

# LEGAL FRAMEWORK FOR ELECTRONIC JUSTICE IN THE EU

**Andrii Kolesnikov,**

Ph.D. in Economics, Associate Professor of the Department of Security and Law Enforcement, Faculty of Law, West Ukrainian National University, Ternopil, Ukraine  
ORCID ID: <https://orcid.org/0000-0003-3064-4133>  
e-mail: kole.ua@gmail.com

---

**Abstract.** *The article examines the concept of electronic justice (e-justice) and statement for its implementation in the European Union. The paper highlights the key criteria for effective e-courts, such as accuracy, integrity, automation and accessibility. The author analyzes the main EU strategic documents that define the principles and directions of digitalization of the judicial systems of the EU members, in particular the Recommendations of the Committee of Ministers of the Council of Europe, the Opinion of the Advisory Council of European Judges, the Justice Programme and the European E-Justice Strategy for 2019-2023.*

*Considerable attention is paid to the review of practical achievements in the sphere of e-justice in the EU, including the creation of the multifunctional e-Justice portal, the European Judicial Atlas of Civil matters, and the e-CODEX infrastructure for cross-border interaction of courts and authorities. The paper considers the functions of the eu-LISA Agency for the management of IT systems in the EU justice and home affairs sector. The paper analyzed the problems and challenges on the way to full-scale digitalization of the European judiciary, such as legal barriers, technical unpreparedness, and staff shortages. The author highlights the latest EU legislative initiatives to unify the rules of electronic communication in judicial procedures.*

**Key words:** *e-justice, digitalization of court systems, judicial processes, access to justice, EU*

---

**1. Introduction.** Digital technologies are spreading more into various spheres of life, transforming traditional processes and opening up new opportunities to improve the efficiency and accessibility of services. The judiciary is no exception to this trend. The introduction of e-courts is seen as an important step in the modernization of justice, which can provide a number of benefits, including easier access to judicial procedures, speeding up the processing of cases, reducing costs and increasing the transparency of hearings.

The European Union is one of the leaders in promoting the concept of e-justice. The EU sets the digitalization of judicial systems as one of its key goals. The development of e-justice in the EU is based on a number of strategic documents and initiatives designed to harmonize legislation of EU-members. However, the implementation of e-courts is not going through without challenges. At the European level, legal and technical issues require careful study and harmonization of development approaches.

**2. Research methodology.** The methodological basis of the work is a combination of general scientific and special methods of scientific knowledge. The method of document analysis was used to characterize the administrative and legal status of electronic judicial instruments as subjects of interaction and coordination in the field of electronic justice at the EU level. The logical-semantic method was used to reveal theoretical approaches to the interpretation of feature of e-justice. The structural and functional method was applied to identify and characterize the elements of the legal status of electronic court systems as subjects of interaction and

coordination in the field of electronic justice. The analytical method was used to clarify the features of the administrative and legal status of electronic instruments in electronic justice at the EU level. The descriptive method was applied to study the platforms of EU electronic justice systems, such as the e-Justice portal, e-CODEX, and others. The comprehensive application of these research methods allowed to study development of electronic justice in the European Union.

**3. Results.** E-courts use the latest technologies to improve the efficiency of justice by providing parties quick and convenient remote access to proceedings. This advantage is especially important in international litigation, including the EU, which involves additional costs and inconvenience for at least one party when participating in litigation abroad. However, the use of such technologies in court proceedings faces some problems, such as imperfect legal regulation, low technical support and lack of qualified staff.

Information technologies contribute to the modernization of the entire judicial system and the judicial process, improving the functioning and management of courts, as well as the efficiency, consistency, fairness, and accuracy of court decisions. Innovations include integrated technologies in courts, including not only traditional audio and video recording and communication technologies, but also new generation technologies such as face recognition, cloud storage, blockchain, etc. Not to forget, emerging technologies such as facial recognition or artificial intelligence make it technically feasible to digitize and automate either a significant part or even the entire court process, including

complex issues such as filing, preparing the hearing, evidence collection, and hearing itself [1].

