ARTIFICIAL INTELLIGENCE LEGAL REGULATION IN ESTONIA
I part of the MA Exam - IT Law Lab

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INTRODUCTION

Artificial intelligence has lately had a huge impact on our lives by enabling services which are making our everyday life more comfortable as well as efficient. In fact, artificial intelligence is no longer something we can see in the science fiction but instead it empowers services we are using on everyday basis and it is transforming every sector, including commerce, production, public administration, agriculture, medicine and even administration of justice. The use of artificial intelligence in the products and for offering services, however, raises a wide variety of ethical and legal questions, which are currently being dealt with on national as well as European Union level. The main question is whether the existing legal framework is fit to accommodate also the use of artificial intelligence or are the different aspects of artificial intelligence so novel to require specific regulation.

As the description of the current IT Law Lab indicated, an example of a specific artificial intelligence should be used to illustrate the analyses conducted in this work. After having consulted with the supervisor of this work Mr Ott Valsberg and having analysed different options of artificial intelligence, which could be implemented by the public sector, a system powered by artificial intelligence to be used in order for payment procedure, was chosen as an example to be analysed.

The importance of the topic derives from the fact that currently there are few academic works dealing with the legal challenges of implementing artificial intelligence in the judicial proceedings in Estonia. As the government is considering using artificial intelligence to automate the order for payment procedure further, corresponding legal analyses is timely and highly relevant. The authors are of the opinion, that the practical application of the the current analyses is not limited to the order for payment procedure. In fact, it could be used to validate the lawfulness of the automation of any other judgement or court ruling.
The first chapter of the work gives a short overview of the history and provides a definition of artificial intelligence. Although the term artificial intelligence is currently widely used, the definitions tend to vary. The chapter thus concentrates on the different aspects of artificial intelligence and provides a definition to be used in the current work. The second chapter gives an overview of the AI tools currently in use in the field of judiciary or tested for future implementation. The third chapter describes Estonian order for payment procedure and current level of automation and gives an overview of applicable national and EU law, after which an analysis is then presented to evaluate whether fully automated order for payment procedure would be lawful. It is hypothesized that current legal framework is not preventing the use of AI in the order for payment procedure. Analyse will provide an answer to this question.

Overview of the contribution:
All members participated in the skype calls and discussed the problems to be analysed. Chapters 1 and 2 were written mainly by Kätlin Šahmatova, chapter 3.4 mainly by Margus Moor, and the remaining chapters were written by Margus Moor, Kätlin Šahmatova and Gerli Hummel. The references were checked by Kätlin Šahmatova and Gerli Hummel.

Keywords: civil procedure, procedural law, expedited procedure in matters of payment order, artificial intelligence, automatic learning.

1. The history and definition of artificial intelligence

In the last few years artificial intelligence (hereinafter referred to as “AI”) has become a hot topic among scientists, information technology entrepreneurs, tech-conscious people and of course lawyers, who are following the developments with great interest. The term “AI” is widely used but when you look deeper, the definition starts to vary and the term acquires different nuances. Therefore, before moving on to the analysis, the term “artificial intelligence” should be defined.

In 1950, British mathematician Alan Turing published a paper on computing machinery and intelligence, where he proposed a formal model of computing and posed the question of whether
machines can think. Turing developed a test known as “Turing Test”, which is used to this day, to test his hypothesis: could a computer have a conversation and answer questions in a way that would make a human think that the computer was actually a human.\(^1\) Unfortunately, due to the lack of computing resources, Turing was unable to translate his ideas into real actions. The term “artificial intelligence” however was first used by an American computer scientist John McCarthy in 1956 for the conference, which brought together people having interest in computer intelligence.\(^2\) From 1956-1974 AI flourished as the computers became faster as well as cheaper and their data storage capacities improved\(^3\). Several focal areas in the quest for AI then emerged - heuristic search which was applied in Logic Theorist program, first steps in computer vision and face recognition, natural language processing, expert systems, machine learning as well as artificial neural networks were made.\(^4\) In 1970-s however, due to the lack of practical successes, slow progress and heavy criticism, the funding was cut. In fact, the period that followed was also described as “AI winter”.\(^5\) Situation changed in 1990-s, when the increase in computing power and data storage capacity as well as the availability of a huge amount of data allowed AI to become part of our everyday lives.

Today, there is no universally accepted definition of AI. The need for a generally accepted definition of AI, that is flexible and is not hindering innovation, is emphasized by the European Parliament\(^6\). Currently many countries are working on their AI visions and strategies, which also forces them to face the task of finding a suitable definition for AI. So far the definitions tend to consider AI to be comprised of either, or both: i) the abilities of “systems” (and/or “software”, “devices”, “hardware”, “services”, “machines”) and “technologies” to “act” (“function”, “take actions”, “behave”, “perform tasks”) in a certain way; ii) the research discipline itself (also referred to as “field of research”, “area of science and technology”, “activity”, ”concept”).\(^7\)

When we talk about the abilities of the system, based on the level of intelligence displayed, artificial intelligence can be divided into Artificial Narrow Intelligence (ANI or “applied AI”) and Artificial General Intelligence (AGI). ANI is associated with attempts to build programs to aid, rather than duplicate, human mental activities. Today’s ANI is designed to accomplish a specific problem-solving or reasoning task. The most advanced AI system available today, such as the IBM Watson or Google’s AlphaGo, are still ANI. ANI is often contrasted to AGI, in which autonomous machines would become capable of general intelligent action, like a human being, including generalising and abstracting learning across different cognitive functions, they would have a strong associative memory and be capable of judgment and decision making, multifaceted problem solving, learning through reading or experience, creating concepts, perceiving the world and itself, inventing and being creative, reacting to the unexpected in complex environments, and anticipating. At the moment, however, all existing AI-s are ANI-s. AI’s prominent researchers still disagree as to when an AGI will be achieved and whether basic tools to build an AGI already exist or we’re still missing a great number of the fundamental breakthroughs needed to reach this goal.

