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The influence of digital technologies on some traditional principles of litigation and administrative procedure in entity laws of Bosnia and Herzegovina

Stojana Petrović, Bojan Vlaški

University of Banja Luka, Faculty of Law

Legal systems of the entities of Bosnia and Herzegovina – Republic of Srpska and the Federation of Bosnia and Herzegovina are in the phase of introducing the use of digital technologies in civil and administrative proceedings. The goal of the paper is to normatively and dogmatically analyze the current scope of digitization achieved so far in domestic litigation and administrative procedure. The goal is also from the aspect of process theory to determine the axiological influence of that digitization process on some selected principles of litigation - the principles of publicity, immediacy, adversariality, and the principles of orality and writing, as well as the appropriate principles of administrative procedure - principles of protection of the rights of parties and protection of public interest, efficiency, free assessment of evidence, economy, and principles of access to information and data protection, which is represented at the level of Bosnia and Herzegovina and the Republic of Srpska. It is concluded that the domestic legislators have not yet made significant progress in this process and that the litigation and administrative procedure continue to take place on traditional grounds, and as a result, the aforementioned principles have not been significantly affected.

Keywords: digitization, e-government, litigation, principles of the litigation procedure, administrative procedure, principles of the administrative procedure.

Introduction

Digitization, digitalization and the use of artificial intelligence should be understood as extralegal processes that also take place in the world of justice and public administration. If these three processes are viewed in stages, and if digitization means the first phase, i.e. the phase of conversion of paper documents into digital form and their electronic updating, then digitalization means a more advanced phase such as electronic systems for filing court and administrative cases together with online platforms for resolving disputes and administrative matters, as well as the participation of artificial intelligence as the use of an algorithm for the analysis of court and administrative practice, prediction of legal outcomes and automation of tasks currently performed by experts[1], then it can be concluded that the judiciary and public administration of the entities of Bosnia and Herzegovina (hereinafter also: BiH) are just at the beginning - in the digitization phase.

The structure of this paper after the first part, i.e. the introduction, consists of four chapters. In the second part, a general view of the digitalization of the judiciary in the entities of Bosnia and Herzegovina will be carried out, with a special focus on the digitalization of litigation. The subject of the second part will be a presentation of the current state of development of electronic administration in Bosnia and Herzegovina, i.e. its entities, with an assessment of the impact of this process on the digitization of the administrative procedure. The third part will analyze the impact of digitization on some traditional principles of litigation, while the fourth part will analyze the impact of the digitalization process on selected principles of administrative procedure. Finally, in the conclusion, the authors will present observations and evaluations of the further process of digitization of litigation and administrative proceedings in the entities of Bosnia and Herzegovina.

General view of the digitalization of the judiciary in the entities of Bosnia and Herzegovina

In the past period, courts in the entities of Bosnia and Herzegovina were equipped with technical devices - computers, printers, internet access, internet addresses of each judge, with the aim of faster availability of information, transparency of court work, easier access to justice, and speeding up the procedure.[2] Until now, the isolated computers of each of the judges are

[1] *See* Dženana Radončić, „Između inovacije i transformacije: noviji trendovi u reformi građanskog procesnog prava", *Anali Pravnog fakulteta u Zenici,* 1, 33 (2023): 253.

[2] Jozo Čizmić, Marija Boban, „Tonsko snimanje ročišta pred sudovima Federacije Bosne i Hercegovine", *Zbornik Pravnog fakulteta Sveučilišta u Rijeci,* 40 1 (2019): 62. *Also see* Viktorija

connected to an information network within the judicial network, which enables the exchange of information within that network.[3] The entire process is coordinated by the High Judicial and Prosecutorial Council[4], in the form of adopting regulations, regulating the use of information technologies in the work of the judiciary. Even the special litigation procedure in small value disputes is completely digitized[5], with the possibility of complete electronic communication between the parties and the court in both directions. Nevertheless, due to overcrowding of civil courts with cases, limited spatial and infrastructural capacity of the courts of the civil department, it is recognized that digitalization, as a higher goal to be strived for, has not yet been achieved. As an example, the situation with sound recording of hearings in civil proceedings is mentioned, which is also foreseen as a possibility by entities' laws.[6] Due to the fact that courtrooms with this equipment for each case are not always available to the judges on the civil department, and that it is necessary to reserve them a long time in advance, the use of this legal possibility in civil proceedings is very rare in practice.[7]

The use of an electronic document as a means of proof in general civil proceedings is also very rare. Namely, the rules of procedural laws in Bosnia and Herzegovina do not explicitly prescribe an electronic document as a means of evidence. An electronic document can still be used in civil proceedings as a means of proof to prove the truth of the claim,[8] which has a legal basis in

Haubrich, Ernest Rechner, Davor Bunoza, „Elektronička komunikacija u parničnom postupku u Bosni i Hercegovini - modernizacija i usklađivanje s *acquis communautaire*", *Zbornik radova Aktualnosti građanskog i trgovačkog zakonodavstva i pravne prakse,* 18 (2021): 256.

[3] J. Čizmić, M. Boban, „Tonsko snimanje ročišta pred sudovima Federacije Bosne i Hercegovine", 71.

[4] It is an independent body of Bosnia and Herzegovina, established with the aim of providing an independent, impartial and professional judiciary. (Art. 3 Law on the High Judicial and Prosecutorial Council, *Official Gazette of Bosnia and Herzegovina*, no. 25/04, 93/05, 48/07, 63/23, 9/24, 50/24)

[5] In more than 35 first-instance courts in Bosnia and Herzegovina, a special information system for the electronic submission and processing of court cases in small value disputes (SOKOP Mal System), has been in use for almost ten years, with the aim of more efficiently resolving accumulated small value cases. Currently, there are almost two million unresolved communal cases awaiting resolution before the courts.

[6] *See* par. 375a Law on Civil Procedure, *Official Gazette of the Republic of Srpska*, no. 58/03, 85/03, 74/05, 63/07, 105/08, 45/09, 49/09, 61/13, 209/21, 27/24, *further in the text*: LCP RS and Law on Civil Procedure, *Official Gazette of the Federation of Bosnia and Herzegovina*, no. 53/03, 73/05, 19/06, 98/15, *further in the text*: LCP FBiH.

[7] J. Čizmić, M. Boban, „Tonsko snimanje ročišta pred sudovima Federacije Bosne i Hercegovine", 68. The situation with the use of digital technologies in criminal proceedings is completely different. *See* Milijana Buha, „Elektronski dokaz i dokazivanje visokotehnološkog kriminala", *Zbornik radova sa međunarodnog naučnog skupa „Transformativne tehnologije: pravni i etički izazovi XXI vijeka",* (2020), 327.

[8] Jozo Čizmić, Marija Boban, „Elektronički dokazi u sudskom postupku i računalna

the substantive legal provisions on the electronic document. In practice, the general litigation procedure has not been electronicized even to this day in terms of the use of an electronic document as a means of evidence, and it continues to take place according to the oral principle, combined with the written principle.[9] From a comparative legal point of view, in the countries of our environment, it is considered that the insufficiency of procedural regulations regarding the use of electronic documents in civil proceedings can be supplemented by the interpretation of substantive legal rules, which refer to electronic documents, which should not affect their use in proceedings before the court.[10] The comparative doctrine refers to the need for additional research in order to take a final position on whether the current influence of digital technologies in the work of civil justice, which includes, among other things, the conversion of paper files into electronic form in the digital case management system, has contributed to the quality of the procedure and the quality of the decisions that are passed, whether the cases are taken to work more quickly due to the use of digital technologies, and whether the time to solve the received case has been shortened compared to the period before the digitalization started.[11]

It is claimed that by 2030, the judiciary will be mostly digitized.[12] However, according to the pace at which the digitalization of the judiciary is taking place in the entities of Bosnia and Herzegovina, it is difficult to accept that such forecasts also apply to the domestic judiciary.

