

DIGITALIZATION OF CIVIL PROCEDURE AND AI: THE EUROPEAN PERSPECTIVE

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Abstract

The study is a written version of the author's presentation given at the international conference "AI and Law" organized at Pázmány Péter Catholic University on January 26, 2024. The author explains the current initiatives of the EU in the field of digital justice and how the Commission has been able to take the technological lead in cross-border digital judicial cooperation. The paper demonstrates a parallel development, closely related to judicial cooperation in civil and commercial matters, where a newly established international court in patent matters is offering a modern, totally digitalized procedure that has been immediately accepted by stakeholders from all parts of the world. Finally, the author looks at the prospects of the future developments of the usage of AI in the settlement of civil and commercial disputes in the EU.

Keywords: digitalization, AI, artificial intelligence, cross-border cases, European Union, civil justice, judicial cooperation

1. Digitalization in the European Union: the state of affairs

In the contemporary societies, digitalization offers large prospects of modernization, but also entails big challenges to the existing infrastructures.¹ This dichotomy also applies to the justice systems. Since at the last decade, digitalization invades the civil procedures of the EU Member States and transforms the communication within and among the judicial systems and the parties. However, the European Union is not a

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¹ Cf. on "disruptive effects of digitalization" Horst EIDENMÜLLER – Gerhard WAGNER: *Law by Algorithm*. Tübingen, Mohr Siebeck, 2020. 223. ff. <https://doi.org/10.1628/978-3-16-157509-9>

strong actor in civil procedure, as the Union only disposes of limited competences in this field.² Nevertheless, as I would like to demonstrate in my following presentation, the European Commission has been able to take the lead in some of the critical fields as the latest developments demonstrate: the Regulation (EU) 2023/2844 of December 13, 2023, on the digitalization and access to justice in cross-border civil, commercial, and criminal matters was published on 27 December 27 2023 in the Official Journal.³ A few days earlier, on December 8, 2023, the EU-Commission, Council and Parliament reached an agreement in their tripartite negotiations on the EU Regulation on Artificial Intelligence.⁴ At present, the publication of the regulation in the OJ is being prepared. Both instruments will considerably influence the future development of digitalization in civil litigation.

My presentation of today will address the following issues: First, I would like to explain the current initiatives of the Union in the field of digital justice and how the EU Commission has been able to take the technological lead in cross-border digital judicial cooperation. Secondly, I will demonstrate a parallel development, closely related to judicial cooperation in civil and commercial matters, where a newly established international court in patent matters is offering a modern, totally digitalized procedure that has been immediately accepted by stakeholders from all parts of the world. Finally, I would like to look at the prospects of the future developments of the usage of AI in the settlement of civil and commercial disputes in the European Union.

1.1 e-CODEX: direct digital communication between judicial authorities and parties within the European Union

The so-called e-CODEX project has become a major success of the EU-Commission in the field of cross-border digitalization.⁵ Already in 2009, the Commission had adopted a first formal four-year action plan on digitalization, which got several follow-ups. More importantly, the EU Commission provided funding for pilot projects to enhance digital cooperation. In this regard, the so-called e-CODEX project was most successful.⁶ Initially developed by some stakeholders in a couple of Member States and (financially) supported by the EU Commission, it has finally become the technical solution for the interconnection of the different domestic IT systems of EU Member States.

The e-CODEX system is a decentralized secured communication system. It consists of several software tools aimed at setting up so-called “access points for secure

² Burkhard HESS: *Europäisches Zivilprozessrecht*. Berlin, de Gruyter, 2nd ed., 2021. chap. 2 V, paras 2.105. ff. <https://doi.org/10.1515/9783110715156>

³ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202302844 (Accessed on: 22 January 2024).

⁴ Financial Times, 8.12.2023, EU agrees landmark rules on artificial intelligence, <https://www.ft.com/content/d5bec462-d948-4437-aab1-e6505031a303> (Accessed on: 22 January 2024).

⁵ Digitalization is one of the six political priorities of the EU Commission for the period of 2019–2024. Furthermore, the Commission declared the decade between 2020 and 2030 the “digital decade”, https://ec.europa.eu/info/strategy/priorities-2019-2024_en (Accessed on: 22 January 2024).

⁶ Cf. the description of e-Codex by the EU Commission, COM(2020) 710 final, 5.

communication”. Access points using e-CODEX can communicate with other access points over the internet via a set of common protocols, with no central system involved. Each access point can be linked to a national case management system in order to allow it to exchange documents securely with other similar systems.⁷ It seems that, at present, no other competing IT system is working with the same degree of maturity.⁸ As a result, the European Union (or, to be more explicit, the EU Commission) has taken the lead in the cross-border digitalization of civil procedures.