E-courts, both in the EU and beyond, must meet a number of criteria, including accuracy, accessibility, integrity and automation. The accuracy criterion for e-courts implies that all processes, data and communications related to court cases must be absolutely reliable and accurate and ensure that data is not changed throughout the process. The integrity features implies that, in contrast to the basic use of information technology for filing documents and separate communications between the court and the parties, new e-courts should integrate technology into the entire judicial ecosystem and convert all proceedings into digital and online format with appropriate measures. This applies to aspects such as identity verification, filing of documents, service of proceedings, exchange of evidence, the proceedings themselves, and the court's decision or judgment. In addition, it is a well-known fact that the judiciary has long required an interoperable and interconnected system, and thus it is possible to speak not only of technological but also of institutional integrity [2]. Automation implies that e-courts help to reduce human activity in court proceedings, so algorithms can speed up proceedings and provide recommendations on the decision to be made [3].

The criterion of accessibility is one of the most important for effective e-justice. First, the e-justice system must guarantee equal access opportunities, regardless of social status, place of residence, age, or disabilities. Electronic court services should be intuitive and easy to use even for those who do not have advanced technical skills. To ensure this, e-justice platforms and applications should be technologically adaptable, making them compatible with various digital devices and operating systems, including smartphones. Interfaces and documentation should be available in at least the national and/or major regional languages. The use of e-court services should be free or affordable to avoid financial barriers to ensure the right to defense. Interfaces, equipment and technologies of e-justice should comply with inclusive design standards to ensure accessibility for disabled people. Finally, in order to overcome digital inequality, it is important to provide training opportunities in e-justice and to increase the level of digital literacy of the population.

Digitalization of justice is one of the main goals of both the EU and national legislators. However, the goal of achieving overall digitalization of judicial cooperation between EU member states is challenging due to differences in the levels of justice digitalization. Even before the pandemic, some EU countries were more advanced in this regard, while others were quite slow. Initially, a decentralized approach was used, and later digitalization was spread on a voluntary basis within the principles of proportionality and subsidiarity [4].

One of the first important documents on the digitalization of justice is Recommendation Rec(2001) 3 on the delivery of court and other legal services to the citizen through the use of new technologies, adopted by the Committee of Ministers on February 28, 2001. The

document provides for:

- the means of communication with courts and other legal institutions (d registration departments, etc.) should be simplified as much as possible;

- necessity to use the latest technologies while complying with the requirements of security and confidentiality of private information, namely to guarantee the ability: to initiate proceedings using electronic means; to carry out further procedural actions within the proceedings in the digital environment of electronic document management; to obtain information about the progress of the case by accessing the court's information system; to obtain information about the results of the proceedings in electronic form; to gain access to any information relevant for effective proceedings

- information in electronic form on court proceedings should be publicly available;

- information should be disseminated using the most common technologies;

- the state should, as far as possible, ensure the accuracy and completeness of the information provided to individuals and legal entities [5].

Opinion No. 14 (2011) of the Consultative Council of European Judges set out the general principles of the use of modern information and telecommunication technologies in the judicial system. The document provided for the following:

- the principle of fair trial - the introduction of IT technologies should not undermine procedural guarantees;

- the principle of equal access to justice - IT should provide access to justice on equal terms, without creating unreasonable obstacles;

- the principle of the proper administration of justice - the use of IT should contribute to the effective administration of justice;

- the principles of independence, impartiality and security - the implementation of IT should not threaten the performance of judges' duties, and should also guarantee the security and confidentiality of data;

- the principle of ensuring fundamental human and civil rights - the use of IT should not violate fundamental rights;

- the principle of personal contacts - the use of IT should not exclude personal contacts in the judicial process where necessary;

- principles of governance and accountability - mechanisms for oversight and reporting on the use of IT in the judiciary should be introduced [6]. In addition, the Opinion emphasizes the importance of training judges and court staff to work with IT, ensuring information security, personal data protection, and balancing the benefits of IT with respect for procedural rights.

On December 17, 2013, after two years of coordination, the European Parliament and the Council introduced a progressive program of the European Union "Justice Programme" № 2014–2020 [7]. The overall goal of this program was to create a truly European justice space based on mutual trust, as well as to promote judicial

cooperation in civil and criminal cases, and to assist in seminars for judges, prosecutors and other legal professionals.