The aim of the research is to determine how the current level of digitalization of the litigation procedure in the entities' rights of Bosnia and Herzegovina corresponds to some important classic principles of this procedure. Also, starting from the importance of each of the presented principles for providing the parties the quality legal protection before the court, the goal is to determine whether their adaptation to the implemented digitization limits or improves the achievement of the desired goals of the procedure.

forenzička analiza", *Zbornik Pravnog fakulteta Sveučilišta u Rijeci,* 38, 1 (2017): 37.

[9] Stojana Petrović, „Elektronski dokaz i/li elektronska isprava kao dokaz u parničnom postupku", *Zbornik radova sa međunarodnog naučnog skupa „Transformativne tehnologije: pravni i etički izazovi XXI vijeka",* (2020), 479.

[10] Tjaša Ivanc, „New Dimensions of Evidence Taking in Civil Proceedings – the Question of Impact of ICT on Traditional Rules of Evidence Law (Case of Slovenia)", *Aktualnosti građanskog procesnog prava – nacionalna i usporedna pravnoteorijska i praktična dostignuća,* (2018): 195.

[11] Ksenija Flack-Makitan, „Pravo na pošteno suđenje i digitalne tehnologije u parničnom postupku", *Aktualnosti građanskog procesnog prava – nacionalna i usporedna pravnoteorijska i praktična dostignuća,* (2022): 446.

[12] Zvonimir Jelinić, „Digitalne tehnologije rješavanje građanskih i potrošačkih sporova i pružanje pravne pomoći", *Glasnik Advokatske komore Vojvodine,* 2 (2019): 202.

Presentation of the current state of the development of electronic government in Bosnia and Herzegovina

Digitization and digitization of public administration, including the use of artificial intelligence in its work, in the administrative and legal literature are most often denoted by the unique concept of electronic administration[13], which, in accordance with the principles of the New Public Management, "consists in the use of information and communication technology in all activities of public and political administration"[14], which transforms (redefines) public administration into a service for the needs of citizens". Electronic administration can also be defined as a whole that includes three types of relationships: 1) administration and citizens (G2C), 2) administration and companies (G2B) and 3) administration and administration itself (G2G)[15].

Bearing in mind the rapid and dynamic development of information and communication technologies during the last three decades, it can be stated that all countries are in the process of developing electronic administration, with some countries being leaders in that process, while others are going through the initial stages of the same process[16]. The fact is that Bosnia and Herzegovina and its entities have not advanced far in the development of electronic administration, which has one advantage - the possibility to learn from the mistakes of others and to apply the best experiences of the electronic administration development process. The development of electronic administration contributes, among other things, to the strengthening of the service function of the administration, but also to the dehumanization of the relationship between the administration and citizens, then the resistance of civil servants to changes, the inequality of citizens who do not use new technologies compared to those who use them, the opening of space for abuses, and even and for criminal activities[17].

[13] The United Nations defines e-government as "the capacity and willingness of the public sector to develop the use of information and communication technologies with the aim of improving the provision of services to citizens", while according to the European Union, e-government "involves rethinking organizations and processes and changing behavior so that public services they deliver to people more efficiently". (cf. UN Global E-government Readiness Report 2005 – from E-government to E-inclusion, (New York: UN department of Economic and Social Affairs, Division for Public Administration and Development Management, 2005), 13; eGovernment and digital public services, https://digital-strategy.ec.europa.eu/en/policies/egovernment, accessed 1/10/2024)

[14] Stevan Lilić, Dragan Prlja, *Pravna informatika, treće dopunjeno izdanje*, (Beograd: Pravni fakultet Univerziteta u Beogradu, 2011), 85.

[15] *Ibid.*, 87.

[16] Dejan Šuput, „Rizici uvođenja elektronske uprave", *Strani pravni život*, 1 (2003): 59, 66.

[17] *Ibid.*, 60-66.

Modern information and communication technologies have significantly improved the organization and functioning of public administration, especially in terms of its numerous relations with citizens and business entities. At the same time, it should be borne in mind that "due to the high degree of formalization and the close legal ties of administrative action, administrative law is well-suited for legal automation"[18]. From a comparative legal point of view, the genesis of electronic administration starts from the basic forms of communication and providing information through the official websites of public administration bodies, to the electronic management of administrative procedures and the provision of public services[19], and ultimately to the generation of evidentiary material and decision-making using artificial intelligence tools[20]. Moreover, artificial intelligence has numerous fields of application in the public sector, such as policing[21], border control and migration management[22], citizenship, health care, education and science, transport, energy, water management, geospatial data[23], waste management, urban planning and "smart cities". At the same time, the use of artificial intelligence in the public sector brings certain challenges, such as data protection and information security, economic challenges related to the provision of funds for the application of artificial intelligence, ethical risks[24], the concern of

[18] Peter Parycek, Verena Schmid, Anna-Sophie Novak, "Artificial Intelligence (AI) and Automation in Administrative Procedures: Potentials, Limitations, and Framework Conditions", *Journal of the Knowledge Economy*,15 (2024): 8392.

[19] *Ibid.*, 8394-8395.

[20] According to the document of the European Commission entitled "Strengthening the European administrative space (ComPAct)", the second pillar of which refers to the strengthening of capacities for digital transformation, "public administrations (...) provide (...) appropriate regulatory frameworks using the best available scientific knowledge and evidence , including the ethical use of artificial intelligence and other digital technologies". At the same time, "digitization of administrative procedures, technical preparations for the introduction of the EU wallet for digital identity by 2026, increasing the automatic exchange of evidence and information for the purpose of providing user-oriented digital public services and improving the digital skills of staff are important prerequisites for public administrations to achieved those target values". ComPAct, COM (2023) 667, 2, 6, 12.

[21] Kristijan Kuk, „Veštačka inteligencija u prikupljanju i analizi podataka u policiji", *NBP - Žurnal za kriminalistiku i pravo*, 20, 3 (2015): 131-184.

[22] Bogdan Krasić, „Primena veštačke inteligencije u upravljanju migracijama", *Bezbednost*, 2 (2024): 11.

[23] Nedjeljko Frančila, „Geoprostorna umjetna inteligencija", Terminologija, *Geodetski list*, 4 (2019): 382.

[24] Ines Mergel, Helen Dickinson, Jari Stenvall & Mila Gasco, "Implementing AI in the public sector", *Public Management Review*, (04 Jul 2023): 4.

administrative officials that they will become technologically redundant[25], the danger of establishing a totalitarian legal and the political system[26], etc.

The legal framework of electronic administration in Bosnia and Herzegovina is a reflection of the constitutional arrangement of this federally organized state. In this regard, legal and other regulations can be observed at the level of BiH and at the level of entities (including Brčko District of BiH, a condominium of two entities under the sovereignty of BiH). At the BiH level, the Law on Electronic Documents of BiH[27], the Law on Electronic Signatures of BiH[28], the by-laws that elaborated these laws, and the Decision on Adopting the Interoperability Framework of BiH[29] were adopted. The legal framework of electronic administration at the entity level includes regulations adopted by the Republika Srpska and the Federation of Bosnia and Herzegovina. The unitary Republika Srpska adopted the Law on Electronic Signature[30], the Law on Electronic Documents[31], the Law on the Agency for Information and Communication Technologies[32], the Law on the Security of Critical Infrastructures in the Republic of Srpska[33], the Law on Information Security[34], and numerous by-laws. In the Federation of Bosnia and Herzegovina, the Law on Electronic Documents[35] was adopted, and the Law on Electronic Signature of the Federation of Bosnia and Herzegovina is in the process of being adopted. The Law on electronic signature of the Brčko District of Bosnia and Herzegovina[36] is in force in the Brčko District of Bosnia and Herzegovina.