AI as a research discipline takes us to different research categories, “machine learning” of which can be considered one of the most active, but not the only, field of research of AI. In fact, when people talk about AI, they often confuse it with machine learning - a subset of AI. “Machine learning,” teach machines to make decisions by showing them many examples of correct decisions or by defining a set of rules and letting the machine learn by trial and error. Deep learning, a subset of artificial intelligence that uses unsupervised learning to process data within a hierarchical structure (similar to the way a child learns), is perhaps the most powerful forms of machine learning technology. The ability of a deep learning system to continuously improve its

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knowledge in close to real time, independent of manual programmer input, makes it perfectly suited to be used without the need for ongoing professional intervention.\textsuperscript{11}

The first attempt to define AI was recently made by the European Commission in its communication on Artificial Intelligence for Europe by stating that the artificial intelligence (AI) refers to systems that display intelligent behaviour by analysing their environment and taking actions – with some degree of autonomy – to achieve specific goals\textsuperscript{12}. Therefore, according to the European Commission, to be considered AI, the system should meet the following requirements: it should be able analyse its environment and show some degree of autonomy in taking actions. Although AI definitions commonly mention AI’s ability to learn, European Commission has not considered it necessary to emphasize the self-learning aspect, thus opening the definition of AI up also for systems which do not have the ability to learn. The definition has been elaborated further by the European Commission's High-Level Expert Group on Artificial Intelligence as follows: “Artificial intelligence (AI) refers to systems designed by humans that, given a complex goal, act in the physical or digital world by perceiving their environment, interpreting the collected structured or unstructured data, reasoning on the knowledge derived from this data and deciding the best action(s) to take (according to pre-defined parameters) to achieve the given goal. AI systems can also be designed to learn to adapt their behaviour by analysing how the environment is affected by their previous actions.”.\textsuperscript{13} The described definition is currently open for public consultation and thus changes may occur.

Taking into account the definition provided by the European Commission and the requirements described in the description of the current IT Law Lab task, for the sake of this work AI is a system that has at least the following characteristics:

\begin{itemize}
\item[a)] analyses its environment. By that the authors of the current work mean that the system can perceive its environment and is being able to analyse the information it has obtained;
\end{itemize}

b) takes actions with some degree of autonomy. System´s autonomy can be defined as the ability to take decisions and implement them in the outside world, independently of external control or influence; whereas this autonomy is of a purely technological nature and its degree depends on how sophisticated a system's interaction with its environment has been designed to be.\textsuperscript{14} AI system can be conceived of as an autonomous system when it modifies its inner states or properties without external stimuli, thereby exerting control over its actions without any direct intervention of humans\textsuperscript{15};

c) contains an element of self-learning, which is enabled by different subsets of machine learning. By introducing an element of self-learning, the problems regarding the transparency of the system´s actions arise - software programming can be so complex that it is impossible to predict a system´s behavior\textsuperscript{16}. The system incorporating AI can be programmed in a way that by using the information it is provided with, the system can create new complex behaviour patterns, which cannot always be foreseen nor controlled by its programmer.

2. Overview of the systems incorporating AI in the field of judiciary

As everywhere else, the use of information and communication technologies (ICT) is growing also within the justice administration. Courts and judges are using ICT to enhance efficiency.\textsuperscript{17} Replacement of human skills by machines through AI to support and reduce the workload of courts to ensure a better quality of justice is by no means a new topic and in fact many examples illustrating the use of AI, enabled by natural language processing and machine learning, to assist and facilitate the work of judges can be found. A step further, however, is a heavily debated question of replacing the judge partially or in certain cases entirely with AI.\textsuperscript{18}

\textsuperscript{14} European Parliament resolution 2015/2013(INL), op cit, recital AA.
\textsuperscript{18} Prof. Dr. P. Enders, Hagen, Einsatz künstlicher Intelligenz bei juristischer Entscheidungsfindung. Juristische Arbeitsblätter 2018, p. 723-724.
The potential of AI in the judicial sector has not remained unnoticed by governments who have started discussing the risks and challenges on higher levels. For example, Council of Europe’s European Commission for the Efficiency of Justice (CEPEJ) has held a conference "Artificial Intelligence at the Service of the Judiciary" which brought together representatives of the academic world, justice professionals, judicial institutions from different European countries to explore how artificial intelligence can be used to support the work of legal professionals and courts and ensure a better quality of justice, while respecting fundamental principles. The growing use of AI in the judicial field with its ethical as well as legal questions has motivated CEPEJ to adopt an Ethical Charter on the use of artificial intelligence in judicial systems. The purpose of the charter is to provide a framework of principles that can guide policy makers, legislators and justice professionals when implementing AI in their national judicial processes.

According to the abovementioned charter the tools used in judicial field can be categorized as follows: case-law search engines, online dispute resolution tools, assistance in drafting deeds, analysis (predictive, scales), categorisation of contracts according to different criteria and detection of divergent or incompatible contractual clauses, "Chatbots" to inform litigants or support them in their legal proceedings. Based on the information collected for the charter, the AI algorithms seem to be rather popular in the United States' courts but in European judicial systems the algorithms are mostly targeted at insurance companies, legal departments, lawyers and individuals. In Estonia, as in other European countries, AI-based tools, except search-engines, are not currently used by the courts but according to the minister of justice Mr Urmas Reinsalu Estonia is planning several activities in its judicial system which cover also the implementation of AI. He has referred to the possible introduction of “robot judge” who should

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19 More information about the conference can be found at: https://www.coe.int/en/web/cepej/justice-of-the-future-predictive-justice-and-artificial-intelligence
22 Ethical Charter of CEPEJ, Appendix 1, op cit, p. 14.
bring information to the judges and simplify their work by pre-generating the decisions in simple cases.  

Case-law search engines have become part of legal practitioner’s everyday lives and in addition to simple case-law search engines more advanced systems can be found. One such example is ROSS Intelligence, a legal research platform also called the attorney robot, that is used in number of law firms and courts in the United States of America. ROSS asks questions to enhance reasons and it constantly monitors the law and uses its machine learning capabilities to continuously improve its results. Another such example currently used is a system called IBM Watson, that is an advanced legal research tool that harnesses the power of artificial intelligence to make the research process more efficient and LexisNexis, providing computer assisted legal research tools.