Consequently, the EU lawmaker recently took up these technological progresses and proposed to consolidate them within a comprehensive legal framework. In October 2020, the European Council adopted Conclusions on “Access to justice – seizing the opportunities of digitalization”, where it called the Commission to take concrete action to comprehensively digitalize justice and to “examine the potential for modernizing the core provisions of instruments in civil and commercial matters in line with the ‘digital by default’ principle.”⁹ This action plan was already in the making. On 2 December 2020, the EU Commission published a Communication on the Digitalization of Justice in the European Union – a toolbox composed of “a comprehensive set of legal, financial and IT instruments.”¹⁰ This document summarizes the current strategy of the Commission in the field by highlighting several priorities: (1) the provision of financial support for Member States to start the “true digital transformation” of their justice systems;¹¹ (2) making the digital channel the default option in EU cross-border judicial cooperation. Other priorities are better interconnect registers (3), including the e-Justice portal (4), and e-Codex shall become the “gold standard” for digital communication in cross-border judicial proceedings.¹²

The practical implementation of the Communication was found in a proposed regulation on the e-CODEX system published the same day.¹³ This proposal was adopted (without any substantial political opposition) by the Regulation (EU) 2022/850.¹⁴ Article

⁷ E-CODEX was developed by 21 Member States with the participation of other third countries/territories and organisations between 2010 and 2016. The total costs of developing the system was about 24 million Euro, of which 50% were funded by the EU and 50% by the participating Member States. Cf. the Explanatory Report of the EU Commission of 2 December 2020 regarding the proposed Regulation on a computerised system for communication in cross-border civil and criminal proceedings (e-CODEX system), and amending Regulation (EU) 2018/1726, COM(2020) 712 final, 5.

⁸ The functioning of the system has been tested in various pilot projects related to various existing instruments of cross-border cooperation.

⁹ Council Conclusions ‘Access to justice – seizing the opportunities of digitalization’ 2020/C 342 I/01.

¹⁰ Communication from the Commission on the digitalization of justice in the European Union – a toolbox of opportunities, 2 December 2020, COM (2020) 710 final, 2.

¹¹ Projects were started in Croatia in 2016, in Cyprus in 2017, in Belgium in 2018 and in Greece in 2020, COM (2020) 710 final, 6.

¹² The Communication also proposed to set up a Joint Research Centre of the Commission and the Member States aimed at monitoring the existing and developing new IT technologies COM (2020) 710 final, 18 ff.

¹³ Proposal for a Regulation on a computerised system for communication in cross-border civil and criminal proceedings (e-CODEX system), and amending Regulation (EU) 2018/1726, COM (2020) 712 final.

¹⁴ OJ 2022 L 150/1 ff.

7 of the Regulation integrates the e-CODEX system into the technical responsibility of eu-LISA,¹⁵ an agency for the development and maintenance of EU IT communication systems in the Schengen area and in the area of criminal cooperation.¹⁶ In addition, it is important to mention the financial dimensions of the project. Until now, the e-Codex consortium spent 24 million Euro for the establishment of the system; an annual budget of 1.660 million Euro shall be spent per year until 2026.¹⁷ As a result, the standardization of IT cross-border exchanges shall operate in the technical framework of e-Codex, provided, funded, and monitored by the European Union. As a result, the Union (led by the Commission) has taken the lead in establishing the technical framework for cross-border communications in the Judicial Area.

1.2 The 2023 Digitalization Regulation

The latest development is the Digitalization Regulation (EU) 2023/2844 of December 27, 2023 (DigReg). It does not only establish the rules (and standards) for the use of electronic communication between competent authorities within the judicial cooperation in civil, commercial, and criminal matters, but also for the use of electronic communication between natural or legal persons and competent authorities in cross-border procedures (Art. 1 DigReg). The Regulation applies to all EU-instruments of judicial cooperation in civil and commercial matters.¹⁸ This communication shall be accomplished through the decentralised IT system (Art. 3 DigReg) and the European electronic access points (Art. 4 DigReg). All communications shall operate through a secure, efficient, and reliable decentralized IT system (Art. 4 (1) DigReg). As a result, Reg. (EU) 2023/2844 shifts from the use of paper (including fax) documents to the immediate usage of electronic communication and facilitates the establishment and interchange of electronic documents in cross-border settings. Here, the regulatory approach of the EU Commission appears quite clear: By developing an operational system to interconnect the national justice IT systems, the Commission sets an uniform IT-standard for cross-border cooperation. Technically, the system is based on the tools and the practice of cross-border interconnectivity of national IT systems operating within the Schengen-system. In addition, the Union provides for support to EU member states to modernize their justice systems according to EU standards. This also includes financial support.

