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SEMI-FINAL C: EU AND EUROPEAN CIVIL PROCEDURE

TOWARDS EUROPEAN E-JUSTICE

The Need for Harmonization of Digital Standards in EU Procedural Law in Civil Matters

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Introduction

Europe is changing every day. European societies are transforming towards a quicker, more interlinked and more digital people. Digitization creates new needs, challenges, but also opportunities. Innovative start-ups with new ideas and solutions pop up in all parts of Europe to contribute to the transformation process. Businesses bring forward their strategies in the digitization process, being aware that a successful transformation is decisive for their future on the market.

The question of competitiveness in the field of digitization, however, is not limited to the private sector. It is also a challenge for our legal system, in particular if it shall not be pushed aside by more efficient and modern methods of alternative dispute resolution (ADR). A decade ago, the EU Council adopted the first quinquennial action plan for the creation of a European e-Justice in the years 2009-2013.¹ The concept of e-Justice was defined as the use of information and communication technologies in the field of justice comprising the fields of civil, criminal and administrative law.²

The 2009-2013 plan focused on providing technical infrastructure and information tools that are quintessential to an e-Justice system at a European scale. At the heart of the action plan was the multilingual European e-Justice Portal.³ Next to access to information, via this portal, the action plan also promoted the creation of the necessary technical infrastructure such as reliable electronic authentication schemes. The second action plan for the years 2014-2018 further developed the topics of access to information, access to court and communication between judicial authorities.⁴ For the latter, the project 'e-CODEX' was put on the agenda. The platform serves as a communication tool enabling an effective and secure exchange of information across borders. The third and current action plan for the years 2019-2023, renamed 'Strategy on e-Justice', reiterates the continuing evolution of tools in the fields of access to information, access to court and e-communication.⁵

Meanwhile, however, even more sophisticated and more disruptive technologies emerged on the horizon. The use of artificial intelligence (AI), virtual reality (VR) or other legal tech domains could fundamentally change our concepts of adjudicating. The current EU Council's

¹ EU Council, 'Multi-Annual European E-Justice Action Plan 2009-2013' [2009] OJ C 75/1.

 $^{^{2}}$ ibid paras 1, 15.

³ The portal, accessible at <https://e-justice.europa.eu/home.do> last accessed 13 May 2019, is a vast information platform for citizens and practitioners alike, providing access to case law, legislation and links to all Member States on various judicial matters.

⁴ EU Council, 'Multiannual European E-Justice Action Plan 2014-2018' [2014] OJ C 182/2.

⁵ EU Council, '2019-2023 Strategy on e-Justice' [2019] OJ C 96/4.

e-justice strategy remarks that these technologies 'should be closely monitored, in order to identify and seize opportunities with a potential positive impact on e-Justice.'⁶ The strategy also invites EU Member States to report on their use of AI-tools.⁷ Some pioneer states already shape the digital judicial future. Estonia, for example, being the EU's leader in digitization, has launched the most ambitious project to date. Its aim is to design a 'robot judge' which is to adjudicate on small claims disputes with up to 7,000 EUR in litigation value.⁸ The broad concept is that the disputing parties will provide documents and relevant information via upload for the AI to issue a decision.⁹ This finding may be subject to review by a human judge at the appellate stage.¹⁰

This paper argues for a harmonization of digital standards at the European level. Thereby, one has to acknowledge the limits of harmonization between procedural autonomy of the Member States and the room for action offered by the concepts of effectiveness and direct effect of EU law. Thus, this paper assesses the possibilities within these limits. In the first part, we explore the various existing tools of digitization in court (A.). In the second part, we examine possibilities to further implement legal tech in civil procedure (B.).

A. Digitization Tools in Court

Adapting the justice system to the demands of digitization first and foremost requires the tools to enable electronic communication between parties. This is the reason why the vast majority of EU Member States has already introduced possibilities to electronically serve documents.¹¹ Yet, the extent of e-communication varies significantly. While it is possible in some Member States, like Estonia,¹² to commence legal proceedings, submit all types of judicial documents and even serve judgments electronically, other States remain more restrictive. In Sweden, for instance, legal proceedings may only exceptionally be initiated electronically due to a strict signature requirement.¹³

⁶ ibid para 30.

⁷ A non-exhaustive overview on AI developments in different Member States is provided by the Council of Europe (CoE), 'Practical Examples of AI Implemented in Other Countries' (2018) <www.coe.int/en/web/cepej/practical-examples-of-ai-implemented-in-other-countries> last accessed 13 May 2019.

⁸ The project is still at its early stages, but officials hope to launch a pilot – however, limited to contract claims – later this year, see Eric Niiler, 'Can AI Be a Fair Judge in Court? Estonia Thinks So' (*Wired.com*, 25 March 2019)
<www.wired.com/story/can-ai-be-fair-judge-court-estonia-thinks-so/> last accessed 29 April 2019.
⁹ ibid.

¹⁰ ibid.

¹¹ See for details European Justice Portal, 'Service of Documents' (2018) <https://e-justice.europa.eu/content_service_of_documents-371-en.do> last accessed 13 May 2019.

¹² European Justice Portal, 'Automatic Processing: Estonia' (2018) <https://e-justice.europa.eu/content_automatic_processing-280-ee-en.do?member=1> last accessed 13 May 2019.

¹³ European Justice Portal, 'Automatic Processing: Sweden' (2014) <https://e-

Apart from e-communication, the courtroom itself forms part of the digitization agenda. Member States more and more frequently make use of digital tools to support the logistic organization of court proceedings. Digital display boards are put in place in courthouses to announce and eventually update hearing schedules. Further, some States, like Spain, allow for the videotaping of oral hearings in civil proceedings and make them available online to the parties and their representatives via a secured interface.¹⁴ While further advancements to remotely conduct parts of the procedure – such as the taking of evidence – are approached, the remote holding of entire hearings has not yet been fully attained.

The legal framework concerning digitization tools in court is based on the EU's task to develop a European area of justice as stipulated in Articles 3(2) TEU¹⁵ and 67 TFEU¹⁶. Accordingly, the EU, under Article 81(1) TFEU, 'shall develop judicial cooperation in civil matters having cross-border implications.' In doing so, the EU has increasingly adopted legislation on cooperation in the taking of evidence and the cross-border service of judicial documents. Additionally, regulating and promoting judicial assistance across borders influences the proper functioning of the internal market of the EU¹⁷ and has the potential to increase consumer protection.¹⁸ Harmonizing digital procedural standards will in turn foster these core policies of the EU as it creates legal certainty for businesses and consumers alike and strengthens the rule of law. EU Actions must however take into due regard the procedural autonomy of the Member States, as emphasized by the European Court of Justice (ECJ) *inter alia* in *Rewe-Zentralfinanz* eG^{19} and, more recently, in *Aquino*²⁰.

In the following, ways of digitizing judicial and extra-judicial communication will be explored with a special focus on the electronic service of documents (I.). In a second step, the roadmap

justice.europa.eu/content_automatic_processing-280-se-en.do?member=1> last accessed 13 May 2019.