Not only are the AI-based tools carrying out simple tasks which the machines are carrying out more speedily and efficiently than a human, like searching for the case law, but certain tools are also able to predict the outcome of cases. For instance there is a system called Blue J Legal - an AI-powered software that accurately predicts legal outcomes in challenging areas of tax and employment law. Another such application is called Case Crunch and it includes functionalities such as complaint handling, legal decision forecasting and merits-based claim review. In fact, it won a week-long competition against human lawyers in predicting decisions with an accuracy of 86.6%, compared to the lawyers’ accuracy of 62.3%. Both the humans and the AI were given the basic facts of hundreds of payment protection insurance mis-selling cases and asked to predict whether the financial ombudsman would allow a claim. It should, however, be kept in mind that the cases analysed during the competition were fairly simple and there was abundant

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25 More information can be found at: https://rossintelligence.com/
26 More information can be found at: https://www.lexisnexis.com/en-us/home.page
27 More information about the service can be found at: http://www.bluejlegal.com/
28 More information can be found at: https://www.case-crunch.com/
case law available. Despite that, the competition illustrates that in certain simple cases machines can be indeed more efficient than humans.

Another example, where the prediction capabilities of AI have been tested, is a software developed by UCL where the AI “judge” has predicted the judicial decisions of the European Court of Human Rights to 79% accuracy. The English language data sets for 584 cases relating torture, degrading treatment, fair trial and privacy were identified and an AI algorithm to find patterns in the text was applied. The algorithm looked for patterns in the text and was able to label each case either as a "violation" or "non-violation". The algorithm tended to get judgements wrong when there were two similar cases - one a violation and one not, suggesting that the platform was not able to detect the finer subtleties of the law.

One of the best-known examples regarding the implementation of AI in legal proceedings can be found in the United States, where in some courts judges have begun to use AI for risk-assessment in order to when and for how long criminals should be jailed. Systems used by different courts vary but lately a system called Public Safety Assessment has caught a lot of attention. Developers themselves describe it as a research-based, data-driven pretrial risk assessment tool that provides judges with objective information about the likelihood that a defendant will commit a new crime or will fail to return to court. The risk assessment considers nine factors related to a defendant’s age, criminal history and current charge that research has shown accurately predict risk. The tool then generates risk scores for each defendant. This information, along with other pertinent facts from a defendant’s case, is provided to judges to assist in their pretrial decision making. Therefore, the outcome provided by the tool is not

binding but the purpose of it is simply to assist the judge. Systems have been criticised for the outcome of the algorithm to lack transparency\textsuperscript{36}.

Special attention should be paid also to online dispute resolution (ODR) services. ODR is moving increasingly into the court processes offering electronic court services. Among low-value disputes there also tax disputes, disputes relating to social security services, or divorce proceedings. The main purpose is to take complainants through an automated diagnosis of the dispute by putting a number of questions, which are then processed by the machine, resulting in proposals for a solutions.\textsuperscript{37} For example UK has launched Online Money Claim, which is an Internet based service for claimants and defendants.\textsuperscript{38}

Based on the examples described above, uses of AI in judicial matters can vary from being a useful tool in finding and analysing materials to predicting possible outcomes and assessing the risk of future felonies. Currently, however, there are no known systems used by the courts, where AI with its self-learning element is used for pre-formulating court decisions. In fact, to the date there are no systems which have successfully succeeded in producing valid legal reasoning.

3. AI and order for payment procedures

3.1. Description of the order for payment procedures

Order for payment procedures is a procedure that enables the creditor to obtain the execution document faster, with a smaller burden of proof and with lower expenses compared to the proceeding of action\textsuperscript{39}. Although the structure of the proceedings regarding the expedited


\textsuperscript{37} Ethical Charter of CEPEJ, op cit, chapter 6.2.

\textsuperscript{38} Online Money Claim service can be accessed at: https://www.moneyclaim.gov.uk/web/mcol/welcome. Analyses of the UK online dispute resolution can be found at: https://www.judiciary.uk/wp-content/uploads/2015/02/Online-Dispute-Resolution-Final-Web-Version1.pdf

procedure in matters of payment order vary considerably from country to country, the essence remains the same - court issues in the written proceedings under a creditor’s petition a payment order.\textsuperscript{40} It has been determined, that the main purpose of a considerable part of court proceedings is to have an enforceable document allowing the debtor to claim his debt instead of acquiring an authoritative impartial decision on contentious questions of fact or law.\textsuperscript{41} It is acknowledged that a legal framework that guarantees a creditor access to the rapid settlement of uncontested claims is paramount importance. Late payments are a major reason for insolvency threatening the survival of businesses, particularly small and medium-sized ones and the obligation to engage in lengthy and costly court proceedings even for the collection of uncontested debts inevitably aggravates described negative economic effects.\textsuperscript{42} For the reasons described beforehand, the expedited procedure in matters of payment order has been introduced also in Estonia.

In Estonia the application of order for payment procedures can be filed only electronically by using electronic portal e-toimik\textsuperscript{43}. According to § 482 (4) of the Code of Civil Procedure (TsMS) the application shall be submitted to the court electronically in such a way that it can be processed by the court and equipped with the applicant's digital signature or other similar secure means to identify the sender and the time of transmission.

The court adjudicates application of order for payment procedures within ten working days after the receipt thereof. Court can satisfy or refuse to satisfy the application. If court satisfies the application, the debtor has a right to file an objection to the claim, after filing of which the court usually continues to hear the matter in actions (§ 486 (1) TsMS). If court refuses to satisfy the application, the relevant decision is not subject to appeal, but the petitioner reserves the right to file the claim in action (§ 483 (5) TsMS). Estonian order for payment procedures is very formal as when receiving the application, the court will merely check that the application is in accordance with the preconditions of the procedure (§ 481 TsMS) and that the application

\textsuperscript{42} Green Paper, \textit{op cit}, p. 8.
\textsuperscript{43} Electronic portal e-toimik can be accessed at: https://www.e-toimik.ee/
contains all the necessary data set out in § 482 TsMS. The claim in substance, however, is not reviewed until the debtor has filed an objection and the court continues to hear the matter in actions.