Although the legal framework in Bosnia and Herzegovina is partially built and represents a relatively good basis for the development of electronic administration, its shortcomings are evident. First of all, it is interoperability,

[25] Karen Shrum, Lisa Gordon, "Artificial Intelligence and the Future of Work", in *AI and its impact on Public Administration* (ed. Alan R. Shark), (Washington D.C.: National Academy of Public Admininistration, April 2019): 11.

[26] Marko Pejković, „Veštačka inteligencija i totalitarizam", *Arhiv za pravne i društvene nauke*, 1 (2024): 97-98.

[27] Law on electronic documents of BiH, *Official Gazette of BiH*, no. 58/14.

[28] Law on electronic signature of BiH, *Official Gazette of BiH*, no. 91/06.

[29] Decision on adoption of the BiH interoperability framework, *Official Gazette of BiH*, no. 53/18.

[30] Law on electronic signature, *Official Gazette of RS*, no. 106/15 and 83/19.

[31] Law on electronic documents, *Official Gazette of RS*, no. 106/15.

[32] Law on the Agency for Information and Communication Technologies, *Official Gazette of RS*, no. 90/23.

[33] Law on the Safety of Critical Infrastructures in the Republic of Srpska, *Official Gazette of RS*, no. 58/19.

[34] Law on Information Security, *Official Gazette of RS*, no. 70/11.

[35] Law on Electronic Documents, *Official Gazette of FBiH*, no. 55/13.

[36] Law on electronic signature of the Brčko District of BiH, *Official Gazette of the Brčko District of BiH*, no. 11/20.

both within BiH and abroad (especially towards the institutions of the European Union). Internal interoperability was supposed to be improved by the adoption of the Decision on Adoption of the Interoperability Framework from 2018. However, its application is accompanied by difficulties, because the bodies in charge of implementing the Decision were formed in 2021, and the working group formed for the implementation of the Interoperability Framework has not yet started its work. The interpretation of the Constitution of Bosnia and Herzegovina[37] and Regulation no. 910/2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC[38]. Namely, the Constitution of BiH foresees the competence of entities for the development of electronic administration at the entity level (Article III paragraph 3. point a) of the Constitution of BiH), and alignment with Regulation no. 910/2014 requires electronic signatures issued by member states[39]. It seems that the core of this problem lies in the misinterpretation of Regulation no. 910/2014 and the political attempt to change the distribution of competences between BiH and the entities under the pretext that the process of European integration requires it[40]. The solution to this issue is possible by revitalizing internal

[37] Constitution of BiH, https://www.ustavnisud.ba/public/down/USTAV_BOSNE_I_HERCEGOVINE_engl.pdf, accessed on October 1, 2024.

[38] Regulation no. 910/2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv %3AOJ.L_.2014.257.01.0073.01.ENG, accessed on 10/1/2024.

[39] This provision is often interpreted in the Bosnian science of administrative law so that "the electronic signature issued on the basis of entity laws does not meet the interoperability requirement and cannot be used outside the borders of Bosnia and Herzegovina." This represents an additional problem, considering that the European Union only recognizes the regulation on electronic signature at the state level". See in detail: Edina Šehrić, "Development of the concept of electronic administration in Bosnia and Herzegovina - challenges and perspectives", *Annals of the Faculty of Law in Tuzla*, 31 (2023): 131.

[40] There is no doubt that Article 7 paragraph 1 point a) subpoint i. Regulation no. 910/2014 designates as acceptable means of electronic identification issued "by the notifying Member State". On the other hand, electronic signatures are issued at different levels of government in BiH by competent bodies in accordance with the Constitution of BiH, so they can be considered issued by the state, which is federally organized and has several competent bodies. Furthermore, Article 9 paragraph 1 point c) of Regulation no. 910/2014 establishes the obligation of member states to report to the European Commission, among other things, "the authority or authorities responsible for the electronic identification scheme", which implies that multiple competent bodies in one federally regulated state are not an obstacle for interoperability. Article 12 paragraph 3 point a) of Regulation no. 910/2014, according to which "The interoperability framework aims to be technology neutral and does not discriminate between any specific national technical solutions for electronic identification within a Member State". Finally, the preamble of Regulation no. 910/2014, among other things, establishes that "member states should designate a supervisory body or supervisory bodies to carry out the supervisory activities under this Regulation". In short, the issuing of electronic signatures by the state, in federal states does not require the authorization of

interoperability in BiH, while respecting the constitutional competences, and establishing a joint intergovernmental body of the institutions of BiH, Republika Srpska, Federation of BiH and Brčko District of BiH, as a contact point for simplifying interoperability with competent bodies of other states.

Digitalization and some of the traditional principles of litigation procedure

This paper will analyze in what sense the principles of litigation - publicity, immediacy, adversariality, and oral and written communication - are affected by the influence of modern digital technologies in the judiciary of the two observed entities of Bosnia and Herzegovina - the Republika Srpska and the Federation of Bosnia and Herzegovina. The question is whether this process changes the classic form and goals of these principles in civil proceedings and how this affects the users of judicial services - citizens.

The principle of publicity of litigation and modern digital technology

A. The traditional concept of the principle of publicity of civil proceedings

The procedural theory points to the importance of giving an unlimited number of persons the opportunity to attend deliberations before the court. *Ratio* arises, both from the will of the citizens of a state, indirectly or directly expressed, to entrust the performance of its function to a specific state body, as well as from the general principle of the rule of law and democracy.[41] The general public of court proceedings is considered a public interest of the community.[42] Not only the supervisory, but also the educational function of the public over the work of the judge is recognized.[43]

In the laws of the states of our environment, which originate from the former Yugoslav state, the public is not limited only to discussions before the court, but it also extends to the presentation of evidence (since the evidence is presented at the main hearing) and the publication of court decisions.[44]

a body at the level of the federation, but the competences for issuing are determined on the basis of the constitution of each specific state.

[41] Hans Joachim Musielak, Wolfgang Voit, *Grundkurs ZPO – Erkenntnis und Zwangsvollstreckungsverfahren,* (München: C. H. Beck, 2022), 80.

[42] Mihajlo Dika, „Načelo javnosti u parničnom postupku", *Zbornik Pravnog fakulteta Sveučilišta u Rijeci,* 29, 1(2008): 2.

[43] Jozo Čizmić, „Javnost glavne rasprave", *Zbornik Pravnog fakulteta Sveučilišta u Rijeci,* 42, 2 (2021): 284.

[44] M. Dika, „Načelo javnosti u parničnom postupku", 3.

Normatively, the legal situation is similar in the laws of entities of Bosnia and Herzegovina.[45]

It is expressly prescribed by the law that the court decides on the basis of oral, direct and public discussion.[46] The public, especially of the main hearings, is specifically provided for,[47] and the possibility of its exclusion is left with a very detailed regulation of the parameters on the basis of which the court determines the existence of a justified reason for it. If those parameters are not properly measured by the court, that is the reason for contesting the judgment with an appeal due to violations of the provisions of the civil procedure regarding the application of the principle of publicity of the procedure, which is essential according to the law itself.[48]

The procedural theory recognizes some of the assumptions that the principle of the public trial could be realized, such as spatial assumptions, which refer to the spatial conditions of the court's work in which the public can be received, and normative assumptions which, through the regulation of the court's duties, would publicly publishes the schedule of hearings, allowing timely notification of the public. Without the fulfillment of these assumptions, it is considered that the publicity of the trial is just a mere promise[49], which can also be considered the main complaint against the state if it did not provide these conditions.