¹⁴ Regional Government of Andalusia, Council for Justice and Interior Affairs, 'Arconte Portal: Guía de uso para los Profesionales' (Manual for Professionals, undated) <https://sede.justicia.juntadeandalucia.es/portal/export/sites/sedeelectronica/.content/galleries/downloads/Guia_ PROFESIONALES_Portal_Descargas.V.3.1.pdf> last accessed 13 May 2019.

¹⁵ Consolidated Version of the Treaty on European Union [2012] OJ C 326/13 (TEU).

¹⁶ Consolidated Version of the Treaty on the Functioning of the European Union [2012] OJ C 326/47 (TFEU).

¹⁷ Cf European Parliament, 'Legislative Resolution of 13 February 2019' P8_TA(2019)0104 (13 February 2019) para 1.

¹⁸ Cf Max Planck Institute Luxembourg for International, European and Regulatory Procedural Law, 'An Evaluation Study of National Procedural Laws and Practices in Terms of their Impact on the Free Circulation of Judgments and on the Equivalence and Effectiveness of the Procedural Protection of Consumers under EU Consumer Law' (2017) para 36 https://publications.europa.eu/s/lmsp last accessed 13 May 2019.

¹⁹ Case 33/76 *Rewe-Zenralfinanz eG and Rewe-Zentral AG v Landwirtschaftskammer für das Saarland* (16 December 1976) para 5. See further Diana-Urania Galetta, *Procedural Autonomy of EU Member States: Paradise Lost?* (Springer 2010).

²⁰ Case C-3/16 Aquino (15 March 2017) para 48.

towards a possible digital courtroom will be outlined (II.). Here, the possibilities to hold hearings or to take evidence remotely will be discussed.

I. Digitization of Judicial and Extra-Judicial Communication

The digitization of judicial and extra-judicial communication lies at the heart of the modernization process in the justice system of most Member States. It primarily involves the electronic service of documents. The EU legal framework is laid down in Regulation (EC) 1393/2007 on the service of judicial and extrajudicial documents.²¹ The regulation, however, does not yet mention the possibility of electronic means of communication.

Meanwhile, EU Member States have undertaken their own modernization processes. In Germany, for example, lawyers may now use a special electronic mailbox designed only for them, the 'beA'. While the reception of electronic documents is mandatory, the sending, on the other hand, is still optional. It shall, too, become mandatory in 2020 or 2022, depending on the legislation of the respective federal state (*Bundesland*).²² In Spain, since 1 January 2017, not only lawyers, but also certain individual parties may be obliged to electronically communicate with judicial authorities. This concerns *inter alia* entities with or without legal personality, notaries and registrars as well as representatives of public authorities.²³ Thereby, the use of electronic means in civil proceedings shall be applied globally.²⁴

Within the jurisdiction of the EU, too, the ECJ has made available the possibility to electronically submit court documents. According to Article 48(4) of its Rules of Procedure, the ECJ decided to explicitly allow the lodging and service of procedural documents by electronic means.²⁵

Most recently, within the framework of its regulatory fitness and performance (REFIT)²⁶ program, the EU Commission brought forward a proposal to amend Regulation (EC)

²¹ Regulation (EC) No 1393/2007 of the European Parliament and of the Council on the service in the Member States of judicial and extrajudicial documents in civil or commercial matters (service of documents), and repealing Council Regulation (EC) No 1348/2000 [2007] OJ L 324/79.

²² Cf German Federal Lawyers Act ('Bundesrechtsanwaltsordnung') s 31.

²³ Cf Law 42/2015 of 5th October, reform of the law 1/2000, of 7th January, on Code of Civil Procedure, No 34, reforming art 274 no 3 ('Ley 42/2015, de 5 de octubre, de reforma de la Ley 1/2000, de 7 de enero, de Enjuiciamiento Civil, No 34, reformiendo art 274 no 3').

²⁴ Cf ibid Preamble II ('Preambulo II'); Manuel R González, 'La justicia electronica en Espana' (2017) 67 Revista de la Facultad de Derecho de México 1032, 1045 ff.

²⁵ ECJ, Decision of 16 October 2018 on the lodging and service of procedural documents by means of e-Curia [2018] OJ L 293/36.

²⁶ For more information see European Commission, 'REFIT Platform' (2017) https://ec.europa.eu/info/sites/info/files/refit_platform_brochure.pdf> last accessed 13 May 2019.

1393/2007.²⁷ The proposal was already subject to a first reading in the EU Parliament and is currently under discussion in the EU Council which has not yet adopted a common opinion.²⁸

The proposal's key provision for the communication between parties and judicial authorities is Article 15a. In the version adopted by the EU Parliament in its first reading, it provides:

Service of judicial documents may be effected directly [...] through electronic means to electronic addresses accessible to the addressee, provided that [...]

- a. the documents are sent and received using qualified electronic registered delivery services within the meaning of Regulation (EU) No 910/2014 [...], and
- b. after the commencement of legal proceedings, the addressee gave express consent to the court or authority seised [sic] with the proceedings to use that particular electronic address for purposes of serving documents in course of the legal proceedings.

Article 15a highlights that the use of electronic communication shall only be permitted if security aspects of this communication technology are observed and if parties have given their express consent. Hereby, the security of the transmission shall be ensured by use of the 'e-ID'.²⁹ Additionally, the EU Commission may set the concrete preconditions for the qualified electronic delivery services in a future delegated act.³⁰

The proposal also takes into account the remote means of communication when the defendant is not reacting to the transmitted document, hence is 'not entering appearance' in terms of Article 19 of Regulation (EC) 1393/2007. To inform the defendant about the procedure, the tribunal shall use 'any available channels of communication, including means of modern communication technology, for which an address or an account is known to the court seised [sic].'³¹ This has incited critics to question the practicability of the proposed obligation for tribunals.³² It could represent an unreasonable burden on tribunals to gain knowledge about the entirety of communication channels used by the addressee. In particular, the verification of publicly accessible social media channels like Facebook, Instagram or Snapchat could be

²⁷ European Commission, 'Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 1393/2007 of the European Parliament and of the Council on the service in the Member States of judicial and extrajudicial documents in civil or commercial matters (service of documents)' Com(2018)379 final (31 May 2018) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52018PC0379> last accessed 13 May 2019.

²⁸ For more information on the legislative process, see 'Procedure 2018/0204/COD' (2019) <https://eur-lex.europa.eu/procedure/EN/2018_204> last accessed 13 May 2019.

²⁹ The European electronic identification scheme 'e-ID' was adopted in 2014 and enjoys EU-wide recognition as of 29 September 2018, see Regulation (EU) 910/2014 of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC [2014] OJ L 257/73. See also https://go.eid.as/ last accessed 13 May 2019.

³⁰ Cf European Commission (n 27) art 15a lit a.

³¹ Cf ibid art 19(3).