European order for payment procedures established by regulation (EC) No 1896/2006 of the European Parliament and of the Council of 12 December 2006 creating a European order for payment procedure differs from the Estonian procedure in a way that in case of European order for payment procedures the court also verifies the merits of the application. Recital 16 of the European order for payment procedures regulation states that “the court should examine the application, including the issue of jurisdiction and the description of evidence, on the basis of the information provided in the application form. This would allow the court to examine prima facie the merits of the claim and inter alia to exclude clearly unfounded claims or inadmissible applications. As indicated before, in the Estonian proceedings the court verifies the merits of application in a later phase, namely when debtor has filed an objection.

In Estonia the use of order for payment procedures is reserved for rather simple and clear-cut cases, whereas more complicated cases have been excluded from its scope. The most important restriction to the applicability of the expedited procedure is the maximum amount of the claim which is 6400 euros. All claims which do not fulfil the requirements of the expedited procedure, should be heard in the normal proceeding of action.

Due to the formal character and simplicity of the order for payment procedures no or very little judicial discretion will be exercised in decision making by the court while reviewing the application. According to § 15 of the Constitution of the Republic of Estonia (PS) only court can administer the justice. Administering justice means applying objective right by the court when assessing specific circumstances of the case. Administering justice allows a judge to decide a legal case or matter within a range of possible decisions. In order for payment procedures the AI tools or algorithms will not make complex judicial decisions instead of the judge. AI tools or algorithms simply help the process of verifying the formal preconditions of the procedure and

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check that the application contains all the necessary data. Such decisions will be clear and easy to make, for example, it is very easy to assess whether the claim exceeds 6400 euros or not. Thus, it is a reasonable opportunity for using AI in order for payment procedures to save the valuable resources of judges, make the court-proceedings more efficient and less time-consuming.

3.2. Current level of automation and the potential implementation of AI in the order for payment procedures

AI could be potentially used to verify the preconditions of Estonian order for payment procedures (§ 481 TsMS) and to verify that the application contains all necessary data set out in § 482 TsMS. According to § 481 (1) TsMS order for payment procedures is not applied to non-contractual claims, claims the object of which is compensation of non-proprietary damage, claim filed against bankrupt, collateral claims exceeding the main claims, claims which amount exceeds 6400 euros and to certain claims arising from the consumer contracts.

For the time being the court (i.e. assistant judge) is mainly checking these preconditions manually. For example, the court conducts a search in databases and verifies that the debtor would not have been declared bankrupt and that there would be no pending bankruptcy proceedings against the debtor at the time of filing the application. Assistant judge analyses the short description of the circumstances which constitute the basis for the claim and evaluates if the claim is contractual, assesses whether the obligation is enforceable (fallen due), and makes sure that the object of the claim is not compensation of non-proprietary damage. Only two preconditions are currently checked automatically by the court: that claims would not exceed the amount of 6400 euros (§ 481 lg 2² TsMS) and that collateral claims would not exceed the main claim (§ 481 lg 2¹ TsMS). Additionally, if the applicant chooses for the basis of the claim a consumer credit agreement, the system automatically generates an extra field and prompts the applicant for the annual percentage payable by the consumer. The assistant judge then manually checks, that the rate of the annual percentage payable by the consumer would not exceed the
maximum annual percentage rate provided by subsection 406² (1) of the Law of Obligations Act (a precondition set out in § 481 (2³) TsMS second alternative).

The level of automation regarding the verification of preconditions could definitely be increased compared to the current level by use of AI tools or more simple algorithms. For example, a simple program could check the databases and determine whether the debtor is declared bankrupt or not. AI could possibly be used in checking other preconditions. AI could verify that in case of consumer credit contract the agreed interest is not exceeding the maximum annual percentage rate. In delivering the payment proposals and payment orders AI could help detecting the phone numbers and addresses of the debtors. An advanced AI tool, which is able to understand the text ("natural language processing") could check, for example, whether applicant has a contractual or non-contractual claim and analyse if the circumstances described are enough for the payment proposal. By no means is here intended to claim that such an AI tool already exists, but as the technology evolves, such AI tools may become available very soon.

As indicated above, the court also checks the mandatory data to be included in the application set out in § 482 (1) section 1 - 6¹ TsMS namely the data of the parties and their representatives, the court, the sum of main and collateral claim, a short description of the circumstances and evidence and the confirmations as to the claim being collectible and information presented honestly. The court's ability to evaluate the mandatory elements of application is limited as no evidence is added to the application. The court merely checks the information provided in the application and assumes that provided information is accurate.⁴⁵ The before mentioned confirmations are already in the correct form and wording in the electronic e-toimik system, and the applicant just needs to tick the box.

§ 484 (1) TsMS sets out that if the court satisfies a petition for application of expedited procedure in a matter of a payment order, then the court makes a ruling to propose payment after which the debtor has 15 days to file an objection (§ 485 (1) TsMS). After filing the objection, the court usually will make a ruling and continue to hear the matter in actions. However, if the

debtor fails to pay the amount indicated in the proposal for payment or to file an objection, the court makes a payment order by way of a ruling (§ 489 (1) TsMS), which can be appealed according to § 4891 (1) TsMS. If the court satisfies the appeal against the ruling, the court annuls the payment order by a ruling. In the case of annulment of a payment order the court terminates the expedited procedure in the matter of the payment order or initiates actions. Annulment of a payment order does not restrict the petitioner's right to file the claim in actions (§ 4891 (1) TsMS).