According to Article 6 of this Program, further development and funding of the multifunctional e-Justice portal is required [8]. The launch of this portal was a significant achievement in the development of EU e-justice. The portal was created to provide comprehensive information on rights, court procedures and justice legislation for different EU countries. In addition, it integrates national registers of court cases, company registers, etc. into unified European registers, facilitating access to relevant information. The portal allows for a number of cross-border court procedures to be carried out electronically through special dynamic forms and templates, such as the European Payment Order (Commitment) or the Small Claims Procedure.

In addition, the portal facilitates cooperation between the judiciary and legal professions in EU member states through information systems and professional networks. The portal also offers decision of the EU Courts, the latest legislation and case law. E-justice provides a space for bilateral exchange of best practices in electronic justice between EU countries. It is available in more than 20 languages as part of a broader strategy for development of e-justice and cross-border judicial cooperation.

The European Judicial Atlas in Civil Matters should also be considered useful. Judicial Atlas is an interactive tool created by the European Commission that provides information on various EU legal instruments application in civil litigation of EU members. In particular, the Atlas contains detailed information on:

- competent authorities and ways of filing applications under various EU regulations/directives in civil cases (e.g., jurisdiction, documents, evidence, etc.)
- application of the principle of mutual recognition in civil cases;
- legal aid systems in different countries;
- networks for cooperation between authorities of EU-members in civil matters;
- references to relevant national laws and procedures.

The Atlas aims to facilitate the practical application of digital and standardized EU instruments in civil proceedings and to ensure judicial cooperation between EU States. Atlas is an interactive online platform available to anyone. [9]

European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice eu-LISA should be given great importance for the digitalization of the judicial process in the EU. The Agency was established in 2011 by Regulation (EU) No. 1077/2011 [10]. The agency was created to prepare and implement long-term solutions for the operational management of large-scale IT systems. The Agency currently manages Eurodac (European Fingerprint Database), the Schengen Information System (SIS) and the Visa Information System (VIS). In addition, eu-LISA is developing the Entry-Exit System (EES) and the European Criminal Records Information System for third-country

nationals. (ECRIS-TCN). These and other existing systems are being built/adapted to ensure interoperability - improved access to information stored in EU information systems and identity management at the EU level. The Agency develops judicial electronic communication tools (e-CODEX). The e-CODEX system provides easy access to cross-border justice for citizens, businesses and legal professionals across Europe.

The idea is to motivate parties (as well as public authorities) to participate in cross-border litigation through digital means available in their home countries. The e-CODEX network consists of a number of physical gateways located in national administrations. On the European side, each gateway is connected to the others by a common communication protocol and is secured by proven authentication and cryptographic algorithms.

On the national side, each gateway communicates with national systems through an adapter called a connector. The connector is customized by each country according to its specific and reflects its own national formats which is converted into a widely used standard format based on ebM between gateways [11].

However, the challenges faced by the e-CODEX team were not only technical. Not only does communication during litigation need to be secure and reliable, it also needs to be legally valid. In national legal procedures, procedural rules allow and regulate the use of technological means to perform legally valid actions. In a cross-border context, the legal validity of the actions taken depends on the combination of the EU legal framework and the legal system of the EU-member state. The legislation that rules EU-member court is usually different between parties. This has proven to be particularly problematic in the case of a key component of legally valid judicial communications: the signing of documents [4].

While the high-level architecture of e-CODEX was developed starting in 2011 and the system went live in August 2013, Regulation (EU) No. 910/2014 on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation). The Regulation sets out the conditions under which EU members recognize electronic identification means of electronic identification of individuals and legal entities covered by a notified electronic identification scheme of another EU member. The documents establishes the legal framework for electronic signatures, electronic seals, electronic time stamps, electronic documents, electronic registered delivery services and certification services for website authentication, which come into force only in July 2014, and key parts are applicable only from July, 2016.

During the deployment and testing of the infrastructure at the national level, a number of challenges arose, from the installation of the e-CODEX gateway, migration from one version to the next, configuration of firewalls to ensure communication, mapping national schemes to e-CODEX, and testing communication with other network partners. At the same time, the project has managed to withstand those challenges, and as a result, the EU member states, together with the EU Commission, are

committed to supporting and further developing e-CODEX.