³² German Lawyers Association, 'Stellungnahme Nr 53/2018, Beweiserhebung und Zustellung' (October 2018) 8 <https://anwaltverein.de/de/newsroom?newscategories=3&category=&startDate=01.10.2018&endDate=30.11.2 018&searchKeywords=> last accessed 13 May 2019.

impractical. Critics therefore asked to clarify the extent of the obligation to inform the defendant.

With regard to communication between EU Member States and their respective judicial authorities, the benefits of the new platform 'e-CODEX' shall be exploited. According to the proposal's new Article 3a, documents shall be transmitted through a decentralized IT-System based on e-CODEX. Finally, the proposal also makes clear, that the regulation shall apply without prejudice to formal requirements imposed by national law.³³

All in all, the Commission's proposal identifies the security of the transmission process as well as the parties' explicit consent as the basis for implementing the electronic service of documents. Here, we shall note that the consent-based approach is not unanimously adopted in EU Member States. In fact, the already evoked example of Spain provides for a strict disregard of any documents non-compliant with the requirements of electronic submission. ³⁴ Indeed, the Commission's proposal reiterates that the stipulation of form requirements generally lies in the competence of the national legislator. Consequently, Spain could maintain its electronic form requirements. Yet, it could be discussed whether the express consent of the parties to receive judicial documents electronically is the preferable model. In light of the gains of efficiency and the economized resources, it could be more favorable to set the electronic communication as default option. Then, parties could still choose to opt-out and request analogue communication instead.

II. Digital Court Proceedings: Towards a Digital Courtroom?

Implementing a digital courtroom in the justice system of EU Member States is generally possible from a technical point of view. To remotely conduct the taking of evidence or take part in a remote hearing, the tribunal and the parties would have to be equipped with the necessary tools.

1. EU-Level Harmonization

In this context, the EU Council published a guide on cross-border video-conferencing that portrays the relevant technical, organizational and legal aspects.³⁵ Therein, the technical training of the legal staff is encouraged to ensure a smooth process. Yet, the guide does not aim at laying out the circumstances for an entire hearing to be conducted remotely. It rather refers to the situation to hear a witness from a remote location or, more generally, the remote taking

³³ Cf European Commission (n 30) art 4(3).

³⁴ González (n 24) 1045 ff.

³⁵ EU Council, Guide on Video-Conferencing in Cross-Border Proceedings (European Union 2013).

of evidence. Thus, for the relevant legal framework, the guide points to Regulation (EC) 1206/2001 on cooperation between the courts of the Member States in the taking of evidence in civil or commercial matters, adopted by the EU Council on the basis of Article 81(2) TFEU.³⁶

Member States followed this cue by including provisions on video-conferencing in their own jurisdictions.³⁷ Germany, for example, introduced the core rulings of the Regulation in Articles 1072 to 1075 of the German Code of Civil Procedure (GCCP). According to Article 1072 No. 1 GCCP, German courts may directly request a competent court of another Member State to take evidence and participate in the process via video-conference pursuant to Article 1073(1) GCCP in conjunction with Article 10(4) of Regulation (EC) 1206/2001. However, German courts may, under the conditions of Article 17 of Regulation (EC) 1206/2001, i.e. on a voluntary basis, also apply for their direct taking of evidence in another Member State (Article 1072 No. 2). If necessary, this may be conducted by means of image and sound transmission (Article 1073(2) GCCP in conjunction with Article 17(4) of Regulation (EC) 1206/2001.³⁸

In 2018, the European Commission advanced a proposal of amending Regulation (EC) 1206/2001: the transmission of requests and communications shall be carried out more rapidly, digital evidence be mutually recognized, and modern electronic technology in the taking of evidence used more frequently.³⁹ For example, Article 18a of the Commission's proposal ensures that digital evidence taken according to the law of a Member State is not rejected as evidence in other Member States. This proposal is also in line with the EU justice agenda for 2020.⁴⁰

Further, Regulation (EC) 861/2007⁴¹ governs the aspect of a future digital courtroom and touches without doubt on the territorial sovereignty of the Member States concerned.⁴² The Regulation in its Articles 8 and 9 allows the use of video-conferencing for oral hearings and the

³⁶ ibid 25.

³⁷ See eg European Justice Portal, 'Taking of Evidence by Videoconferencing: Germany' (2017) <https://e-justice.europa.eu/content_taking_evidence_by_videoconferencing-405-de-en.do?member=1> last accessed 13 May 2019.

³⁸ Dirk von Selle, '§ 128a Verhandlung im Wege der Bild- und Tonübertragung' in Volkert Vorwerk and Christian Wolf (eds), *BeckOK ZPO* (32nd online edn, 1 March 2019) para 16.

³⁹ European Commission, 'Proposal for a Regulation of the European Parliament and the Council amending Council Regulation (EC) No 1206/2001 of 28 May 2001 on cooperation between the courts of the Member States in the taking of evidence in civil or commercial matters' COM(2018) 378 final (31 May 2018) https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018PC0378> last accessed 13 May 2019.

⁴⁰ European Commission, 'The EU Justice Agenda for 2020: Strengthening Trust, Mobility and Growth within the Union' COM(2014) 144 final (11 March 2014) 8 ">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0144&from=EN> last accessed 13 May 2019.

⁴¹ Regulation (EC) No 861/2007 of the European Parliament and of the Council of 11 July 2007 establishing a European Small Claims Procedure [2007] OJ L 199/1.

⁴² Astrid Stadler, '§ 128a Verhandlung im Wege der Bild- und Tonübertragung' in Hans-Joachim Musielak and Wolfgang Voit (eds), Zivilprozessordnung (16th edn, Vahlen 2019) para 8; von Selle (n 38) para 16.

taking of evidence across borders. In Germany, these provisions were implemented in Articles 1100 and 1101 GCCP. With regard to domestic proceedings lacking cross-border implications the use of video-conferencing in oral hearings is regulated by Article 128a GCCP,⁴³ which took effect in 2002.⁴⁴

The question of court hearings exclusively conducted via remote communication tools has not yet been picked up by the EU legislator. The case is different, however, for alternative dispute resolution (ADR) mechanisms. Saving time and costs, remote communication has been embraced more enthusiastically in ADR. The EU set the framework for an out-of-court resolution of online disputes through two legislative acts aimed at improving consumer protection: Directive 2013/11/EU and Regulation (EU) 524/2013.⁴⁵ The latter establishes an online dispute resolution (ODR) platform, whereas Directive 2013/11/EU lays out the requirements for recognizing ADR entities and for conducting ADR procedures.

Internationally, the use of remote means of communication in ADR proceedings, such as arbitration, is widely acknowledged. As the United Nations Commission on International Trade and Law (UNCITRAL) illustrates in its Notes on Organizing Arbitral Proceeding:

Hearings can be held **in-person or remotely** via technological means ([...]). The decision whether to hold a hearing in-person or remotely is likely to be **influenced by various factors**, such as the importance of the issues at stake, the desirability of interacting directly with the witnesses, the availability of the parties, witnesses and experts as well as the cost and possible delay of holding a hearing in person. The **parties and the arbitral tribunal may need to consider** technical matters [...].⁴⁶

It becomes clear that the decision to favor a remote hearing instead of a hearing in person depends on different aspects and should be decided on a case-by-case basis. In light of the importance of party autonomy in arbitral proceedings, the UNCITRAL Notes emphasize that both the arbitral tribunal and the parties decide on whether to hold a hearing remotely or inperson. This option contributes to the attractiveness of arbitral proceedings in contrast to traditional court proceedings.