The process of issuing courts rulings is already partially automated. As stated above, the application can only be submitted to court electronically via e-toimik system. All the data user enters via e-toimik, meaning the mandatory data set out in § 482 (1) TsMS will be printed to the ruling automatically (the data of the parties and their representatives, claimed sum of money, short description of the circumstances etc). The assistant judge will check the data beforehand and makes sure that data entered by applicant is sufficient and that application fills all the requirements. Once assistant judge has checked the data and confirmed that the application can be taken in the proceeding, assistant judge will simply press a button and the system generates an automated ruling. This ruling will then be sent to the debtor. An automated ruling is also generated in situations where the debtor has paid the debt, application is withdrawn, or debtor is declared bankrupt, or if debtor has not filed an objection to the application and the court will make a payment order via ruling.46

3.3. Existing legal framework

3.3.1. EU and international law

As a result of a rapid growth in different AI-powered technologies, there are voices on the European level emphasizing the need to update the existing regulation to be able to fully benefit from these new technologies and services. It is understandable that to encourage investing in AI-related research and development and implementing new technologies, a stable legal system is

46 According to information received from court's representative Heli Sirelbu.
needed. For this reason, European Commission as well as European Parliament have started investing their resources to analyse the existing rules and to determine the gaps in regulation as well as the rules which are hindering the full potential of AI. For this reason, European Parliament has so far prepared a resolution with recommendations to the Commission on Civil Law Rules of Robotics\textsuperscript{47} and Commission has published a communication on Artificial Intelligence for Europe\textsuperscript{48}, covering among other things also the steps for ensuring appropriate legal and ethical framework, accompanying by the Staff Working Document on Liability,\textsuperscript{49} providing the first mapping of liability challenges that occur in the context of emerging digital technologies.

However, at the European Union level there are currently no legal acts defining, regulating or explicitly referring to AI. So far the main target of AI-related legal analyses and the potential object of regulation has been the liability challenges accompanying the emerging new technologies and the legal status of AI. There are talks about making public services more efficient with the use of AI, including implementing AI in the judicial proceedings, but the existing legal analyses on these topics is rather scarce.

As to the regulation relevant for the payment order procedure, several EU and international legal acts should be mentioned. First, Article 6 of the European Convention of Human Rights provides that in the determination of his civil rights and obligations, everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law. Second, Article 47 of the Charter of Fundamental Rights of the European Union\textsuperscript{50} provides that everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal. Although the national civil proceedings are out of the scope of EU regulation and belong to the member state’s jurisdiction, there are acts which have relevance to the national civil proceedings. One such directive, which is relevant in connection with the

\textsuperscript{47} European Parliament resolution on of 16 February 2017 with recommendation to the Commission on Civil Law Rules of Robotics, \textit{op cit.}

\textsuperscript{48} Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on Artificial intelligence for Europe, \textit{op cit.}


\textsuperscript{50} Charter of Fundamental Rights of the European Union, OJ C 326, 26.10.2012.
payment order procedure is the directive 93/13/EEC on unfair terms in consumer contracts.\textsuperscript{51} In 2012, the Court of Justice ruled that the Consumer Contracts Directive must be interpreted in such a way that, in payment order proceedings, the court must assess the unfairness of the interest independently even if the debtor does not file an objection.\textsuperscript{52} More regarding to this is described below.

As indicated in chapter 2, the CEPEJ has adopted an European Ethical Charter on the use of Artificial Intelligence in Judicial Systems and their environment, which lays down ethical principles relating to the use of AI in judicial systems by listing five principles. There is a principle of respect for fundamental rights, which has to ensure that the design and implementation of artificial intelligence tools and services are compatible with fundamental rights. A principle of non-discrimination which aims to prevent specifically the development or intensification of any discrimination between individuals or groups of individuals. A principle of quality and security with regard to the process of judicial decisions and data, use certified sources and intangible data with models conceived in a multi-disciplinary manner, in a secure technological environment. A principle of transparency, impartiality and fairness which aims to make data processing methods accessible and understandable, authorise external audits. A principle “under user control” which precludes a prescriptive approach and ensures that users are informed actors and in control of their choices.\textsuperscript{53}

3.3.2. Applicable national rules

As to the regulation of artificial intelligence, there are currently no legal acts defining or mentioning AI. The plans of Estonia nevertheless seem ambitious as it is working hard on being one of the first countries to regulate AI. A thorough legal analysis regarding AI\textsuperscript{54} has been ordered by the expert group of self-driving vehicles summoned by Government Office in 2017.

\textsuperscript{52} CJEU C-618/10, Banco Español de Crédito SA v Joaquín Calderón Camino.
\textsuperscript{53} Ethical Charter of CEPEJ, op cit, p. 5.
Although the analysis was supposed to focus on the regulation relevant to the self-driving cars, the authors of the analysis argued that it is not reasonable to amend only specific laws and a thorough reform for regulating emerging new technologies in its complexity should be carried out. The analyses states that in order to avoid new legislative changes each time a new technology is introduced, an area specific legal act should be drawn up. The named analysis mentions also the possibility of providing a robot in certain cases with a passive and active legal capacity.\textsuperscript{55} Described initiative has caught a considerable amount of attention also outside of Estonia.

As European Union is encouraging each Member State to develop their own national AI strategies by mid-2019, Estonia has summoned an AI expert group,\textsuperscript{56} whose task is, among other things, to analyse whether there are changes to be made in Estonian legislation to be able to use the full potential of AI. The above legal analyses with the relevant legislative proposals is expected to be ready by the end of April 2019. Legal analyses will focus on the following topics: risks arising from AI, including criterias applicable to the development of AI and supervision, state liability, product liability, regulation enabling certain decisions to be made by AI. Therefore, it can be claimed, that the focus is no longer on being the first country in the world to grant AI a legal status but determining whether existing law can be interpreted in a way to cover also the emerging new technological solutions.

As to the order for payment procedures, the most important national legal act is TsMS. In addition to the clauses already indicated, § 489\textsuperscript{2} (2) TsMS should be highlighted. According to the indicated clause a proposal for payment, payment order or another ruling related to expedited procedure in matters of payment order may also be made made in an automated manner through the information system of the expedited procedure in matters of payment order if the fulfillment of the prerequisites for making the ruling can be verified in an automated manner. In such case, a ruling need not be signed. The requirements for the information system of the expedited procedure in matters of payment order have been described in 489\textsuperscript{2} TsMS.