B. The principle of publicity of litigation and modern digital technology

The question is whether the digitalization of civil proceedings, to the extent that it is currently represented in the laws of the entities of Bosnia and Herzegovina, modifies the principle of publicity, on which the essence of civil proceedings is traditionally based. The question is whether this principle would be violated by increasing the digitization of litigation proceedings.

The use of a video conference connection is considered to narrow the scope of the principle of publicity in civil proceedings, since the person being heard and the participants are in different places, all or only some of them, and depending on whether the hearing is held entirely via a video conference connection, or hybrid - in parallel and in the courthouse and via this connection.[50] The use of a video conference connection during the hearing is

[45] Art. 118 LCP RS, and LCP FBiH.
[46] Art. 4 LCP RS, and LCP FBiH.
[47] Art. 118 LCP RS, and LCP FBiH.
[48] Art. 209 par. 2. (10) ЗПП РС и ЗПП ФБиХ.
[49] M. Dika, „Načelo javnosti u parničnom postupku", 5.
[50] Branka Babović Vuksanović, „Ročišta na daljinu u parničnom postupku", *Anali Pravnog fakulteta u Beogradu,* 70 (2), (2022): 545.

not, however, foreseen by domestic procedural laws as a possibility. Due to the lack of a legal framework, in practice hearings in civil proceedings are not audio-visually recorded, nor are they held via video conference connection. As this principle is still applied today in the practice of domestic courts in the traditional sense, it is pointless to consider the impact of the current influx of digital technologies on this principle of civil proceedings.

The principle of immediacy of litigation and modern digital technology

A. The traditional concept of the principle of immediacy in civil proceedings

In the process theory, it is considered that the procedure in which the decision is made by the court in the composition that conducted the oral hearing and presentation of evidence immediately after their presentation[51], and also the procedure in which the basis for the decision would be only what was presented before the court as proof.[52] Immediacy in the discussion implies that the discussion, especially the main discussion, is conducted orally at the hearing before the court.[53] In addition to immediacy in discussion, there is also immediacy in the presentation of evidence, which implies that the evidence is evaluated and the decision is made by the court in the same composition before which the presentation of evidence was performed, and the selection of direct evidence.[54] According to one of the criteria set by the legal doctrine, a direct means of evidence is one by means of which the object of proof is found through direct contact with the means of evidence.[55]

Although direct court contact between the parties and evidence is considered a guarantee of providing quality legal protection, deviation from the strict application of the principle of immediacy does not harm the achieve-

[51] Nikola Bodiroga, „Sužavanje načela neposrednosti u parničnom postupku", *Glasnik Advokatske komore Vojvodine,* 82 10 (2010): 465.

[52] Mihajlo Dika, „O načelu neposrednosti u parničnom postupku *de lege lata* uz neke projekcije *de lege ferenda*", *Zbornik Pravnog fakulteta u Zagrebu,* 58, 4 (2008): 900. *Also see* Hans Joachim Musielak, Wolfgang Voit, *Grundkurs ZPO – Erkenntnis und Zwangsvollstreckungsverfahren,* (München: C. H. Beck, 2022), 80.

[53] M. Dika, „O načelu neposrednosti u parničnom postupku *de lege lata* uz neke projekcije *de lege ferenda*", 903.

[54] In the procedural doctrine of Austria, the principle of immediacy is considered to have the most important influence on the determination of the truth in the procedure, since it ensures direct contact between the court of the parties and the evidence. (*Compare* Walter Rechberger, Daphne Adriane Simotta, *Grundriss des österreichischen Zivilprozessrechts,* (Wien: Manzsche Verlags- und Universitätsbuchhandlung, 2010), 232).

[55] M. Dika, „O načelu neposrednosti u parničnom postupku *de lege lata* uz neke projekcije *de lege ferenda*", 909.

ment of the goals of the procedure.[56] Such is the situation when the second-instance court does not conduct an oral public hearing to determine the relevant facts, but forms its position on the merits of the claim based on a direct consideration of the composition of the file.

In the process theory, immediacy is considered to be connected with orality, while it does not exclude writing in the procedure. The difference between these principles is that orality refers to the medium of communication (which is usually speech), while immediacy refers to the way that communication is carried out (with the participation of an intermediary or directly).[57]

B. Immediacy of litigation and modern digital technology

In procedural theory, there are divided opinions on whether the court, applying the rules on sound recording of hearings, is able to properly apply the principle of immediacy of civil proceedings. According to some, due to the use of modern digital technologies in civil proceedings, one can speak of *electronic immediacy*.[58] The possibility of audio recording the hearing relativizes the difference between indirect and direct evidence.[59] The court could, by directly viewing the recording of the presented evidence, realize the principle of immediacy in its presentation before another judge.[60] However, there are contrary observations in the process doctrine. Namely, starting from the purpose of the principle of immediacy, and the ability of the judge to, by applying it originally, on the spot during the presentation of evidence, directly inspect the statement of the party, witness or expert, asking additional questions, assessing the credibility of their testimony, and which later enables the application of the principle free assessment of evidence, in this situation that possibility is significantly narrowed.[61] The principle of immediacy requires that the same court that heard one of these persons is also the court that will evaluate the credibility of his testimony.[62] It is also claimed that when testifying in court via video link, it is necessary to pay attention to the difference between personal and hearing via video link, so that the evaluation of evi-

[56] M. Dika, *op. cit.,* 901.
[57] *Ibid.*, 914.
[58] *Ibid.,* 919.
[59] Although the current procedural theory does not explicitly state this, it could be assumed that the possibility of sound recording of hearings, in the broader sense of digitalization, provided by law, can be subsumed under this concept.
[60] M. Dika, „O načelu neposrednosti u parničnom postupku *de lege lata* uz neke projekcije *de lege ferenda*“, 919.
[61] N. Bodiroga, „Sužavanje načela neposrednosti u parničnom postupku“, 471.
[62] N. Bodiroga, *op. cit.,* 471.

dence preserves all the qualities guaranteed by direct and personal contact with the evidence.[63]

In the laws of the entities of Bosnia and Herzegovina, sound recording of hearings is only a possibility decided by the court at the request of a party, in a special procedure.[64] The domestic legislators does not envisage the use of electronic platforms for remote hearings. The civil proceedings takes place orally and the evidence is presented directly in front of the court, unless the law provides otherwise.[65]

In the doctrine, the audio recording of a person's testimony is considered a less direct way of presenting evidence, compared to a hearing that takes place via a video conference connection, which transmits both image and sound simultaneously in real time.[66] This is because the simultaneous transmission of both image and sound provides all the qualities of hearing a person live before the court.[67] Furthermore, a hearing held remotely in a different place and not in court, in such a way that the image and tone are simultaneously transmitted in real time, is considered a modification of the principle of immediacy[68], but not a deviation from it.