⁴³ Art 128a(1) GCCP reads: 'The court may permit the parties [...], to stay at another location in the course of a hearing for oral argument, and to take actions in the proceedings from there. In this event, images and sound of the hearing shall be broadcast in real time to this location and to the courtroom.' (tr Federal Ministry of Justice and Consumer Protection).

⁴⁴ See German Law on Reform of Civil Procedure (adopted 27 July 2001, entered into force 1 January 2002) [2001] Federal Official Journal No 40, 1887 ('Gesetz zur Reform des Zivilprozesses, BGBl 2001 Teil I Nr 40, 1887').

⁴⁵ Cf Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013 on alternative dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC [2013] OJ L 165/63, para 12.

⁴⁶ UNCITRAL, 'Notes on Organizing Arbitral Proceedings' (2016) para 122 https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/arb-notes-2016-e.pdf last accessed 13 May 2019 (emphasis added).

2. Digital Courts and the Right to Fair Trial

The legal ramifications of conducting court hearings remotely are certainly greater with respect to the ordinary courts. This concerns in particular the principle of public and effective access to court as well as the role of the judge in ensuring equality of arms. The implications of substituting a hearing in-person via remote access on these principles will be discussed in turn.

Public access to court guarantees in the first place that proceedings are not conducted secretly but considers the court's accountability before the public.⁴⁷ Then, it also maintains the confidence of the public in the court system through its visibility.⁴⁸ In the case that a hearing is conducted remotely, it would have to be made sure that any interested third party could assist in the hearing. This could either be ensured by effectively holding the hearing at the courthouse with the judge being present in person and the respective parties being present remotely.⁴⁹ As for the public, there would not be any difference as to a normal hearing since they also could assist the hearing in-person. Another option is to provide a link to the court's website where interested members of the public could join the procedure online. As Article 6(1) of the European Convention on Human Rights (ECHR)⁵⁰ explicitly provides, the public's access to court can be restricted to ensure the parties' right to privacy. From a technical point of view, the number of participants could also be capped at a certain ceiling depending on the importance and public interest in the case.

Equality of arms denotes a fair balance between the parties. Whereas in arbitral proceedings parties usually take a homogenous position in terms of resources and capacity, ordinary court hearings face different situations. Quite frequently, more resourceful and knowledgeable parties encounter small and less adapt parties, especially when it comes to proceedings with laypersons who are not represented by a lawyer.⁵¹ Thereby, judges have the special task to ensure the equality of arms by giving explanatory information or even short legal notices to the parties. Their appreciation of inequalities between the parties could be rendered more difficult in light of the natural distance created by the remote communication. Additionally, judges might be tasked further to provide technical assistance to parties taking part in remote hearings as the conduct of the hearing generally lies in the judge's competence.

⁴⁷ ECtHR, 'Guide on Article 6 of the European Convention on Human Rights: Right to a Fair Trial (Civil Limb)' (2018) para 345 <www.echr.coe.int/Documents/Guide_Art_6_ENG.pdf> last accessed 13 May 2019.

⁴⁸ Cf Malhous v Czech Republic (GC) App no 33071/96 (ECtHR, 12 July 2001) para 55.

⁴⁹ This is the case in Germany, cf art 128a GCCP.

⁵⁰ Convention for the Protection of Human Rights and Fundamental Freedoms (adopted 4 November 1950, entered into force 3 September 1953) ETS No 5 (ECHR).

⁵¹ Cf Michaela Balke, 'Moderne Kommunikationsmittel für den Zivilprozess: Was heute schon geht' [2018] AnwBl Online 394, 396.

However, parties could choose a remote hearing optionally and unanimously to exclude any inequalities from the very beginning. Further, as to the technical equipment, it could be set as a prerequisite that only party representatives may participate in remote proceedings since they will more likely dispose of the necessary technical infrastructure. If the presence of a party is required, the party could be ordered to remotely attend the hearing alongside its representative.

Finally, the technical requirements shall not deprive any party from an **effective access to court**. Thus, parties who do not possess the necessary technical infrastructure or knowledge should be offered to decline a remote hearing.

In any scenario, parties could have the possibility to return to an analogue procedure as recourse. At the Forum 'Digital Civil Process', held by the German Lawyers Association on 8 November 2017, the request to implement such an 'escape clause' was submitted.⁵²

3. Conclusion

Overall, there are no general impediments against the optional introduction of holding court hearings remotely. Provided the interoperability and cybersecurity of the remote proceeding, the technical adjustments to be made concern the availability of the digital courtroom to the public within the demonstrated limits. Further, the involvement of laypersons in the proceedings could incite restricting remote hearings to parties who are represented by a lawyer. Apart from them, parties such as legal persons or merchants may demonstrate a higher aptitude to participate in remote hearings.

While taking into account the possible drawbacks of video-conferencing in the taking of evidence, the EU nevertheless provides litigating parties with greater flexibility and furthers procedural economy (*Prozessökonomie*).⁵³ Proceedings could be conducted more cost and time efficiently as parties, witnesses and experts could be available at more convenient time and at any place.⁵⁴ Thereby, the EU could significantly contribute to the attractiveness of European courts as a legal forum. On the other hand, extensive use of remote communication could disrupt the paradigm of a traditional civil procedure, which today is still based on 'face-to-face relationships in civil litigation'.⁵⁵ Although, the technical infrastructure will have to be installed

⁵² Marcus Werner and Markus Wollweber, 'Der digitale Zivilprozess: 15 Forderungen der Anwaltschaft' [2018] AnwBl Online 386, 387.

⁵³ von Selle (n 38) para 1.

⁵⁴ See Florian Specht, 'Chancen und Risiken einer digitalen Justiz f
ür den Zivilprozess' [2019] Multimedia und Recht 153; Hendrik Schultzky, 'Videokonferenzen im Zivilprozess' [2003] Neue Juristische Wochenschrift 313, 318.

⁵⁵ Masanori Kawano, 'Electronic Technology and Civil Procedure: Applicability of Electronic Technology in the Course of Civil Procedure' in Miklós Kengyel and Zoltán Nemessányi (eds), *Electronic Technology and Civil Procedure* (Springer 2012) 3, 23 and 27; von Selle (n 38) para 1.

and may prove to be cost-intensive at the beginning.⁵⁶ In addition, courts may have to step up their IT-support to maintain an efficient and secure functioning of remote communication means.