\textsuperscript{55} K. Turk, M. Pild, \textit{op cit}, p 6.
\textsuperscript{56} The tasks of the expert group have been described here: \url{https://www.kratid.ee/}
In addition, however, Constitution of the Republic of Estonia (PS) should be consulted. Namely, § 15 PS states that everyone whose rights and freedoms have been violated, has the right of recourse to the courts and §s 146-153 PS provide the basic principles of Estonian court system.

3.4 Using AI tools in the expedited procedure of payment orders - compatibility with PS, EU law and with the Ethical Charter of CEPEJ

In order for the use of AI technology to be lawful in Estonian procedure of payment orders it must comply with PS and with EU law. As indicated in chapters 3.3.1 there are no EU Directives or Regulations currently regulating the use of AI in judicial procedures. Ethical Charter of CEPEJ is not directly applicable but in order to improve efficiency and quality of justice it would be appropriate also to consider the five principles laid down in the Ethical Charter of CEPEJ (see chapter 3.3.1).

There are already some simple algorithms in use in Estonian payment order procedure which enable partial automatic processing of applications and to generate automatically the rulings. For example an algorithm checks that the claim does not exceed 6400 euros. Complete list and description of the ICT solutions currently in use in Estonian procedure of payment orders can be found in chapter 3.2. These solutions can not be considered as AI tools, however, as as technology evolves, the courts are likely to be interested in using AI tools as well. These new tools will gradually become available step-by-step and will be put in use separately on after another.

As shown below, the problems regarding to compatibility with PS can arise when AI tools are used to resolve a dispute or to assist courts in judicial decision-making. The automatic verification of prerequisites and the automatic verification of application are made with the aim of issuing automatic court ruling to propose a payment or issuing automatic court ruling to refuse

57 According to TsMS § 484 (2)2 expedited procedure in matters of payment order is not applied to the claims which amount exceeds 6400 euros. This amount includes both the main and collateral claims.
This type of activity can be considered as “administering justice” (in Estonian language “Õigusemõistmine”). For example, an algorithm verifies that the claimed sum would not exceed 6400 euros. It is not hard to assess whether the claim exceeds 6400 euros or not, but nevertheless, by doing so, law is applied to the facts of the circumstances. So even if it is to be assumed that the review of the application of Estonian procedure of payment orders is formal, at least in a very limited way justice will be administered.

According to IT Law Lab Task Description it is expected that a specific example of AI is used to illustrate the analysis. The AI example must be autonomous and contain an element of self-learning. As stated above, the AI solutions will most likely become available step-by-step, which means that the payment order procedure will be gradually become more and more automated. For the purpose of the following analysis, however, it is presumed that AI technology(s) is verifying all the preconditions of the payment order procedure stated in § 481 TsMS and checking all the data applicant is entered electronically according to § 482 TsMS.

Such AI solution would be fully autonomous and a court ruling would be generated completely without assistant judge intervention. AI tool must be very advanced, capable of natural language processing and understanding the basic nuances of the law. For example, AI tool must be capable to understand from the short description of the claim whether the claim is contractual or non-contractual, whether the claim is fallen due and the object of the claim is not a compensation of non-proprietary damage. AI must be capable of checking the databases and ensure that the debtor is not declared bankrupt. AI must understand and evaluate whether the description of evidence and circumstances is relevant and sufficient enough to start the proceedings. In other words, such AI must be capable of performing all the tasks which are currently performed manually by assistant judge.

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58 If application is not permitted according to TsMS § 481 or the application does not comply with the requirements provided in § 482 TsMS, then the court will refuse to satisfy application by a ruling (TsMS § 483 (2) p. 1 and 2), and vice versa, if the court satisfies application, then the court makes a ruling to propose payment (TsMS § 484 (1)).

3.4.1 Compatibility with § 12 PS

According to § 12 (1) PS everyone is equal before the law. No one may be discriminated based on nationality, race, colour, sex, language, origin, religion, political or other views, property or social status, or on other grounds. Prohibition of discrimination is also set out in Article 14 of ECHR which states that the enjoyment of the rights and freedoms set forth in ECHR shall be secured without discrimination on any ground such as sex, race, colour, language, religion, political or other opinion, national or social origin, association with a national minority, property, birth or other status.

According to principle no 2 of the Ethical Charter of CEPEJ public and private stakeholders developing AI tools must specifically prevent the development or intensification of any discrimination between individuals or groups of individuals. Charter points out that Court decisions may contain other, very varied, types of personal data that fall into this category of sensitive data. Courts dealing with criminal matters are particularly likely to process sensitive data such as those on criminal proceedings and convictions. All this sensitive data therefore deserves special vigilance. Their mass dissemination would present serious risks of discrimination, profiling and violation of human dignity. For example, the algorithm used in COMPAS predicted that black populations were more likely to reoffend as white populations meaning that white populations were much less likely to repeat the offence. Thus the algorithm clearly had discriminatory effects.

As can be seen from the example above, violation of non-discrimination principle and § 12 PS most likely arises particularly when AI algorithm is used to predict behavior of persons in criminal proceedings. This is due to the fact that crime predicting algorithms are using statistical

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60 Ethical Charter of CEPEJ, op cit, p. 12.
61 Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) is a decision support tool used by U.S. courts to assess the likelihood of a defendant repeating the offence: https://en.wikipedia.org/wiki/COMPAS_(software)
62 Ethical Charter of CEPEJ, op cit, p. 137.
data from past events to generate the predictions. Such predictive AI tool is unlikely to be used in the Estonian order for payment procedure.\textsuperscript{64} AI is primarily intended to be used to verify the preconditions of order for payment procedure (§ 481 TsMS) or the verification of the mandatory elements of application (§ 482 TsMS).\textsuperscript{65} The question of discrimination can only arise if applications are processed or rulings are generated differently depending on, for example, which ethnic group the person belongs to or on the basis of another discriminatory feature. Such discrimination is unlikely but still conceivable. To illustrate this, let’s assume that an algorithm (or AI tool) is designed to evaluate and process the short description of the claim. The description needs to be clear enough and contain sufficient information regarding to the claim in order to comply with § 482 TsMS. Let’s assume further that the algorithm is setting higher linguistic and grammatical requirements for the description if applicant is a native speaking Estonian compared to a applicant who is non-native speaker of Estonian. In such case the algorithm would discriminate applicants depending on the language spoken as the native language.