The adversarial principle and the digitization of civil proceedings

A. In general, about the principle of adversarial in civil proceedings

The meaning of the principle of adversariality is to balance both procedural parties during their use of procedural powers, which arise from the principle of dispositiveness.[69] This principle is traditionally manifested in allowing each of the parties before the court to state the requests and allegations of the other, so that the court could decide on that party's request.[70] This principle extends through all stages of litigation.[71] The adversarial principle is considered an essential constitutive element of the right to a fair trial. This right means that the parties in civil proceedings must have the opportunity

[63] Z. Jelinić, „Digitalne tehnologije rješavanje građanskih i potrošačkih sporova i pružanje pravne pomoći", 197.
[64] Art. 375a par. 2. LCP RS.
[65] Art. 101 LCP RS and LCP FBiH.
[66] B. Babović Vuksanović, „Ročišta na daljinu u parničnom postupku", 544.
[67] *Ibid.*, 544.
[68] H. J. Musielak, W. Voit, *Grundkurs ZPO – Erkenntnis und Zwangsvollstreckungsverfahren,* 80.
[69] Ranko Keča, Marko Knežević, *Građansko procesno pravo,* (Belgrade: Official Gazette, 2021), 152.
[70] R. Keča, M. Knežević, *Građansko procesno pravo,*152.
[71] Ranka Račić, *Parnično procesno pravo,* (Banja Luka: Faculty of Law of University of Banja Luka, 2017), 218.

to present evidence, but also the opportunity to find out all the evidence of the other party in the proceedings, and to make a statement about them.[72] The above also applies to the situation when the party's statement does not affect the issues that should be decieded by the court.[73]

B. The principle of adversarial in civil proceedings and the use of modern digital technologies

Domestic legislation in the entities of Bosnia and Herzegovina leaves room for electronic communication between the parties and the court, in both directions.[74]

As part of the consideration of the adversarial principle, it is interesting to refer to the digitization of submissions to the parties of civil proceedings, as a procedural act of the court. This, since domestic law recognizes such a possibility.[75] The provision of electronic delivery as a possibility is considered to represent the adaptation of the standards of the European *acquis* to the national law.[76] However, it is expressly stipulated that the rules on electronic delivery by the court to the opposing party do not apply to the lawsuit.[77] There is also a possibility that the delivery could be carried out to the parties of the procedure in a traditional way, if the court determines that electronic delivery is not possible.[78]

The court must decide on delivery by electronic means. He does not decide on this *ex officio*, but only if the party addresses him with such a request. Due to the request of the party, that is, the participant in the litigation, the adhesion procedure is conducted, functionally speaking, before the president of the court. The legislator expressly lists the persons, authorities and organizations that may require electronic delivery of documents. This list is

[72] *It follows from the decisions of the European Court of Human Rights in cases* Milatova and others v. Czech Republic, application no. 61811/00, decision 21.06.2005 *and* Juričić v. Croatia, application no. 58222/09, decision 26.07.2011.

[73] *It follows from the decisions of the European Court of Human Rights in cases* Kukkonen v. Finland, application no. 57793/00, desicion 07.06.2007, *and* Sharomov v. Russija, application no. 8927/02, decision 15.01.2009.

[74] S. Petrović, „Elektronski dokaz i/li elektronska isprava kao dokaz u parničnom postupku", 481.

[75] In the procedural doctrine, it is anticipated that in the near future the legally stipulated mandatory use of electronic mail in all matters of communication between the court and state authorities on the one hand and the attorneys of the parties on the other hand will come into force. (*see* Z. Jelinić, „Digitalne tehnologije rješavanje građanskih i potrošačkih sporova i pružanje pravne pomoći", 192).

[76] Jozo Čizmić, Alena Huseinbeović, Viktorija Haubrich, „Načini dostave u parničnom postupku s posebnim osvrtom na elektroničku dostavu" *Zbornik radova Aktualnosti građanskog i trgovačkog zakonodavstva i pravne prakse,* 19 (2022): 108.

[77] *See* art. 337 par. 1. LCP RS.

[78] Art. 337v par. 3. LCP RS.

not limited to those listed, but it is foreseen that all other natural and legal persons can also request it.[79] About the request for electronic delivery the court passes a decision, against which the applicant can file an appeal if he is not satisfied with it. The president of the immediately higher court decides on the appeal.[80] The legislator allows the court, that is, the president of the court, *ex officio* and without appeal from the participants of the proceedings, to invalidate its decision approving electronic delivery. This, if the court, after giving permission for electronic delivery during the procedure, determines that it is no longer possible.[81]

Except for a lawsuit, if the person requests it and the president of the court approves, the importance of the electronic address is equal to the importance of the physical address of the residence, i.e. the seat.[82] Delivery is considered completed at the moment of return of the confirmation of receipt of electronic mail.[83]

In domestic law, due to the traditional way of conducting civil proceedings, there is an absurd possibility that the digitization process will go back and turn into a traditional way of undertaking concrete procedural actions. Namely, certain procedural actions of the parties taken electronically, such as delivering submissions to the court, the court will be forced to convert into an action taken in the classical, written way, if the electronic submission was not expressly requested by the opposing party and the court approved. The law stipulates that written submissions must be delivered to the court in a sufficient number of copies for the court and the opposing party. If the submission is sent to the court in electronic form, the party would not have to fulfill this legal requirement. The court, applying the adversarial principle, will forward the electronic submission to the opposing party converted in paper form, or electronically, depending on whether that party requested electronic delivery or not.[84] If the party has made such a request to the court, the court will deliver the received submission electronically. If she did not expressly request it, the court will be forced to convert the electronic

[79] Art. 337v par. 4. LCP RS. These are the bodies of Bosnia and Herzegovina and its entities, companies, institutions, lawyers, notaries, bankruptcy and liquidation administrators, legal entities exercising public powers. (*see* art. 337v par. 4. LCP RS). It is interesting that the legislator foresees that the request for electronic delivery of documents is sent to the court in paper written form.

[80] Art. 337v par. 5. LCP RS.

[81] Art. 337v par. 6. LCP RS.

[82] Art. 337v par. 1. LCP RS.

[83] Art. 351 par. 8. LCP RS.

[84] *See the provision of* art. 337v LCP RS. The possibility of submitting submissions to a party in a civil proceeding electronically is not provided as a possibility in the LCP FBiH, not even at the request of a party.

document into a written document and apply the classic rules on delivery. From these considerations, it can be concluded that the application of digital technologies in civil proceedings, in the form of submission to the court of an electronic document, i.e. delivery of that document to the opposing party by the court, did not significantly modify the principle of adversary in its traditional sense. Moreover, the method of regulating electronic delivery to parties and the entire still traditional concept of litigation, and in the process of implementing the principle of immediacy, can lead to a retrograde process in domestic law - that communication between parties and the court is transformed from electronic to non-electronic, respectively paper form of communication.

Principles of orality and writing and digitalization of civil proceedings

A. The traditional concept of oral and written principles in civil proceedings

The principles of orality and writing in civil proceedings refer to the method of gathering of the procedural material.[85] The principle of orality requires that the basis for making a decision can only be formed at an orally held hearing in the presence of the parties.[86] The principle of writing is considered in civil proceedings as a modification of the principle of orality.[87] These two principles are used in combination in civil proceedings, from a traditional legal point of view - orality is foreseen at the preliminary hearing and for the main hearing, while the written principle has its scope, in addition to the first-instance and also in the second-instance proceedings.[88]

B. Digitalization of civil proceedings and the principles of orality and writing

Digitalization of civil proceedings in the entities of Bosnia and Herzegovina, from a normative point of view, touches on the principles of oral and written. The electronic form of submissions sent by the parties to the court is a kind of exception to both - the oral and written principles. From a logical point of view, electronic delivery of submissions to the court is closer to the principle of writing. This also follows from the meaning of the provision of the law, according to which submissions sent to the court by electronic

[85] R. Račić, *Parnično procesno pravo,* 236.
[86] „There is no judgment without oral argument." (Florian Jacoby, *Zivilprozessrecht,* (München: Verlag Franz Valen, 2022), 36).
[87] F. Jacoby, *Zivilprozessrecht,* 37.
[88] R. Račić, *Parnično procesno pravo*, 236.

mail meet the requirement of written form.[89] However, the electronic form of submissions is not provided by law as binding for the parties, but only as one of the possible forms of submission.[90] Also, all requirements regarding the content of the submission must be satisfied if it is submitted to the court electronically. In addition, these submissions must be provided with a qualified electronic signature.[91]

In addition to the principle of writing, as a kind of exception to the principle of orality, the court is authorized, in proceedings in commercial matters, to schedule a hearing via electronic mail.[92] The legislator does not expressly regulate, but one gets the impression that here it is not necessary to initiate and lead a special adhesion procedure before the court president, similar to the one prescribed for granting approval for electronic delivery in common civil procedure.