In addition, the e-CODEX infrastructure can be used for interconnecting Network of Member States' business registers (BRIS) and to support the Investigation Decision and the exchange of electronic evidence between all EU Member States. [12].

While the e-CODEX project has achieved these positive results, a major limitation can be seen in its inability to support and facilitate a sufficient number of cross-border litigations. The number of cases and transactions remains quite limited. Several initiatives are attempting to expand the e-CODEX infrastructure and increase its use. The Me-CODEX project, in addition to justice domain components, is investigating new judicial procedures or procedural steps, which may attract users such as the service of documents in cross-border procedures. The Pro-CODEX project aims to explore opportunities and create conditions to support the development of technological components necessary to ensure interoperability of e-CODEX and applications used by legal professionals (lawyers and notaries) at the national level [13]

To address the current problems, the EU Commission has developed an eJustice Strategy for 2019-2023. It sets the following goals for European eJustice:

- improving access to justice-related information, including information on citizens' rights, EU and Member State legislation, procedures, competent authorities, national registers, etc. (e-justice and EUR-Lex portals)
- promoting electronic communications in the field of justice, dematerialization of judicial and extrajudicial procedures, electronic interaction between judicial authorities, citizens and practitioners through secure tools;
- ensuring the relationship between the national e-justice systems of the Member States.

The principles of European eJustice development include prioritization of projects by importance, maturity of technology, number of EU members involved, ensuring planned actions, flexibility to future legal and technological changes such as use of artificial intelligence, blockchain, involvement of practitioners in implementation, financial support from the EU, voluntary participation, monitoring and adaptation of the action plans [14].

In general, the strategy aims to digitalize and facilitate judicial cooperation in the EU for the benefit of citizens, businesses and justice authorities. These goals require new investments from EU countries to develop the necessary infrastructure that can interact with e-CODEX. The amount of investment will depend on the current national level of digitization, the level of participation in the e-CODEX project, the compatibility of solutions implemented by EU countries, and the ability to authorize technologies under each country's national legislation. The regulation proposals of judicial cooperation digitalization and access were adopted by the European Commission on December 1, 2021. The Council agreed on its negotiating position at the Council meeting on December 9, 2022.

The steps taken to digitize European justice will improve access to justice for citizens and businesses, and will also contribute to the fight against crime. Citizens and their representatives will be able to communicate with the competent authorities in cross-border procedures in the EU through a European electronic access point, sending their requests and receiving responses electronically [15].

Authorities will also be able to communicate with each other and share data related to civil, commercial and criminal matters through secure and reliable digital channels. Once adopted, the new rules will improve cross-border court procedures by:

- allowing parties and other relevant persons to participate in civil, commercial and criminal hearings through videoconferencing or other remote communication technologies;
- establishing a European electronic access point through which individuals and legal entities can file claims, send and receive relevant information, and communicate with the competent authorities;
- receiving electronic messages and documents from individuals and legal entities;
- recognition of documents with an electronic signature or seal;
- facilitating the payment of fees by electronic means [15].

As regards the service of documents, under the new rules documents can be served electronically and directly to an addressee with a known address in another Member State, if their express consent is given in advance. The service can be made by qualified electronic registered delivery or, under additional conditions, by e-mail. In addition, a decentralized system should be established in the EU to facilitate electronic communication. The software package can be used by EU-members, with e-CODEX serving as the main tool for interconnection.

**4. Conclusion.** To summarize, it is possible to note that a number of important strategic legislative acts and programs have been established. These documents outline the principles of e-justice, define specific goals and mechanisms their achieving. Several technical tools have been developed, such as the e-Justice portal, the European Judicial Atlas, and the e-CODEX infrastructure. These tools facilitate information exchange and communication between judicial authorities of different countries and provide citizens the access to online judicial services.

At the same time, the full-scale implementation of e-justice in the EU faces a number of legal, technical and organizational obstacles. Differences in the levels of digitalization of national judicial systems, legal barriers, insufficient technical infrastructure, and a lack of qualified personnel slow down the process. To overcome these challenges, concerted action is needed from EU institutions and member states. The recent legislative initiatives to unify the rules of electronic communication in cross-border court proceedings, introduce a single electronic access point and a decentralized system of data exchange between courts will be crucial steps towards advancing e-justice efforts.