Yet, the new framework will not apply immediately: The Regulation will enter into force on 1 May 2025. Furthermore, the EU-Commission will enact implementing acts related to each instrument as scheduled by article 26 DigReg. Thus, the implementing

¹⁵ European Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice, mainly located in Estonia.

¹⁶ *Richard*, La refonte du règlement sur l'obtention des preuves en matière civile, Rev. Crit. DIP 2021, 67, 70 ff.

¹⁷ EUR-lex. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A712%3AFIN> (Accessed on: 22 January 2024).

¹⁸ The pertinent instruments are listed in Art. 2 DigReg and in its Annex I.

period will finally last from 2026 until 2029. Nevertheless, the Regulation clearly establishes a legal and a technical framework for digital communications in the European Judicial Area – the scene has been set.¹⁹ On their side, EU-member states (via the Council) primarily tried to push back the obligations of using IT tools in order to get more time for the implementation.²⁰ Yet, the interests of parties getting a framework for effective digital litigation asap did not play a substantial role in the negotiations.²¹

2. Fully digitalized procedures in the Unified Patent Court

The second actual development to be mentioned here is the establishment of the Unified Patent Court that started its activities on 1 June 2023. The Unified Patent Court is based on an Agreement of its 17 Contracting States²², it operates as a common court of the participating EU Member States and is fully integrated into the Brussels I^{bis} Regulation.²³ The court provides for regional, central, and local divisions, including an appellate division in Luxembourg. Since its start of operations 1 June 2023, the Court of First Instance has received a total number of 160 cases of which 67 are infringement actions, 24 revocation actions, and 48 counterclaims for revocation.²⁴ These cases were already filed in the new litigation system, not only by European parties, but by parties coming from all parts of the world. As far as I can see, this immediate acceptance of a new dispute resolution system has been a unique success in cross-border dispute settlement despite the possibility that parties opt out of the system.²⁵

One reason for this achievement is the fully digitalized procedure of the court based on a case management system (CMS)²⁶: Standardised types of lawsuits²⁷ are brought online, communication takes place on a secured platform, hearings take place onsite but videoconferencing and the taking of digital evidence is fully used. Parties can agree

¹⁹ Same opinion: Mayela CELIS: *Conflict of Laws*. (Accessed on: 22 January 2024).

²⁰ As a result, the European Commission send a clear signal to the EU member states that the digitalization of the justice systems has become a political priority.

²¹ More positively: CELIS op. cit.

²² Agreement on a Unified Patent Court of 19 February 2013 (UPCA), OJ EU C 2013/175, p. 1–40. 24 Member States have signed the UPCA so far (not Spain, Poland and Croatia).

²³ Cf. Article 31 UPCA, articles 71a – 71d of Regulation Brussels Ibis, Lena HORNKOHL: Article 71a– 71d. in: Marta Requejo ISIDORO: *Regulation Brussels Ibis*. Cheltenham, Edward Elgar, 2022, article 71a, paras 71a.04 ff. <https://doi.org/10.4337/9781789908176.00106>

²⁴ Press release of 21st December 2023, <https://www.unified-patent-court.org/en/news/case-load-court-during-2023> (Accessed on: 22 January 2024).

²⁵ According to Article 83(3) UPCA, applicants for and proprietors of a “classic” European patent, as well as holders of a supplementary protection certificate (SPC) issued for a product protected by a “classic” European patent, can opt out their application, patent or SPC from the competence of the Court. As a result, the UPC will have no jurisdiction concerning any litigation related to this application, patent or SPC. Parties can opt out via the case management system of the UPC.

²⁶ The Procedural Rules of the Court were elaborated with the view of their immediate implementation by the case management system, cf.

²⁷ The main types are infringement actions, actions for revocation and corresponding *counterclaims* for revocation against infringement actions.

on the language of the proceedings. The procedure is based on the obligation of the parties to cooperate in the proceedings and the corresponding obligation of the court to use case management techniques and tools.²⁸

The procedure in the first instance consists of three parts: It starts with a written exchange of claims, defences, and counterclaims under the control of a judge rapporteur. This part of the proceedings shall not last longer than 4 to 6 months. The judge rapporteur decides on procedural objections (regarding the jurisdiction) and applications (regarding the provision of a security), he convenes with the parties (usually online) in a preliminary conference to structure the proceedings and to prepare the hearing. The main and public hearing takes place before the full court (3 judges from different jurisdictions), it shall not last longer than a day. Fixed time limits structure all parts of the proceedings. All in all, the dispute shall be settled within months. The appellate proceedings follow the same principles of case management and the obligation of the parties to cooperate. So far, the appellate division dealt with appeals regarding the inadmissibility of the lawsuit and procedural orders.²⁹

All decision taken by the different divisions of the UPC are available in an online data base, accessible via the website of the Court.³⁰ This comprehensive collection of data may permit the use of AI tools in the future as this collection of data is done comprehensively. Yet, there is a need to present the case-law of the court in a more systematic manner. The UPC demonstrates the advantages of a procedure that is entirely based on a case management system in complex cross-border proceedings. In addition, the judges of the UPC started a practice that supports parties to get familiar with the system providing a service to litigants. Still, it remains to be seen whether the UPC will continue to operate smoothly – the start of the new system has been very promising.