Digitalization and some of the traditional principles of administrative procedure

The development of information and communication technologies during the last three decades has changed social processes, and has consequently influenced administrative action. Keeping records and issuing certificates proved to be particularly suitable for digitalization. Since these material administrative acts are based on large databases, their digitization has proven to be successful and is implemented in all countries that have begun the process of developing electronic administration[93]. Certain countries digitized administrative decision-making, enabling the adoption of the so-called of automated administrative acts[94]. In short, computers have become an indispensable tool for the work of administrative officials, and artificial intelligence[95] is playing an increasingly important role in the administrative procedures of modern states. On the following pages, we will show the influence

[89] *See* art. 334 par. 1. LCP RS.
[90] *See* art. 325 par. 3. LCP RS.
[91] Art. 334 par. 4. LCP RS.
[92] Art. 433g par. 2. LCP RS.
[93] Lilić, Prlja, *Pravna informatika, treće dopunjeno izdanje*, 83-84; Dušan Lesjak, Tomaž Klojčnik, Benjamin Lesjak, Rok Lampe, Viktorija Sulčič, *Pravna informatika*, (Maribor: Univerza v Mariboru, Pravna fakulteta, 2003), 25-26.
[94] Lilić, Prlja, *Pravna informatika, treće dopunjeno izdanje*, 81-82.
[95] It is important to point out that administrative activities involving artificial intelligence systems must adhere to a set of guarantees rooted in the principles of good governance and general principles of administrative procedure. Correia Pedro Miguel Alves Ribeiro, Ricardo Lopes Dinis Pedro, Ireneu de Oliveira Mendes, and Alexandre D. C. S. Serra, "The Challenges of Artificial Intelligence in Public Administration in the Framework of Smart Cities: Reflections and Legal Issues", *Social Sciences,* 13, 75 (2024): 9.

of modern digital technology on the application of selected principles of administrative procedure - the principle of protection of the rights of parties and protection of public interest, the principle of efficiency, the principle of free evaluation of evidence, the principle of economy, which are represented in the laws on (general) administrative procedure of Bosnia and Herzegovina and its entities, and the principles of access to information and data protection, which is represented at the level of Bosnia and Herzegovina and the Republic of Srpska. These principles will be analyzed in accordance with the provisions of the Law on Administrative Procedure of BiH[96], the Law on General Administrative Procedure of the Republika Srpska[97], the Law on Administrative Procedure of the Federation of BiH[98] and the Law on Administrative Procedure of Brčko District of BiH[99]. These provisions, with the exception of minor language variations, do not differ significantly, which is understandable considering the common legacy of Yugoslav laws on administrative procedure.

The principle of protecting the rights of the parties and protecting the public interest and modern digital technology

A. The traditional concept of the principle of protecting the rights of the parties and protecting the public interest

One of the most important principles of administrative procedure, second in order in the laws on (general) administrative procedure in Bosnia and Herzegovina, is the principle of protecting the rights of the parties and protecting the public interest. This principle has three components: 1) the duty of the authorities conducting the procedure to enable the parties to exercise their rights as easily as possible, taking care that the exercise of their rights does not harm the rights of other persons or contradict the public interest established by law[100]; 2) the duty of an official acting in an administrative matter to, in view of the existing factual situation, inform the party when he/she assesses that the party has a basis for exercising a right and 3) the duty

[96] Law on Administrative Procedure, *Official Gazette of BiH*, no. 29/02, 12/04, 88/07, 93/09, 41/13 and 53/16.
[97] Law on General Administrative Procedure, *Official Gazette of RS*, no. 13/02, 87/07-corrected, 50/10 and 66/18.
[98] Law on Administrative Procedure, *Official Gazette of FBiH*, no. 2/98, 48/99 and 61/22.
[99] Law on Administrative Procedure of the Brčko District of BiH, *Official Gazette of BD BiH*, no. 48/11 – revised text, 21/18 and 23/19.
[100] The protection of the rights of other participants in the procedure is realized in connection with the authorization to withhold the presentation of the document, in the form of the right to withhold testimony in cases provided for by law, in the form of the protection of the rights of the owner and holder of things during the investigation, etc. See: Zoran R. Tomić, *Upravno pravo – sistem, četvrto, doterano izdanje*, (Beograd: JP Službeni list SRJ, 2002), 340.

of the authority conducting the procedure to, when the parties are ordered by law, what obligations, according to them, applies those measures provided for by the regulations that are more favorable for the parties, if such measures achieve the goal of the law[101]. At the same time, "the authority that conducts the procedure has a double specified role - to take care of the achievement and protection of the public interest, but at the same time the protection of the rights and legal interests of the party (individual or organization) with which it is in a concretely established legal relationship." It is obvious, therefore, that the primarily undisputed character of the administrative procedure does not necessarily require the participation of a special body that would take care of the protection of the public interest, as is the case with other legally regulated procedures"[102]. At the same time, the public interest is determined by a special law or other regulation, in accordance with the guidelines of the assembly or the executive body[103].

B. The principle of protecting the rights of the parties and protecting the public interest and modern digital technology

The possibilities of applying information and communication technologies in the administrative procedure, with the aim of enabling the parties to exercise their rights as easily as possible, in accordance with the principle of protecting the rights of the parties and protecting the public interest, are based on certain provisions of the law on (general) administrative procedure in BiH, which concern submissions, filing and proof[104]. All analyzed laws provide for the possibility to deliver submissions in electronic form, make delivery (except in the Brčko District of Bosnia and Herzegovina), and issue documents. Moreover, Article 37a of the Law on General Administrative Procedure of the RS foresees the establishment of a single administrative place through which the party electronically communicates with several administrative bodies, while Article 139 paragraph 2 of the Law on Administrative Procedure of the FBiH enables the drafting of a decision in an abbreviated procedure by computers, which in our opinion also includes

[101] In this third case, we are talking about the principle of proportionality, which is proclaimed as a special administrative-procedural principle in certain legal systems. See more: Jürgen Schwarze, European administrative law, (London: Sweet and Maxwell, 2006), 677-866; Bojan Vlaški, „O prisustvu i primjeni evropskih načela dobre uprave u pozitivnom pravu Republike Srpske", *Moderna uprava - Časopis za upravno-pravnu teoriju i praksu*, 9-10 (2013): 133.

[102] Mirjana Rađenović, *Pravo upravnog postupka i upravnog spora*, (Banja Luka: Pravni fakultet Univerziteta u Banjoj Luci, 2019), 38-39.

[103] Mustafa Kamarić, Ibrahim Festić, *Upravno pravo-opći dio, četvrto izmijenjeno izdanje*, (Sarajevo: Pravni fakultet Univerziteta u Sarajevu, 2009), 294.

[104] Šehrić, „Razvoj koncepta elektronske uprave u Bosni i Hercegovini – izazovi i perspektive", 131-132.

the possibility of applying artificial intelligence in the adoption of administrative acts. However, the application of these provisions is mostly sporadic, both because the technical, organizational and personnel prerequisites for the smooth functioning of electronic administration are not fully met in BiH and its entities, and also because of the difficulties in the development of electronic administration in BiH, which were discussed in this paper.