As we can see, there is a legal framework for introducing video-conferencing into civil procedure that exists at both the EU and the national level. With regard to the principles of subsidiarity and proportionality in the context of Article 81 TFEU, there is indeed a need to regulate and modernize judicial cooperation in cross-border civil and commercial proceedings at the EU level. Regulations (EC) 1206/2001 and 861/2007 present a big step in this direction. Member States have not yet developed a sufficient cooperation between their courts nor have they managed to adjust their justice systems to the current level of technological development.⁵⁷ Thus, one of the main problems of implementing electronic procedural provisions is that whereas procedural laws have been updated the judiciary itself is still lacking such modernization.⁵⁸ Member States' courts and authorities still communicate in a predominantly paper-based way and use video-conferencing for the taking of evidence only marginally, even in domestic proceedings.⁵⁹ The overall progress has been slow so far as Member States are not yet ready or willing to undertake the transformation in a timely manner. This poses a clear call for the EU to further harmonize and simplify civil proceedings, in particular as regards the taking of evidence in cross-border disputes.

B. Legal Tech in Civil Procedure

With new technology having inexorably altered our everyday life over the spread of almost two decades now, it is no wonder that it crept into almost every part of our modern society. The judiciary, too, should move to the 21st century, building on the various steps of digitization,⁶⁰ and make use of legal tech, such as e-evidence (I.) and AI (II.).

I. E-Evidence: A New Era in the Taking of Evidence?

This exposure to digitization in our everyday life also impacts how and what kind of evidence parties would eventually submit in civil litigation. The purpose of this part is to examine electronic evidence and its legal implications (1.) as well as future developments (2.).

⁵⁶ See Specht (n 54) 154; Stadler (n 42) para 1.

⁵⁷ European Commission (n 39).

⁵⁸ In particular about the German situation writes Nikolaj Fischer, 'Electronification of Civil Litigation and Civil Justice: The Future of the Traditional Civil Procedure Facing the Electronification' in Kengyel and Nemessányi (eds) (n 55) 89, 93.

⁵⁹ European Commission (n 39).

⁶⁰ See above pt A.

1. What is Electronic Evidence and What are its Implications?

For the purpose of this paper, 'electronic evidence' is defined as any data or information stored in electronic format or on electronic media.⁶¹ Based on the 2016 Report of the European Committee on Legal Co-Operation on the use of electronic evidence in civil proceedings a distinction ought to be made between three types of evidence: evidence from public websites, e.g. blog posts, images uploaded in social networks; evidence of content, e.g. e-mails or digital documents held on a server and not public; user identity and data to help identify a person by finding out the source of the communication.⁶²

According to this report, a number of national legal provisions have been adopted with regard to electronic evidence and its use in civil procedure with certain differences among the Member States. However, the Committee concluded that in many cases, there were no substantial differences to the rules applying to evidence in general.⁶³ In fact, some Member States regulated only specific aspects of electronic evidence.⁶⁴ In general, the legislative framework concerning electronic evidence in civil matters is mainly a national one. E.g., in Germany, Article 371a(1) GCCP provides that the general rules concerning the evidentiary value of documents shall be applied *mutatis mutandis* to electronic documents with a qualified electronic signature.

The case is different for criminal matters. Last year, the EU Commission proposed to establish a legal framework for production and preservation orders for electronic evidence.⁶⁵ Thereby, Member States shall be able to investigate and request any type of stored data with additional thresholds depending on whether content or non-content data is concerned.⁶⁶ State prosecutors may then collect and access more information, particularly in fields where the crime scene itself is situated in the digital world.

 ⁶¹ Cf Collaborative Research Project EVIDENCE, 'D3.1 Overview of Existing Legal Framework in the EU Member States' WP 3 Deliverable (2015) 7 http://s.evidenceproject.eu/p/e/v/evidence-ga-608185-d3-1-411.pdf>. For a definition see CoE, European Committee on Legal Co-Operation (CDCJ), 'Guidelines of the Committee of Ministers of the Council of Europe on Electronic Evidence in Civil and Administrative Proceedings
 Explanatory Memorandum' CM(2018)169-add2 (2018)
 https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=0900001680902e0e> last accessed 13 May 2019.
 ⁶² See Stephen Mason and Uwe Rasmussen, 'The Use of Electronic Evidence in Civil and Administrative Law

Proceedings and its Effects on the Rules of Evidence and Modes of Proof' CDCJ(2015)14 final (2016) https://rm.coe.int/1680700298> last accessed 13 May 2019.

⁶⁴ ibid.

⁶⁵ See European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on European Production and Preservation Orders for electronic evidence in criminal matters' COM(2018) 225 final (17 April 2018) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52018PC0225>. For more information see 'Procedure 2018/0108(COD)' (2019) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52018PC0225>. For more information see 'Procedure 2018/0108(COD)' (2019) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52018PC0225>. For more information see 'Procedure 2018/0108(COD)' (2019) https://eur-lex.europa.eu/procedure/EN/2018_108> all last accessed 13 May 2019. Member States' reactions to the proposal were controversial. Germany, for example, voted against it in the EU Council.

⁶⁶ European Commission, ibid para 20.

In civil proceedings, however, the production of evidence lies in the hands of the parties. Using information technology for the taking of evidence reaches the 'heart' of the trial and may influence the 'cultural core' of civil litigation.⁶⁷ On the one side, the use of electronic evidence could improve citizens' rights and access to justice. Admitting electronic evidence to the procedure could facilitate parties to satisfy their burden of proof. This could be particularly important in matters where the relevant facts may only be displayed electronically, e.g. in case of software malfunctioning. On the other side, electronic evidence as such may be less reliable due to its aptitude to modification and potential lack of transparency. It could therefore be more challenging for tribunals to ascertain the authenticity of the piece of evidence, especially when judges do not possess the necessary technical knowledge.

All in all, in our view, the right to fair trial (Article 6 ECHR) commands courts of the Member States to adopt a 'technologically neutral approach' towards evidence: electronic evidence should be neither privileged nor discriminated as to other types of evidence, but be admitted only on the basis of its authenticity.⁶⁸

2. Future Developments

Legal tech can provide litigating parties with many more possibilities to present evidence apart from already existing tools, such as video-conferencing as outlined above. Further, e-evidence is not limited to the production of stored data. One could go further and think about the new categories of evidence using VR in the process of taking of evidence.

For the purpose of this paper, VR is defined as the creation of synthetic environments in order to perceive a given scenario in a realistic way. Thereby, a distinction can be made between immersive virtual environments and collaborative virtual environments.⁶⁹ The former provide the user with the perception of a defined environment and surrounds the spectator with realistic details, such as the scene of a car accident. This synthetic environment may be altered by inserting new or additional data into the programme and thus, enables the comparison of different scenarios brought forward by the parties. A judge vested with an immersive virtual environments tool could then test the likelihood and plausibility of the parties' accounts.

Collaborative virtual environments aim at facilitating communication between different interlocutors represented by avatars inside a synthetic environment. There, users socially

⁶⁷ Georg E Kodek, 'Modern Communications and Information Technology and the Taking of Evidence' in Kengyel and Nemessányi (eds) (n 55) 261.

