EU ETHICAL CHARTER ON THE USE OF ARTIFICIAL INTELLIGENCE IN JUDICIAL SYSTEMS WITH A PART OF THE LAW BEING ESTABLISHED ON BLOCKCHAIN AS A TROJAN HORSE ANTI-COUNTERFEITING IN A GLOBAL PERSPECTIVE

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Abstract. *In 2018 the use of artificial intelligence (AI) algorithms in European judicial systems remains primarily a private-sector commercial initiative aimed at insurance companies, legal departments, lawyers and individuals. The European Commission for the Efficiency of Justice (CEPEJ) of the Council of Europe in the 4 of the december 2018 has adopted the first european text setting out ethical principles relating to the use of artificial intelligence (AI) in judicial systems. The Charter provides a framework of principles that can guide policy makers, legislators and justice professionals when they grapple with the rapid development of AI in national judicial processes. Aside from the benefits for copyright traceability and management, blockchain can also become a central means for protecting digital assets and provide the rightholder with the ability to pursue civil and criminal remedies. The Anti-Counterfeiting Blokathon Forum on 2018 takes forward its works on using blockchain to co-create the future EU anti-counterfeiting infrastructure. Could blockchain live up to the challenge? Any future anti-counterfeiting blockchain solution must comply with Regulation (EU) No 608/2013 of the European Parliament and of the Council of 12 June 2013 concerning customs enforcement of intellectual property rights, and with Ethical Charter made from CEPEJ in the 2018.*
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The European Commission for the Efficiency of Justice (CEPEJ) of the Council of Europe in the 4 of the december 2018 has adopted the first european text setting out ethical principles relating to the use of artificial intelligence (AI) in judicial systems. The Charter provides a framework of principles that can guide policy makers, legislators and justice professionals when they grapple with the rapid development of AI in national judicial processes: PRINCIPLE OF RESPECT FOR FUNDAMENTAL RIGHT: ensure that the design and implementation of artificial intelligence tools and services are compatible with fundamental rights; PRINCIPLE OF NON-DISCRIMINATION: specifically prevent the development or intensification of any discrimination between individuals or groups of individuals; PRINCIPLE OF QUALITY AND SECURITY: with regard to the processing of judicial decisions and data, use certified sources and intangible data with models elaborated in a multi-disciplinary manner, in a secure technological environment; PRINCIPLE OF TRANSPARENCY, IMPARTIALITY AND FAIRNESS: make data processing methods accessible and un-

derstandable, authorise external audits; PRINCIPLE OF "UNDER USER CONTROL": preclude a prescriptive approach and ensure that users are informed actors and in control of the choices made.

The EU strategy on AI technology in a single digital market is to building trust in human centric AI, and in the 8 of April 2019 the EU Commission takes forward its works on ethics guidelines made from high level expert group (HLEG). This document is a starting point for the discussion about "Trustworthy AI for Europe" and has three components, which should be met throughout the system's entire life cycle: 1. it should be **lawful**, complying with all applicable laws and regulations; it should be **ethical**, ensuring adherence to ethical principles and values; 3. it should be **robust**, both from a technical and social perspective, since, even with good intentions, AI systems can cause unintentional harm. The aim is to foster cross-border cooperation and mobilise all players to increase public and private investments to at least EUR 20 billion annually over the next decade. The EU Commission doubled its investments in AI in **Horizon 2020** and plans to invest EUR 1 billion annually from **Horizon Europe** and the **Digital Europe Programme**, in support notably of common data spaces in health, transport and manufacturing, and large experimentation facilities such as smart hospitals and infrastructures for automated vehicles and a strategic research agenda. The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the societies of all Member States in which pluralism, non-discrimination, tolerance, justice, solidarity and equality prevail. In addition, the EU Charter of Fundamental Rights brings together — in a single text — the personal, civic, political, economic and social rights enjoyed by people within the EU. The EU has a strong regulatory framework that will set the global standard for human-centric AI**.**

Judicial decision processing by AI, according to their developers, is likely, in civil, commercial and administrative matters, to help improve the predictability of the application of the law and consistency of court decisions, subject to compliance with the principles set out below. **In criminal matters, their use must be considered with the greatest reservations in order to prevent discrimination based on sensitive data, in conformity with the guarantees of a fair trial**. Whether designed with the aim of assisting in the provision of legal advice, helping in drafting or in the decision-making process, or advising the user, it is essential that processing is carried out with transparency, impartiality and equity, certified by an external and independent expert assessment. The use of AI science and technology in criminal matters poses specific challenges as its application may reflect some current public debates about the alleged predictability of offending behaviour. However, this debate seemed to have been thoroughly settled for some thirty years in a number of European countries. In Italy for example, Article 220, paragraph 2, of the Code of Criminal Procedure expressly rules out the use of an expert opinion to establish habitual or professional criminal features, the tendency to commit a crime, the character and personality of the accused and, in general, the psychological qualities of the accused, regardless of the pathological causes. This approach is shared by a number of European criminal policy instruments that focus on the objectives of re- educating and reintegrating offenders (ECHR, Grand Chamber, *Vinter and Others vs. United Kingdom*, paras. 114 — 118. There is also now clear support in European and international law for the principle that all prisoners, including