The principle of efficiency and modern digital technology

A. The traditional concept of the efficiency principle

Efficiency as a principle of the administrative procedure is manifested in the form of the duty of the authority conducting the procedure to enable the successful and high-quality realization and protection of the rights and legal interests of the parties. According to Article 6 of the FBiH Law on Administrative Procedure, emphasis is placed on quick, complete and high-quality resolution of administrative matters, which is preceded by a good organization of the performance of the duties of the acting authority. Efficiency implies that "each of the actions has achieved the set goal, that is, the final result of the administrative procedure that was in mind when initiating the administrative procedure"[105]. In other words, by giving this principle a legal rank, the administration is asked not to lag behind other social entities, because the administration bodies often do not comply with the legal deadlines and do not complete the tasks for which they are legally responsible[106]. At the same time, the principle of efficiency is equally applied to administrative procedures initiated at the request of a party and ex officio[107]. Efficiency is also understood as the effectiveness of the work of the body that leads the administrative procedure, with the mandatory observance of the principle of legality, but also the realization of the economy of the procedure[108].

B. The principle of efficiency in the framework of electronic administration

The principle of efficiency is essentially directed towards the development of electronic administration and *vice versa* - electronic administration creates optimal conditions for the implementation of the principle of efficiency in practice. On that track, Article 59 paragraph 1 point a) subpoint v. Regulation on artificial intelligence no. 2024/1689 of June 13, 2024 singles out

[105] Rađenović, *Pravo upravnog postupka i upravnog spora*, 41.
[106] Kamarić, Festić, *Upravno pravo-opći dio, četvrto izmijenjeno izdanje*, 294.
[107] Petar Kunić, *Upravno pravo*, (Banja Luka: Pravni fakultet Univerziteta u Banjoj Luci, 2010), 382.
[108] Tomić, *Upravno pravo – sistem, četvrto, doterano izdanje*, 341.

"efficiency and quality of public administration and public services"[109] as one of the areas in which public administration bodies are authorized to develop artificial intelligence systems. Although artificial intelligence can increase the efficiency of administrative action, it is necessary to maintain human supervision over its use because artificial intelligence tools often lack the breadth of knowledge and understanding of the context in which public administration operates, which can lead to unfair decisions[110]. The advantage of artificial intelligence is that its algorithms can process large databases available to the public administration and deliver the desired results in a short time. However, it should be borne in mind that this freedom cannot be taken in an absolute sense, and does not mean arbitrariness, but a logical and thoughtful process[111].

The principle of evidence evaluation and modern digital technology

A. The traditional concept of the principle of evaluation of evidence

The principle of evaluation of evidence instructs the official conducting the procedure to decide according to his conviction which facts to take as proven, based on conscientious and careful evaluation of each piece of evidence separately and all pieces of evidence together, as well as on the basis of the results of the entire procedure. At the same time, the freedom of an official during the assessment of evidence has three components, which extend "from giving the leader of the procedure the opportunity to determine the facts that need to be proven, to choose the necessary evidence of greater or lesser importance, to gaining one's own conviction about the provenance of certain decisive facts"[112]. Moreover, an official can base his assessment of evidence not only on formal evidence, but also on his own conviction about certain facts that occurred at the oral hearing, such as the behavior of the parties, witnesses and experts[113].

[109] Regulation on artificial intelligence no. 2024/1689, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32024R1689, accessed 10/1/2024.
[110] Junaid Sattar Butt, "The Impact of Artificial Intelligence (AI) on the Efficiency of Administrative Decision Making Including Ethical & Legal Considerations and Comparative Study about Countries Already Incorporated AI for Administrative Decisions", *Acta Universitatis Danubius Juridica*, 19, 3 (2023): 9.
[111] Kunić, *Upravno pravo*, 385.
[112] Uporedi: Tomić, *Upravno pravo – sistem, četvrto, doterano izdanje*, 343; Rađenović, *Pravo upravnog postupka i upravnog spora*, 46-47.
[113] Kamarić, Festić, *Upravno pravo-opći dio, četvrto izmijenjeno izdanje*, 297.

B. The principle of evidence evaluation in the framework of electronic administration

Digital technologies, and especially artificial intelligence, have developed the possibility of supporting decision makers in legally regulated procedures when evaluating evidence in the procedure. Laws on (general) administrative procedure in Bosnia and Herzegovina prescribe the mandatory obtaining of evidence ex officio about the facts on which official records are kept in order to avoid requiring the obtaining of such documents from citizens, which is a positive move in the direction of the development of electronic administration. In conditions of full interoperability of public administration bodies, the data they keep records of can be easily accessible to decision makers when evaluating evidence[114]. Moreover, in countries that are at a higher level of e-government development, algorithms used by automated artificial intelligence systems may produce different results. On the one hand, there are traditional conditional algorithms that function on the basis of rules determined in advance by programmers (according to the "if-then" principle)[115]. On the other hand, machine learning algorithms and especially deep learning algorithms are based on neural networks inspired by the human brain, establishing their own decision rules based on the correlations they infer from the large amounts of data (big data) they are trained with. By applying a deep learning system, the process takes place through several stages and is very complex, with the programmers themselves often not being able to explain why the system suggested a certain outcome, which is why they can be very problematic from the point of view of the principle of evidence evaluation and giving reasons for automated administrative acts[116]. In this regard, a distinction is made between positive and negative administrative acts, so that the possibility of decision-making through the system of artificial intelligence is allowed only for positive administrative acts,

[114] Gianluigi Spagnuolo, "Artificial intelligence and the end of administrative proceedings", *Rivista di Digital Politics*, 1, (2024): 59.

[115] This is the case with the ETIAS automated travel authorization system for non-EU nationals, which is due to start operating in 2025.

[116] In this regard, we refer to the judgment of the Court of Justice of the EU in the case of the League of Human Rights (Ligue des droit humains) of June 21, 2022, which prohibited the use of machine learning systems in the automated assessment of public security risks that travelers may pose in air traffic, for reasons of incompatibility with the requirement that such assessment be based on predetermined criteria, with the necessity of human supervision over the adoption of automated administrative acts. Judgment of the Court (Grand Chamber) of 21 June 2022. Ligue des droits humains ASBL v Conseil des ministers, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62019CJ0817, accessed 10/1/2024

with the obligation of "human control" before the issuance of these acts[117]. This probability of errors in the functioning of artificial intelligence can call into question the legality of the administrative procedure and the decisions made[118], which is why human participation in the creation of administrative acts is irreplaceable, not only in the administrative procedure, but also in the control, administrative-judicial procedure.