⁶⁸ See García Ruiz v Spain (GC) ECHR 1999-I, para 28; CoE CDCJ (n 61).

⁶⁹ Jeremy N Bailenson and others, 'Courtroom Applications of Virtual Environments, Immersive Virtual Environments, and Collaborative Virtual Environments' (2006) 28 Law & Policy 249, paras 251 ff.

interact and live a genuine communication experience. Disadvantages inherent in videoconferencing, such as local distance or timely deferred transmission, may thus be marginalized.

Experience through VR-tools could become a new category for pieces of evidence. Yet, we have to acknowledge the risks of potential misuse, for example if a party secretly modifies the data creating the VR to its benefit. Also, general technical inequalities in terms of knowledge or financial capacities have to be considered, as goes for all new technologies. Further, users have to be aware of technological bias. When the VR is too perfect, the distinction to the real world may be hampered. Judges could then be – also subconsciously – manipulated in their decision-making.

3. Conclusion

Electronic evidence is still a relatively new terrain in civil procedure. This in turn creates an ambiguous approach among practitioners and legal scholars towards its use. While some of them underline the 'reliability' of the electronic evidence due to its objectivity and precision,⁷⁰ others focus on the lack of authenticity or means to prove it. One should not forget the cost of introducing electronic evidence into civil procedure and enhancing its role there. There is still a long way to go and new developments, such as VR, are promising, but must be put to the test.

II. AI in the Judicial System: All Rise for 'Robo-Judge'?

In this paper, AI is understood as comprising all advanced forms of automated data analysis in judicial services and procedures.⁷¹ While various forms of AI are already employed in the private sector, most prominently by insurers, legal departments and law firms, State actors generally remain reluctant to incorporate AI in their operations.⁷² Few examples of AI used by courts can be observed with respect to criminal justice proceedings, predominantly in non-EU Member States.⁷³ The possible forms of use of AI in civil proceedings – with Estonia's robo-

⁷⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'Building Trust in Human-Centric Artificial Intelligence' COM(2019) 168 final (8 April 2019) https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52019DC0168& from=ES> last accessed 13 May 2019.

⁷¹ See Bart Jan van Ettekoven and Corien Prins, 'Data Analysis, Artificial Intelligence and the Judiciary System' in Vanessa Mak, Eric Tjong Tjin Tai and Anna Berlee (eds), *Research Handbook in Data Science and Law* (Edward Elgar 2018) 425, 425. See also CoE, European Commission for the Efficiency of Justice (CEPEJ), 'European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and their Environment' (adopted 4 December 2018) 69-70 https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c> (defining AI as '[a] set of scientific methods, theories and techniques whose aim is to reproduce, by a machine, the cognitive abilities of human beings.').

⁷² Xavier Ronsin and others, 'In-Depth Study on the use of AI in Judicial Systems, Notably AI Applications Processing Judicial Decisions and Data' (2018) in CoE CEPEJ (n 71) 13, 16.

⁷³ Eg in the US where criminal judges in multiple states use the privately developed software COMPAS, an algorithm that assesses the potential recidivism risk of the defendant and proposes the criminal sentence to the judge. The algorithm bases its result on over 100 factors, *inter alia* age, sex and criminal history. See, also on the

judge being the most extreme – are various and will be displayed (1.), following a balancing of opportunities and risks (2.). The use of AI in the judiciary will then be measured against the core principles of civil procedure, namely the right to fair trial, as stipulated in Article 6 ECHR (3.).

1. AI and its Forms of Use in the Judicial System

Firstly, AI presents great potential through its predictive⁷⁴ capacities. With respect to the administration of justice, predictive analytics are primarily used by lawyers.⁷⁵ But the judiciary, too, can use such tools to its advantage. In 2016, a group of British academics developed an algorithm to predict the outcome of cases of the European Court of Human Rights (ECtHR) based on natural language processing. The program was designed to predict whether a violation of Articles 3, 6, or 8 ECHR had occurred or not, and it did so with 79% accuracy.⁷⁶ The researchers believe that such a text-based predictive program is a 'useful assisting tool' as the system 'can also be used to develop prior indicators for diagnosing potential violation of specific Articles in lodged applications and eventually prioritise the decision process on cases where violation seems very likely.'⁷⁷ 'Predictive justice' software may therefore facilitate the case-management of the courts and ease their dealing with an ever growing caseload.⁷⁸

Secondly, AI may be used in judges' decision-making process. Even now, judges rely on scales in order to harmonize their case law, for example, with respect to compensation claims for personal injury but also in family matters. Here, too, AI can be of help and calculate the amount of compensation due based on scales or tables already in use as well as relevant case law.⁷⁹ AI may also assist judges in their judgment preparation by producing a suggested reasoned draft

criticism surrounding the program, Sam Corbett-Davies and others, 'A Computer Program Used for Bail and Sentencing Decisions Was Labeled Biased Against Blacks. It's Actually Not That Clear.' (*Washington Post*, 17 October 2016) https://wapo.st/2edSBbI?tid=ss_mail&utm_term=.33de8ecad627> last accessed 13 May 2019.

⁷⁴ The term 'predictive' denotes that AI is used to predict the outcome of a case, i.e. the possibilities of its success or failure, based on a statistical modelling of case law using both natural language processing and machine learning methods. For more details, including criticism on terminology, see Ronsin and others (n 72) paras 56 ff. See further Jean-Marc Sauvé, 'La justice prédictive' (Colloque organisé à l'occasion du bicentenaire de l'Ordre des avocats au Conseil d'Etat et à la Cour de cassation, Paris, 12 February 2018) <www.conseiletat.fr/content/download/126837/1283810/version/1/file/2018-02-12_Justice%20pr%C3%A9dictive.pdf> last accessed 13 May 2019.

⁷⁵ Ronsin and others (n 72) para 58. Software examples include Prédictice, Case Law Analytics and JurisData Analytics (all France); Luminance (UK); or ROSS (USA), see ibid para 18.

⁷⁶ See Nikolaos Aletras and others, 'Predicting Judicial decisions of the European Court of Human Rights: A Natural Language Processing Perspective' (2016) PeerJ Computer Science 2:e93.

⁷⁷ ibid 3.

⁷⁸ Cf van Ettekoven and Corien Prins (n 71) 426.

⁷⁹ Ronsin and others (n 72) paras 98 ff. See, however, the pilot project conducted at the courts of appeal in Rennes and Douai (France) in spring 2017, which tested predictive software in litigation appeals, but found *inter alia* no 'added value of the tested version of the software for the work of reflection and decision-making of the magistrates.', ibid para 98.

decision based on the given information.⁸⁰ Fully automated AI decision-making processes can already be observed in ODR as a form of alternative dispute resolution (ADR).⁸¹ Estonia's initiative of a 'robo-judge' builds on these methods, yet seems to wish to incorporate them into the ordinary courts.