those serving life sentences, be offered the possibility of rehabilitation and the prospect of release if that rehabilitation is achieved). **Tools used by investigative authorities before the criminal trial** Instruments described as **"predictive policing"** (before the judicial process or before a court referral) are already growing rapidly and are beginning to be known by the general public (for example, think of the **no fly list**, which is actually a big data analytics application that collects and analyses data on **potential terrorists** in order to prevent the commission of acts, or algorithms used to detect **fraud** or **money laundering**). The first category includes "predictive policing" instruments that are used to prevent certain types of offences with elements of regularity in their occurrence such as burglary, street violence, theft from/of vehicles. **Tools during the criminal trial.** The use of predictive tools by judges in criminal trials is very rare in Europe.

Counterfeiting as a Global Phenomenon: The Anti-Counterfeiting Blokathon Forum 2018. By global perspective the counterfeit medicine market is now responsible for around 1 million deaths a year, in an industry estimated to be worth $75bn annually. In fact, the counterfeit medicine industry is estimated to be growing at twice the rate of legitimate pharmaceuticals, making it up to 25 times more lucrative than the global narcotics trade “We *now have more fakes than real drugs in the market.”*— Christophe Zimmermann, the anti-counterfeiting and piracy co-ordinator of the World Customs Organisation. The Anti-Counterfeiting Blokathon Forum on 2018 takes forward its works on **using blockchain to co-create the future EU anti-counterfeiting infrastructure.** The European Union Intellectual Property Office (EUIPO) said that a token is a unique digital representation of any applied tracking or identification measure used in a product to distinguish that product from other products. **Tokenisation** is the technical process to produce a token. Authenticity is at the core of the anti- counterfeiting use case addressing the need to prove that the goods handled are genuine. Rights holders gain access to the anti-counterfeiting blockchain through the Blockchain Access Portal. This gives permissions to create tokens in the blockchain representing actual goods. Optionally rights holder can use the same portal to identify further parties, such as manufacturers authorised to create goods tokens. They may also specify product lines managed through the blockchain. At the point of tokenising goods to track on the anti-counterfeiting blockchain, it is imperative to link the blockchain identity with the real-world goods by using characteristics and identifiers of the goods, its labelling or packaging (e.g. bar codes, QR codes, chemical fingerprints). Any user, such as transport companies, enforcement authorities or the final consumer, can scan the goods to check their authenticity. **Could blockchain live up to the challenge?** Any future anti-counterfeiting blockchain solution must comply with Regulation (EU) No 608/2013 of the European Parliament and of the Council of 12 June 2013 concerning customs enforcement of intellectual property rights.

Blockchain, smart contracts and copyright enforcement. Even if the application of blockchain for copyright registration is not so widespread at the moment, the introduction of blockchain registries in the long term could be deemed successful if we consider the benefits carried out by registration in other areas of property and intellectual property. For example Kodak’s plan is to use the Blockchain to build a digital rights management platform for photographs. Photographers will register their photos on the KodakOne platform and buyers will purchase rights using the KodakCoin cryptocurrency. In its interaction with copyright related issues, blockchain is presented as an **opportunity to improve**

the efficiency and transparency of the market, but there are still many frictions between the design of the technology and the legal architecture surrounding the copyright.

Blockchain and Due Process of Law: notice and "take down" procedure. We are likely facing an exciting **crypto-revolution** (following the digital revolution), but in order to express the full potential of the Blockchain, first we need to ensure a sufficient political and legal debate and provide a common set of standards, to be globally recognized, that can balance the progress of technology with the inclinations of users and society. In a global perspective it's very important the EU Digital Single Market: *Copyright EU Resolution and Digital Single Market 26.03.2019* — Art. 11/15 (link tax) art. 13/17 (upload filter) against web giant (Google, Facebook, Youtube etc.). **With a part of the law being established on blockchain** we have to take into the right account the notice and "take down procedure" as a **trojan horse anti-counterfeiting in a global perspective —** Online Copyright Infringement Liability Limitation as «Notice and takedown procedure» was adopted by Electronic Commerce Directive (2000), under art. 14. implemented in Italy by Legislative Decree 70/2003 — See now at the EU legal framework **on** blockchain and smart contract italian law: Art. 8-ter of the Simplification Decree (Legislative Decree 14 December 2018, No. 135, converted into law with Law 11 February 2019, No. 12). Could Blockchain live up to the challenge of online copyright Infringement liability limitation? Any future anti-counterfeiting blockchain solution must comply with European Ethical Charter on the use of Artificial Intelligence in Judicial System adopted by CEPEJ on 2018.

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