The principle of economy and modern digital technology

A. The traditional concept of the principle of economy

Unlike the civil procedure, which is dominated by the trial principle - which causes increased costs for the court and the parties, the administrative procedure is dominated by the principle of officiality, which is why this procedure is considered "cheaper" than the civil procedure[119]. The principle of economy requires the authority conducting the administrative procedure to do so quickly and with as little expense and loss of time as possible for the party and other persons participating in the procedure, but in such a way as to obtain everything necessary for the correct determination of the factual situation and for the adoption of a legal and correct solution. In contrast to other analyzed laws, Article 14 of the FBiH Administrative Procedure Law explicitly states that the body conducting the administrative procedure "is obliged by official duty to obtain data on the facts of which official records are kept". It follows from the legal provisions that the principle of economy in the work of administrative bodies is based on "speed and savings, which means that they are required to avoid slowness in the performance of certain actions and higher material costs for the party and other persons participating in the procedure"[120]. The application of the principle of economy comes to the fore in the first-instance procedure, but it is also valid in the second-instance administrative procedure, the procedure for extraordinary legal means and the administrative executive procedure[121]. The analyzed laws on (general) administrative procedure elaborate the principle of economy in their provisions on competence, method and time limits for the performance of certain procedural actions, abbreviated procedure, party's statement as evidence, resolution of the previous question by the body conducting the

[117] Oriol Mir, "Algorithms, Automation and Administrative Procedure at EU Level", *Law Research Working Paper Series*, No. 8 (2023): 7-9, 12-13.
[118] Stefan Andonović, „Strateško-pravni okvir veštačke inteligencije u uporednom pravu", *Strani pravni život*, god. LXIV, br. 3 (2020), 117.
[119] Tomić, *Upravno pravo – sistem, četvrto, doterano izdanje*, 349.
[120] Rađenović, *Pravo upravnog postupka i upravnog spora*, 54.
[121] Kamarić, Festić, *Upravno pravo-opći dio, četvrto izmijenjeno izdanje*, 304.

administrative procedure, work of the first-instance body according appeals, procedural costs, etc[122]. With the development of electronic administration and full interoperability in BiH, the economy of administrative procedures will be improved.

B. The principle of economy in the framework of electronic administration

The use of digital technologies in the administrative procedure reduces the need for human labor. In addition, digital technologies make it possible to overcome spatial distances, who would, for example, the institute of legal assistance in administrative proceedings through digital technologies enables faster and cheaper obtaining of evidence (e.g. delivery of a document electronically or hearing a witness from a remote place via a video conference call). In addition, the office costs of the authority conducting the procedure are also reduced. The savings that artificial intelligence can bring in administrative procedures are evidenced by analyzes of its potential impact on the Health Care Program for the Poor in the US (Medicaid), whose costs exceed $1 trillion[123].

The principle of access to information and data protection and modern digital technology

A. The traditional concept of information access and data protection principles

The principle of access to information and data protection is a newer principle of (general) administrative procedure, which is represented as such in laws at the level of Bosnia and Herzegovina and Republika Srpska. Truth be told, the provisions of other laws on administrative procedure allow the parties access to the information of the authorities conducting the procedure, although they do not have an explicitly derived principle that guarantees this. In domestic administrative-procedural literature, this principle is often identified as a derived legal principle - the principle of transparency[124]. This principle directly supports the development of electronic administration and the application of information and communication technologies by emphasizing "the authority's obligation to provide parties with access to their own

[122] Uporedi: Tomić, *Upravno pravo – sistem, četvrto, doterano izdanje*, 349;.Kunić, *Upravno pravo*, 388.
[123] Ted Cho, Brian J. Miller, " Using artificial intelligence to improve administrative process in Medicaid", *Health Affairs Scholar*, 2(2), 1–4 (2024): 3.
[124] Uporedi: Kamarić, Festić, *Upravno pravo-opći dio, četvrto izmijenjeno izdanje*, 306; Kunić, *Upravno pravo*, 389.

website where all important notices are published and to provide them with access to all necessary data and prescribed forms electronically. In the procedure, the protection of personal and confidential data must be ensured, while respecting the regulations that deal with this special type of protection"[125].

B. The principle of access to information and data protection in the framework of electronic administration

In the conditions of developed electronic administration, access to information created in the work of administrative bodies, as well as data protection in accordance with special laws, become imperatives to preserve the freedom of individuals and protect the public interest. In France, in that context, since the adoption of the so-called The Digital Republic Act of 2016 provides "the right to request information about an algorithmic decision, including decision-making rules and the basic characteristics of the algorithm"[126]. In addition, the issue of explaining the functioning of artificial intelligence algorithms when making decisions is controversial, especially considering that the software used is the intellectual property of private companies[127]. It follows from this that access to information should be limited to information about the case and the reasons for the decision, which would have to be controlled and verified by administrative officers, as we established in connection with the principle of free assessment of evidence. Another challenge of applying digital technologies in administrative proceedings concerns the parties' consent to the processing of their data. Unlike the private sector, where the condition for using data is the user's consent, in public administration such consent is not required, due to the predominance of public interest in administrative-legal relations[128], which increases the risks to the rights and freedoms of the parties.

Conclusion

From the presented normative-dogmatic research, and from the views of the domestic and comparative procedural theory, it follows that the civil

[125] Rađenović, *Pravo upravnog postupka i upravnog spora*, 57.
[126] Simon Chesterman, *We, the Robots? Regulating Artificial Intelligence and the Limits of the Law*, (Cambridge: Cambridge University Press, 2021), 162. Наведено према: Dragutin Avramović, Ilija Jovanov, „Sudijska (ne)pristrasnost i veštačka inteligencija", *Strani pravni život*, 2 (2023): 171.
[127] Johan Wolswinkel, *Artificial Intelligence and Administrative Law*, (Strasbourg: Council of Europe, 2022), 12-13.
[128] João Reis, Paula do Espírito Santo, Nuno Melão, "Impacts of Artificial Intelligence on Public Administration: A Systematic Literature Review", *14th Iberian Conference on Information Systems and Technologies*, (Coimbra: 19 to 22 of June 2019): 4.

procedure in the entities of Bosnia and Herzegovina - in the Republika Srpska, almost as much as in the Federation of Bosnia and Herzegovina, is very little electronicized. The peak of modern electronic media used in domestic civil procedure is exhausted in the submission of electronic documents to the court, which, due to the overall and traditionally conducted procedure, are most often converted again by the court into paper submissions, for the purpose of delivery to the opposing party, is also exhausted in the electronic delivery of submissions to the parties by of the court only at their request and with the approval of the court, as well as in the audio recording of the hearing.

The same conclusion can be drawn in relation to the digitization of the law on (general) administrative procedure in Bosnia and Herzegovina, both at the level of Bosnia and Herzegovina, as well as at the level of entities and Brčko District of Bosnia and Herzegovina. Normative prerequisites for the digitalization of administrative procedures have only been partially implemented (in terms of submissions, submissions, documents as evidence, in order to establish a single administrative office in the Republic of Srpska, and partially also in terms of the adoption of automated solutions in the Federation of Bosnia and Herzegovina), and the practical application of legal norms was almost absent due to difficulties in the development of electronic administration, and especially the absence of internal and external interoperability.

Due to the fact that the more serious influence of modern digital technologies continues to successfully bypass the domestic judiciary and public administration, it is the successfully preserved and traditional forms of litigation and administrative procedure, together with not only all the classic principles characteristic of it, but also with all the shortcomings that affect the slowness providing legal protection in civil proceedings and resolving administrative matters in administrative proceedings.

Some of the observed principles, even with the existing low degree of digitization of civil proceedings, are slightly modified, such as the situation with the principle of immediacy, so in procedural theory there is even talk of electronic immediacy. In the administrative procedure, at this stage of the development of electronic administration, one can still talk about improving the implementation of certain process principles, especially the principles of efficiency and economy. The goal of this paper is not to advocate that traditional principles should necessarily be changed, since they form the backbone of the form of litigation and administrative procedure as created by the domestic legal tradition. Nevertheless, it is to be assumed that the process of modification of some of them will occur in that phase of digitization of litigation and administrative proceedings, in which their traditional form

will no longer be possible to preserve. In this direction, certain theses were presented in this paper.

Based on all of the above, although the doctrine expresses fear in an excessively futuristic way, whether the legal systems in Bosnia and Herzegovina will be able to properly balance the process of digitization and integration of artificial intelligence in civil and administrative procedures, with the requirements for the protection of human rights and principles of fairness, we believe that such concerns premature, even longer period observed. This, taking into account the dynamics of the digitization process of domestic civil justice and public administration.

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