The forms of use of AI are broad and often more subtle than one might imagine. Taken to its extreme, i.e. AI in form of a 'robo-judge' is appalling to many. However, with Estonia's recent efforts, this extreme no longer remains the too far away fairytale that it perhaps once was.

2. Opportunities and Risks

Every policy-maker's decision is based on a weighing of opportunities and risks of the measure involved, so with the introduction of AI into the (civil) judicial system, too, such a balancing must take place. Since AI is already used by private actors, e.g. to offer simple legal advice on the Internet,⁸² citizens are offered quicker and easier ways of access to justice, which in turn leads to an increase in the workload of the judiciary. In light of this growing pressure, the State itself should make use of digitization.⁸³ The use of AI is thus first and foremost aimed at generating efficiency gains through the facilitation of practitioners' work, including case-management and decision-making, thereby also reducing time and costs.⁸⁴ This in turn fosters the right to fair trial.⁸⁵ Another prominent argument in favor of AI is its contribution to more consistency in legal decisions,⁸⁶ closely linked to an increase in the objectivity of decision-making as 'equal cases [are decided] more equally, unequal cases more unequally'⁸⁷ and unconscious judicial bias could be unmasked.⁸⁸

On the other hand, the use of AI in the legal sphere also implies a number of risks. For one, any software or algorithm is only as good as its programming. This raises a whole litany of issues accompanied by an inherent risk of abuse with respect to the collection and processing of data: Which data is used in an algorithm and how are various factors weighed? Every step in the development and use of a program must be accompanied with sufficient safeguards to ensure

 ⁸⁰ Tania Sourdin and Richard Cornes, 'Do Judges Need to Be Human? The Implications of Technology for Responsive Judging' in Tania Sourdin and Archie Zariski (eds), *The Responsive Judge* (Springer 2018) 87, 94-95.
 ⁸¹ See for more details Sourdin and Cornes, ibid 92-93; Ronsin and others (n 72) 44 ff.

⁸² The UK-based website DoNotPay.com, for example, offers a way to appeal a parking ticket in certain cities through a chatbot.

⁸³ See eg Corien Prins, 'Digital Justice' (2018) 34 Computer Law & Security Review 920-23 (arguing that the conditions for the functioning of the constitutional State contain an inherent obligation for all State powers to make use of digitization).

⁸⁴ Van Ettekoven and Corien Prins (n 71) 433-35.

⁸⁵ Administering justice 'within a reasonable time' is a key element of the right to fair trial, see art 6(1) ECHR.

⁸⁶ CoE CEPEJ (n 71) 5.

⁸⁷ Van Ettekoven and Corien Prins (n 71) 435.

⁸⁸ Sourdin and Cornes (n 80) 96 with further references.

inter alia human oversight, technical safety, transparency and accountability.⁸⁹ While some say AI eliminates human bias, others find the neutrality of algorithms to be 'a myth, as their creators consciously or unintentionally transfer their own value systems into them.'⁹⁰ AI furthermore comes with the risk of a so-called 'automation bias', i.e. the tendency of humans to rely on automated decision-making systems while not searching for or ignoring contradictory information.⁹¹ Finally, since algorithms are fed with retrospective data, AI may also hinder the development of the law through an evolving jurisprudence. In fact, AI may cement current and thus hinder the formation of new case law.

3. AI and the Right to Fair Trial with Respect to Civil Proceedings

The principle of procedural autonomy of EU Member States⁹² finds its limits in the rights conferred by EU law,⁹³ which includes the EU Charter of Fundamental Rights⁹⁴ and thus by referral also the ECHR.⁹⁵ In addition, all EU Member States are members of the Council of Europe and States parties to the ECHR,⁹⁶ hence directly subject to the obligations enshrined therein. The use of AI in civil proceedings has immediate implications on the right to fair trial as provided in Article 6(1) ECHR. Its core guarantees include a fair and public hearing before an independent and impartial tribunal established by law. The use of predictive justice- and automated calculation-tools by judges during their decision-finding and -making process appears to be in line with these core principles. After all, the decision-making process remains in the hands of a human judge. The assessment, however, is more complicated with respect to a 'robo-judge', i.e. a fully automated civil proceeding at first instance.

⁸⁹ See EU High-Level Expert Group on Artificial Intelligence (AI HLEG), 'Ethics Guidelines for Trustworthy AI' (April 2019) 14 ff https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai last accessed 13 May 2019. According to these guidelines, for AI to be trustworthy it must be lawful, ethical and robust, ibid 5. The guidelines do not focus on the first component (lawfulness) but instead 'proceed on the assumption that legal rights and obligation that apply to the processes and activities involved in developing, deploying and using AI systems remain mandatory and must be duly observed', ibid 6. They are addressed to all stakeholders and their application remains voluntary, ibid 5. See also CoE CEPEJ (n 71) 11. ⁹⁰ Ronsin and others (n 72) para 147.

⁹¹ Cf ML Cummings, 'Automation Bias in Intelligent Time Critical Decision Support Systems' (AIAA 1st Intelligence Systems Technical Conference, 20-22 September 2004, Chicago, Illinois) 2 <https://arc.aiaa.org/doi/pdf/10.2514/6.2004-6313> last accessed 13 May 2019.

⁹² See above nn 19, 20 and accompanying text.

⁹³ Aquino (n 20); Case C-161/15 Bensada Benallal (17 March 2016) para 24 with further references.

⁹⁴ Charter of Fundamental Rights of the European Union (adopted 7 December 2000, as amended 12 December 2007, entered into force 1 December 2009) [2012] OJ C 326/391 (CFR). By virtue of art 6(1) TEU, the CFR enjoys the same legal value as the treaties and thus forms part of primary EU law.

⁹⁵ Art 52(3) CFR provides: 'In so far as this Charter contains rights which correspond to rights guaranteed by the Convention for the Protection of Human Rights and Fundamental Freedoms, the meaning and scope of those rights shall be the same as those laid down by the said Convention. This provision shall not prevent Union law providing more extensive protection.'

⁹⁶ See CoE, '47 Member States' (2018) <www.coe.int/en/web/portal/47-members-states> last accessed 13 May 2019. The ratification of the ECHR is a prerequisite for joining the CoE.

a. An 'Impartial and Independent Tribunal'

Firstly, the question presents itself whether one could still speak of a 'tribunal' in the sense of Article 6(1) ECHR. The term is still perceived in a traditional sense as a body composed of one or more human judges. This is demonstrated by the fact that the criteria for assessing a tribunal's key components – independence and impartiality – are focused on the person of the judge herself, e.g. when taking into account their behavior, appointment and terms of office.⁹⁷ The European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and their Environment, too, seems to exclude AI from the term 'tribunal'.⁹⁸ However, the ECtHR in its constant jurisprudence interprets the ECHR as a 'living instrument [...] which must be interpreted in light of present-day conditions'⁹⁹ meaning that its provisions are subject to evolution and change in their understanding in accordance with social, ethical, technological and scientific developments.¹⁰⁰ Following this interpretative approach, it is thus likely that the Court will accept a fully automated proceeding at first instance via a 'robo-judge' with respect to the criterion of a 'tribunal'.