In case it is necessary to design a discriminating element in the AI technology it must be considered if such discrimination is justified. The case law of the Supreme Court of Estonia has been different in the choice of control scheme for the detection of violation of the fundamental right to non-discrimination. In most cases, it has been found that in order to establish a violation of the fundamental right of non-discrimination arising from the first sentence of § 12 (1) PS, it must be demonstrated that unequal treatment is arbitrary, ie there is no reasonable and appropriate reason for doing so. However, a proportionality test pursuant to § 11 of the Constitution has also been made in respect of the first sentence of § 12 (1) PS.\textsuperscript{66} In relation to legislation, the Supreme Court of Estonia has noted that the prohibition of non-discrimination is violated when two persons, a group of persons or a situation are treated unequally without reasonable justification. If there is a reasonable and appropriate reason, unequal treatment in legislation is justified.\textsuperscript{67}

\textsuperscript{64} For the time being none of the judges in the Council of Europe member states are using predictive software, Ethical Charter of CEPEJ, clause 3, p. 12.
\textsuperscript{65} This fact became known when talking to a Estonian court representative.
\textsuperscript{66} RKÜKo 3-4-1-12-10, with a dissenting opinion from justices J. Pöllu, H. Jõks, P. Pikamäe, T. Tampuu.
\textsuperscript{67} RKÜKo 3-4-1-12-07.
In the light of § 12 PS, the second principle of the Ethical Charter of CEPEJ it is advisable to implement the AI technology in a non-discriminatory manner. If is not possible to implement the AI in a non-discriminatory manner, then it is necessary to assess whether there is a reasonable and appropriate reason for discrimination in accordance with the above-mentioned instructions of the Supreme Court of Estonia.

3.4.2 Compatibility with § 15 PS

§ 15 (1) of the Constitution of Estonia states that everyone has the right to apply to the courts if their rights and freedoms have been violated. The interpretation of § 15 (1) Constitution must take account in particular of Articles 6 and 13 of the ECHR. Article 6 ECHR sets forth that in the determination of his civil rights and obligations /.../ everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law. According to Article 13 ECHR everyone whose rights and freedoms as set forth in this Convention are violated shall have an effective remedy before a national authority.

The first principle of Ethical Charter emphasizes that AI tools and services must be compatible with fundamental rights including the right of access to the judge and the right to a fair trial. Furthermore, according to the fifth principle (“under user control”), professionals in the justice system should, at any moment, be able to review judicial decisions and the data used to produce a result. /.../ parties must be clearly informed of any 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 heard directly by a court within the meaning of Article 6 of the ECHR. In depth study of CEPEJ highlights that especially in criminal trials the party concerned should also have access to and be able to challenge the scientific validity of an algorithm whenever a judge is using the algorithm before making his/her decision.

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69 Ethical Charter of CEPEJ, op cit, p. 6.
70 Ethical Charter of CEPEJ, Appendix 1, op cit, clause 138, p 44.
In the order for payment procedure the applicant and debtor both have the right to apply to the court in the meaning of § 15 (1) PS. If the application is not satisfied by the court, the applicant has the right to re-submit the application in payment order procedures or to submit the same claim in the action. Therefore, the question of the constitutionality of the right apply to the court should not arise.\footnote{V. Kõve, I. Järvekülg, J. Ots, M. Torga, \textit{op cit}, § 483, section 3.2.4.2.} The debtor has right to object the application in accordance with § 485 TsMS. In such case the court will continue to hear the same matter in actions, unless the applicant the has explicitly asked for termination of the proceeding in the case an objection is filed [§ 485 (4) TsMS]. The debtor may also file an appeal against a payment order (§ 489\footnote{Ethical Charter of CEPEJ, Appendix 1, \textit{op cit}, clause 138, p. 44.} TsMS). The right to file an appeal is limited, as in the appeal against a ruling, the debtor may only rely on the circumstances set out in § 489\footnote{Eesti Vabariigi põhiseadus. Kommenteeritud väljaanne, \textit{op cit}, § 15, section 3.} (2) TsMS. Additionally the debtor has the right to claim review of the payment order in accordance with § 702 TsMS.

It is questionable whether it should be allowed to challenge the scientific validity of an algorithm in order for payment procedure. The study of CEPEJ stresses that this option should be granted in criminal proceedings.\footnote{Eesti Vabariigi põhiseadus. Kommenteeritud väljaanne, \textit{op cit}, § 15, section 3.} Systematically, § 15 (1) PS, in conjunction with § 14 PS, is a \textit{lex generalis} relating to legal proceedings, which establishes a fundamental right to effective judicial protection and fair trial.\footnote{Eesti Vabariigi põhiseadus. Kommenteeritud väljaanne, \textit{op cit}, § 15, section 4.} When interpreting § 15 (1) PS in conjunction with § 14 PS, it must be assumed that the fundamental right encompasses all aspects of procedure law to ensure the rights of the person.\footnote{Eesti Vabariigi põhiseadus. Kommenteeritud väljaanne, \textit{op cit}, § 15, section 4.} It follows from these principles that the algorithms and AI-tools used in judicial proceedings must also be fair. In order to grant a fair fully automated procedure in payment orders, the option to challenge the scientific validity of the algorithm or an AI tool should be granted. This option should be laid down in the law to avoid any doubts.

In order for anyone to be able to challenge the algorithm, the algorithm should be transparent and understandable by design. According to the 4th principle of the Ethical Charter of cEPEJ (Principle of transparency, impartiality and fairness) data processing methods should be accessible and understandable and external audits should be allowed. A Special importance is given to this principle according to the Ethical Charter of CEPEJ. According to the Charter a
balance must be struck between the intellectual property of certain processing methods and the need for transparency (access to the design process), impartiality (absence of bias), fairness and intellectual integrity (prioritising the interests of justice) when tools are used that may have legal consequences or may significantly affect people’s lives.\textsuperscript{75} In order to achieve this, a complete technical transparency (for example, open source code and documentation) is needed. Another option would be to explain the system in clear and familiar language (to describe how results are produced) by communicating, for example, the nature of the services offered, the tools that have been developed, performance and the risks of error.