3. Perspectives: AI in court proceedings

In the last part of my intervention, I would like to address the initiatives of the European Union regarding the regulation of AI, especially in the context of dispute resolution. Here, state courts are not in the focus of the law-making activities as AI is currently being used mainly in complaint handling mechanisms, in ODR proceedings, and by lawyers, especially when dealing with large scale, but similar claims (flight rights, diesel cases, etc.).³¹ Yet, in the present situation, it is undisputed that AI may

²⁸ Holger KIRCHER: Grundlagen des Verfahrensrechts. In: Thomas BOPP – Holger KIRCHER (ed.): *Handbuch Europäischer Patentprozess*. München, C.H.Beck, 2nd ed. 2023. § 10, paras 18–21.

²⁹ Example: Order of 11 January 2024 regarding the limits of judicial discretion under Rule 333 RoP, <https://tinyurl.com/2u49ak6d> (Accessed on: 22 January 2024).

³⁰ <https://www.unified-patent-court.org/en/decisions-and-orders> (Accessed on: 22 January 2024).

³¹ EIDENMÜLLER – WAGNER (2020) op. cit. 223. ff.

also support judicial activities, especially in large scale and similar disputes. However, compared to the private sector, the justice systems are largely lacking behind.³²

Before discussing the use of AI in litigation, a working definition of the phenomenon seems necessary. In the current debate, the 2021 EU Commission's proposal for a legal framework on AI (AI Act)³³ provides for important guidance. Art. 3 (1) defines AI:

“(1) ‘artificial intelligence system’ (AI system) means software that is developed with one or more of the techniques and approaches listed in Annex I and can, for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with...”³⁴

The proposal classifies AI according to the risks generated by its application, into three different categories: the prohibited AI applications (art. 5 Draft), the high-risk applications (articles 6 – 51 Draft, establishing an elaborated framework of controls) and other applications that are subject to transparency requirements. The application of AI in judicial proceedings is qualified as a high-risk AI (Annex III no 8³⁵). This does not exclude its usage, but articles 13 and 14 of the Draft require a high degree of transparency and a genuine control of the processing by natural persons.³⁶

The EU AI Act does not explicitly address the application of AI within court proceedings, but rather addresses the possibilities of offering and using AI as a service within the Internal Market. Yet, by setting some minimum standards for the marketing of and the liability for AI, the future legal framework paves the way for a regulated development of technological progress. Although the “robot judge” is not imminent, supportive functions of AI within the judiciary need to be explored³⁷. With the AI Act, the European Union has established a legal regime on new developments that

³² EIDENMÜLLER – WAGNER (2020) op. cit. 225. f.; Stefan HUBER: Entscheidungsfindung im Zivilprozess durch künstliche Intelligenz. In: Christoph ALTHAMMER – Herbert ROTH (ed.): *Prozessuales Denken und künstliche Intelligenz*. Tübingen, Mohr Siebeck, 2023. 43., 52. ff.

³³ COM (2021) 206 final: Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union legislative acts.

³⁴ This definition primarily addresses the impacts of AI on contents and decisions, cf. Fernando Gascón INCHAUSTI: Quelques propositions pour réguler l'utilisation de l'intelligence artificielle dans la procédure civile. In: *Mélanges en l'honneur du Professeur Loïc Cadiet*. Paris, Lexis Nexis, 2023. 617., 619.

³⁵ It reads as follows: “High-risk AI systems pursuant to Article 6(2) are the AI systems listed in any of the following areas(...) 8. Administration of justice and democratic processes (a) AI systems intended to assist a judicial authority in researching and interpreting facts and the law and in applying the law to a concrete set of facts...”

³⁶ HUBER (2023) op. cit. 43.; INCHAUSTI (2023) op cit. 617. ff.

³⁷ There is a considerable danger that the application of AI in court proceedings is considered as belonging to the organization of the judiciary to be organized by national ministries without being subject to democratic control by parliaments.

transgresses the fragmented approaches in the EU Member States.³⁸ With regard to the IT developments, the EU lawmaker has demonstrated its ability of setting the fundamental structures for future technological development in the relevant fields: within the Internal Market and within the European Judicial Area.

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³⁸ In almost all EU member states, a specific regulation of AI (in court proceedings) is missing, cf. INCHAUSTI (2023) op cit. 617., 620.