Questionable remains, however, whether a 'robo-judge' can substantially meet the key criteria of impartiality and independence. Following the principle of separation of powers, judges must be independent vis-à-vis other State powers as well as vis-à-vis the disputing parties.¹⁰¹ With regard to impartiality, i.e. the absence of prejudice or bias,¹⁰² the ECtHR employs a twofold approach. On the one hand, the Court takes into account subjective criteria such as a particular judge's behavior and personal conviction. On the other hand, it draws on objective criteria by ascertaining whether the tribunal itself has offered sufficient guarantees to cast away any doubt about its impartiality.¹⁰³ While the traditional criteria for independence and impartiality address the judge as a human subject, AI as a program appears to be free of such problems. Issues with AI arise nevertheless, although on a different level, namely its programming which poses risks of interference and abuse. It must therefore be ensured that the underlying development process meets the criteria of independence and the algorithm itself is construed in an impartial way.¹⁰⁴

⁹⁷ See ECtHR (n 47) 32, 42, 44 ff.

⁹⁸ CoE CEPEJ (n 71) 12 ('[The user] must also be clearly informed of any prior processing of a case by artificial intelligence before or during a judicial process and have the right to object, so that his/her case can be hear directly by a court within the meaning of Article 6 of the ECHR.').

⁹⁹ Tyrer v United Kingdom (1978) Series A no 26, para 31.

¹⁰⁰ *Mamatkulov and Askarov v Turkey* (GC) ECHR 2005-I, para 121; *Christine Goodwin v United Kingdom* (GC) ECHR 2002-VI, para 75; *Marckx v Belgium* (1979) Series A no 31, para 41. See further, also on the criticism surrounding the 'living instrument'-doctrine Stefan Theil, 'Is the "Living Instrument" Approach of the European Court of Human Rights Compatible with the ECHR and International Law?' (2017) 23 European Public Law 587. ¹⁰¹ *Beaumartin v France* (1994) Series A no 296-B, para 38; *Sramek v Austria* (1984) Series A no 84, para 42.

¹⁰² Wettstein v Switzerland ECHR 2000-XII, para 43.

¹⁰³ Cf ECtHR (n 97) 45 ff.

¹⁰⁴ See EU AI HLEG (n 89) 18; CoE CEPEJ (n 71) 11.

Finally, it must be noted that a lack of independence or impartiality can be remedied if the decision taken is subsequently subject to review by a higher instance invested with full jurisdiction, i.e. a review of the merits as well as the facts of the case.¹⁰⁵ Incorporating the possibility of full review by an appellate court after an AI-operated proceeding at first instance will thus satisfy the conditions for an impartial and independent tribunal under Article 6(1) ECHR.

b. 'Fair and Public Hearing'

Another factor is the element of a 'fair and public hearing' under Article 6(1) ECHR. As the ECtHR has emphasized, '[b]y rendering the administration of justice transparent, publicity contributes to the achievement of the aim of Article 6 § 1, namely a fair trial, the guarantee of which is one of the fundamental principles of any democratic society.'¹⁰⁶ While it is inconceivable how a fully automated proceeding can encompass a public oral hearing, it must be noted that in the jurisprudence of the Strasbourg Court a lack of publicity, too, can be remedied at the appeal stage, if the appellate court has full jurisdiction over the matter.¹⁰⁷ Fairness, on the other hand, requires *inter alia* that the observations of the parties must be 'heard', i.e. duly considered by the court.¹⁰⁸ It remains to be seen to what extent natural language processing-driven AI will be able to satisfy this condition. The element of fairness, however, will be the crucial obstacle to overcome as a lack thereof cannot be remedied at the appellate stage.

c. Conclusion

On the basis of the ECtHR's 'living instrument'-doctrine, the concept of a 'robo-judge' *prima facie* seems compatible with the right to fair trial as enshrined in Article 6(1) ECHR, however, only if a fully automated proceeding renders the right as effective as a 'traditional' proceeding does. This becomes especially relevant with respect to the condition of fairness requiring that observations of the parties must be duly considered by the court.

¹⁰⁵ De Haan v the Netherlands ECHR 1997-IV, paras 52-55 with further references to case law.

¹⁰⁶ *Malhous v Czech Republic* (n 48). See also *Diennet v France* (1995) Series A no 325-A, para 33; *Sutter v Switzerland* (1984) Series A no 74, para 26 with further references.

¹⁰⁷ *Ramos Nunes de Carvalho e Sá* (GC) App nos 55391/13, 57728/13, 74041/13 (ECtHR, 6 November 2018) para 192 with further references to case law.

¹⁰⁸ ECtHR (n 97) 52; *Donadze v Georgia* App no 74644/01 (ECtHR, 7 March 2006) para 35 (in French).

Future Outlook

The EU and its Member States are generally prepared to manage the digital transformation process successfully and do not hesitate to invest the necessary funding and effort into innovative solutions. As regards e-communication, important modernization steps are in progress and the EU should pursue their implementation affirmatively. However, in the legal tech domain, the current legal landscape does not yet reflect the present state of technical possibilities. Instead, there is a growing imbalance between the technical reality and a legislation that is becoming more and more outdated.

In its e-Justice strategy, the EU Council evokes that the 'implications [of artificial intelligence, annotation by authors] in the field of e-Justice need to be further defined.¹⁰⁹ It is important, that the EU embraces its responsibility to accompany technological developments from a legal point of view. While the benefits of a more efficient justice system may seem obvious, the technological evolution itself is more ambivalent in nature. Therefore, building trust in e-Justice and protecting the fundamental rights of the individuals concerned require a clear and robust legal framework. E-Justice shall be reliable, accessible and trustworthy for everyone. Further, it is equally important that Member States themselves with their judicial institutions may accord trust in e-Justice following the core principle of mutual trust and cooperation.

As outlined above, the use of legal tech presents important advantages in terms of efficiency, predictability and the elimination of the human bias. Therefore, we would like to encourage its further development in so far as it is aimed at facilitating practitioners' work. In today's digitized and interconnected world, the workload for tribunals is increasing and cases become more and more complex. In this context, the gain in efficiency is crucial to maintain a competitive justice system. In our view, this can only be achieved through coordinated action at the EU level where the technical and financial resources as well as the necessary know-how can be bundled.

With respect to the use of AI however, limitations are warranted when it comes to its most extreme form, aiming at substituting the human judge.¹¹⁰ Given the lack of details concerning the realization of the Estonian 'robo-judge' at first instance, it remains highly questionable whether and how necessary safeguards concerning fairness, transparency and accountability can be implemented. In the near future, the human judge cannot and also should not be replaced.

¹⁰⁹ EU Council, 'Draft e-Justice Action Plan for 2019-2023' 11724/4/18 REV 4 (31 October 2018) para 15.

¹¹⁰ In the same vein EU AI HLEG (n 89) 15-16; Sourdin and Cornes (n 80) 94, 113-14.