In order to maintain the fairness of the technology used in the courts a certain level of security is required. According to the 3rd principle of the Ethical Charter of CEPEJ (the principle of quality and security), the models and algorithms created must also be able to be stored and executed in secure environments, so as to ensure system integrity and intangibility.

The question also arises whether the right to fair trial is granted when the order for payment procedure is fully automatic. In order for the trial to be fair, the AI tools must be very advanced and flawless. They must be able to guarantee the correct resolution of the matter. Thus, a balance must be struck between procedural economics and the principle of fair trial. This issue is particularly relevant in regard to consumer contracts. Court of Justice ruled that the Consumer Contracts Directive must be interpreted in such a way that in payment order proceedings the court must assess the unfairness of the interest independently even if the debtor has not filed an objection.\textsuperscript{76} It can be concluded from this that the court must independently (i.e. without debtor’s objection) also verify the unfairness of other terms in consumer contracts. This would mean that the formal order for payment procedure is not allowed for consumer contracts,\textsuperscript{77} in other word, courts should always check the merits of the claim, if the claim arises from consumer contracts. This opinion is somewhat debatable and Estonian courts have not yet ruled on this issue. Thus it is presumed here, that the formal order for payment procedure is in line with the judgment of the European Court of Justice.

\textsuperscript{75} Ethical Charter of CEPEJ, op cit, p 9.
\textsuperscript{76} CJEU C-618/10, Banco Español de Crédito SA v Joaquín Calderón Camino.
To sum up, a full automatic payment order procedure is in line with § 15 PS if the technology and the AI tools in use are fair, transparent and understandable. They must be flawless and grant the right to fair trial. An option must be granted to challenge the scientific validity of the AI algorithm in order the process to be Fair. To grant the right to apply to the courts both parties should be able to present there claims and arguments in action.

3.4.3 Compatibility with § 146 and § 147 PS

§ 146 PS sets out that justice is administered exclusively by the courts. The courts are independent in discharging their duties and administer justice in accordance with the Constitution and the laws. “Administering justice” means that only the court can interpret and apply the law to the facts of each case. According to § 147 PS judges are appointed for life. The grounds and procedure for release of judges from office are provided by law. Judges may be removed from office only by a court judgment. Judges may not hold any other elected or appointed office, except for those prescribed in the law. The legal status of judges and guarantees for their independence are to be provided by law.

The Supreme Court of Estonia has found that only a appointed judge (meaning a natural person) can administer justice within the meaning of § 147 PS, because guarantees and restrictions provided in the Constitution apply only to him.\(^78\) Since the verification of the preconditions of order for payment procedures (§ 481 TsMS) or the verification of the mandatory data of application (§ 482 TsMS) and adopting a automatic ruling based on these verifications can be considered as “administering justice”\(^79\), then according to § 147 PS this can only be done by natural judge and not by AI tool. Same type of criticism regards to the usage of AI tools in courts can be found in German legal literature.\(^80\)

\(^{78}\) RKÜKo 3-4-1-29-13, with with a dissenting opinion from justices J. Pöllu, E. Kergandberg, J. Luige, p. 44.6.


At the moment, the order for payment procedures are conducted in the courts by assistant judges. Assistant judges are not judges within the meaning of 146 PS and § 147 PS. Irrespective of this, the assistant judges are still allowed to conduct the proceedings. Such right is granted to them in § 489² (1) TsMS which states that a proposal for payment, payment order or another ruling related to order for payment procedures, including a ruling specified in § 179 of this Code, may also be made by an assistant judge.

Current law also allows to use programs and algorithms in the proceeding. § 489² (2) TsMS states that rulings related to order for payment procedures may also be made in an automated manner through the information system (e-toimik) if the fulfilment of the preconditions for making the ruling can be verified in an automated manner.

Taking into account that current law allows to automate the proceedings and assistant judges to conduct the proceedings, also that algorithms are already in use to verify the preconditions and generate the rulings, it must be concluded that further automation is allowed and coherent with § 146 and § 147 PS.

**SUMMARY**

A full automatisation of the order for payment procedure by AI is desirable to reduce the workload of the courts and increase procedural economy. Balance must be found between the right to public hearing within a reasonable time and the right to fair trial.

It is advisable to implement the AI technology in the order for payment procedure in a non-discriminatory manner. If it is not possible to implement the AI in a non-discriminatory manner, then there must be is a reasonable and appropriate reason for discrimination.

AI-tools used in judicial proceedings must be fair, transparent and understandable by design. This could be achieved, for example, by open source code and documentation or description of
the system in clear and familiar language. The AI tools need to be good enough in quality and performance to guarantee the fair trial. Applicant and debtor should have the option to challenge the scientific validity of the algorithm or AI tool.

Both parties should be able to present their claims and arguments in action in order to grant the right to apply to the courts.

Current law allows to use programs and algorithms in the order for payment procedure and thus, there is no need to make any significant changes to the law. However, the option to challenge the scientific validity of the algorithm should be laid down in the law to avoid any doubts.

ABBREVIATIONS

CEPEJ - Council of Europe European Commission for the efficiency of justice
CJEU - Court of Justice of the European Union
ECHR - European Convention of Human Rights
PS - Constitution of the Republic of Estonia
RKÜKo - Decision of Supreme Court en banc
TsMS - Code of Civil Procedure

LIST OF LITERATURE


LIST OF LEGAL ACTS AND POLICY DOCUMENTS


LIST OF JUDICIAL PRACTICE

1. CJEU C-618/10, Banco Español de Crédito SA v Joaquín Calderón Camino.
2. RKÜKo 3-4-1-12-07.
3. RKÜKo 3-4-1-12-10, with a dissenting opinion from justices J. Põllu, H. Jõks, P. Pikamäe, T. Tampuu.
4. RKÜKo 3-4-1-29-13, with a dissenting opinion from justices J. Põllu, E. Kergandberg, J. Luige.