## REFERENCE:

1. Yu J., Xia J. E-justice evaluation factors: The case of Smart Court of China. *Information Development*. 2021. No. 37(4) Pp. 658-670. URL: <https://doi.org/10.1177/0266666920967387>
2. Pangalos G., Salmatzidis I., & Pagkalos I. Using IT to Provide Easier Access to Cross-Border Legal Procedures for Citizens and Legal Professionals - Implementation of a European Payment Order e-CODEX pilot. *International Journal for Court Administration*. 2014. No. 6(2), Pp. 43-52. URL: <https://doi.org/10.18352/ijca.137>
3. Velicogna M., Ontanu A. Improving Access to Courts and Access to Justice in Cross-border Litigation: Lessons from EU Experiences. *Ciências e Políticas Públicas / Public Sciences & Policies*. 2019. No. 5, Pp. 69-92. URL: [https://repub.eur.nl/pub/124386/Ontanu-Improving-Access-CPP\\_V5N1\\_4.pdf](https://repub.eur.nl/pub/124386/Ontanu-Improving-Access-CPP_V5N1_4.pdf)
4. Velicogna M., Steigenga E., Taal S., Schmidt, A. Connecting EU Jurisdictions: Exploring How to Open Justice Across Member States Through ICT. *Social Science Computer Review*. 2020. No. 38(3), Pp. 274-294. URL: <https://doi.org/10.1177/0894439318786949>
5. Recommendation Rec (2001) 3 on the delivery of court and other legal services to the citizen through the use of new technologies. Council of Europe. 2001. URL: <https://search.coe.int/cm?i=09000016805e2aa7>
6. Opinion No. 14 (2011) on Justice and Information Technologies. Consultative Council of European Judges. 2011. URL: <https://rm.coe.int/168074816b>
7. Multiannual European e-Justice Action Plan 2014-2018. European Commission. 2014. URL: [https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/justice-programme\\_en](https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/justice-programme_en)
8. Official website of the The European e-Justice Portal. URL: <https://e-justice.europa.eu/home?action=home>
9. The European Judicial Atlas in Civil Matters. URL: [https://e-justice.europa.eu/content\\_european\\_judicial\\_atlas\\_in\\_civil\\_matters-321-en.do](https://e-justice.europa.eu/content_european_judicial_atlas_in_civil_matters-321-en.do)
10. Official website of the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA). URL: <https://www.eulisa.europa.eu/About-Us/Who-We-Are>
11. Pangalos G., Salmatzidis I., Pagkalos I. Using IT to Provide Easier Access to Cross-Border Legal Procedures for Citizens and Legal Professionals - Implementation of a European Payment Order E-CODEX Pilot. *International Journal for Court Administration*. 2017. No.6(2). URL: <https://ssrn.com/abstract=2893685>
12. Regulation (EU) 2015/848 insolvency proceedings establishing technical specifications and procedures required for the system of interconnection. European Parliament and European Council. 2015. URL: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2015.141.01.0019.01.ENG](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.141.01.0019.01.ENG)
13. Information on the Pro-CODEX project. Information Sheet. Milan Advocacy Assosiation. 2017. URL: [https://ordineavvocatimilano.it/media/allegati/FINANZIAMENTI%20UE/ddmm017\\_Pro-Codex\\_Console.pdf](https://ordineavvocatimilano.it/media/allegati/FINANZIAMENTI%20UE/ddmm017_Pro-Codex_Console.pdf)
14. The European e-Justice Strategy for 2019-2023. Official Journal of the European Union. 2019. No 96. Pp. 24-32. URL: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XG0313\(01\)&rid=7](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XG0313(01)&rid=7)
15. On the digitalisation of judicial cooperation and access to justice in crossborder civil, commercial and criminal matters, and amending certain acts in the field of judicial cooperation, Proposal for a Regulation of the European Parliament and of the Council, 2022. URL: <https://data.consilium.europa.eu/doc/document/ST-15139-2022-INIT/en/pdf>