночитаних форматів (XML/JSON та ECLI), консолідація розрізнених підсистем в єдину екосистему, запровадження обов'язкових цифрових процедур для професійних учасників процесу, а також розроблення правозахисної моделі врядування ШІ, узгодженої з Європейським актом про ШІ. Ключовим завданням є забезпечення того, щоб цифровізація розширювала – а не обмежувала – доступ до правосуддя, вимагаючи збалансування технологічних інновацій із процесуальними гарантіями, інституційною стійкістю та інклюзією користувачів.

Ключові слова: цифрове правосуддя, е-правосуддя, цивільне судочинство, рішення суду, захист прав, людиноцентрична цифрова трансформація, цифрові принципи, цифрові права, Європейський Союз, Україна, Центральна та Східна Європа, Балтійські держави, ШІ.