

Artificial Intelligence Regulation: Approaches and Implications

PhD. student **Gabriel NIȚĂ**¹

Abstract

The complexity of technological risks and cyber security risks with a major significant impact on fundamental rights and freedoms arising from the adoption of new artificial intelligence technologies calls for the implementation of specific regulations adapted to the rapid pace of technological innovation and the continuous evolution of threats in this area. The proposed study will focus both on the critical analysis of the regulatory and institutional instruments for regulating artificial intelligence as one of the so-called disruptive technologies and on the challenges faced by regulators. Methodologically, the research will involve the identification and analysis of the risks associated with AI technology, followed by a systematic assessment of the mandatory (hard law) and non-mandatory (soft law) legal instruments applicable to the field, as well as proposed governance system proposals, in order to identify similarities and juxtapositions. In addition, synthesising the views expressed in legal doctrine will make an important contribution to analyse and understand the challenges to regulation and governance posed by new digital technology. By analysing from different perspectives, the proposed regulations to prevent risks associated with artificial intelligence, the scientific contribution brings into question possible directions for the future regulatory framework.

Keywords: artificial intelligence, risk, regulation, ethics, governance.

JEL Classification: K24, K33

DOI: <https://doi.org/10.62768/ADJURIS/2024/1/10>

Please cite this article as:

Gabriel Niță, „Artificial Intelligence Regulation: Approaches and Implications”, in Pajuste, Tiina, Heliona Bellani (Miço) & Sejla Maslo Cerkic (eds.), *Legal Perspectives in the Modern Era of Technological Transformations*, ADJURIS – International Academic Publisher, Bucharest, Paris, Calgary, 2024, p. 154-176.

1. Introduction

Artificial intelligence technology is a catalyst for the ‘*fourth industrial revolution*’², as the digital revolution has been called, being a central element of the digital transformation of society, representing a cultural change as much as a

¹ Gabriel Niță - Faculty of Law, „Babeș-Bolyai” University of Cluj-Napoca, Romania, gabriel.nita@law.ubbcluj.ro.

² The concept introduced by Klaus Schwab in *The Fourth Industrial Revolution*, World Economic Forum, 2016, the document is available online at https://law.unimelb.edu.au/__data/assets/pdf_file/0005/3385454/Schwab-The_Fourth_Industrial_Revolution_Klaus_S.pdf, accessed on 27.02.2024.

technical one³. Recent studies⁴ note the potential of artificial intelligence technology to grow the global economy, with an estimated total economic impact by 2030 of \$15.7 trillion (representing a 14% increase in global GDP), but this will require strategic investment in different types of artificial intelligence technologies.

The main feature of artificial intelligence technology is to solve tasks typical of human behaviour by applying algorithmic programs (analytical, predictive, classification) to large volumes of computer data (including both personal and non-personal data). Artificial intelligence applications are designed to operate with different levels of autonomy. In practice, they improve the speed, accuracy and effectiveness of human efforts and are used in most fields. Artificial intelligence systems can be software only, operating in the virtual world (e.g. voice assistants, image analysis software, search engines, voice or facial recognition systems) or artificial intelligence can be embedded in hardware devices (e.g. advanced robots, autonomous vehicles, drones or the Internet of Things/IoT applications)⁵.

As a computing environment, artificial intelligence is both technically and legally complex. From a technical point of view, the architecture of artificial intelligence involves a set of technologies combining IT infrastructure, data, algorithms and computing power. The performance of artificial intelligence is dependent on interaction with other emerging technologies such as Big Data, Cloud Computing or Quantum Computing. From a legal perspective, artificial intelligence is a computing environment that brings new types of threats to the cybersecurity landscape by extending existing threats or introducing new ones⁶. The artificial intelligence environment has allowed cyber actors to expand their attack surface, targeting cyber attacks on artificial intelligence models by exploiting their vulnerabilities affecting the confidentiality, integrity and availability of the data and information systems they interact with. In addition, technological risks related to potential opacity, possible errors, algorithmic discrimination and lack of explainability increase the threat to fundamental rights and freedoms.

³ Ryan Calo, Kate Crawford, *There is a blind spot in AI research*, 'Nature' 538, 2016, pp. 311–313, the document is available online at <https://www.nature.com/articles/538311a>, accessed on 27.02.2024.

⁴ PwC, *Sizing de prize. What's the real value of AI for your business and how can you capitalise?*, 2017, the document is available online at <https://www.pwc.com/gx/en/issues/data-and-analytics/publications/artificial-intelligence-study.html>, accessed on 27.02.2024.

⁵ European Commission, *Communication from the Commission to the European Parliament, The European Council, The Council, The European Economic and Social Committee and The Committee of the Regions – Artificial Intelligence for Europe, COM (2018) 237 final*, Bruxelles, 25.04.2018, p. 2, the document is available online at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0237>, accessed on 27.02.2024.

⁶ Pupillo Lorenzo, Fantin Stefano, Ferreira Afonso, Polito Carolina, *Artificial Intelligence and Cybersecurity. Technology, Governance and Policy Challenges*, Centre for European Policy Studies (CEPS), Brussels, 2021, the document is available online at <https://www.ceps.eu/ceps-publications/artificial-intelligence-and-cybersecurity-2/>, accessed on 27.02.2024.

The AI Incident Database⁷ now identifies over 500 cases globally where recently deployed artificial intelligence systems have produced unexpected results in the real world, affecting fundamental rights and freedoms.

Technological and cybersecurity risks arising from the use of artificial intelligence systems have led to an upsurge in the adoption of preventive regulatory frameworks at global, regional, national or sectoral level.

This new technology represents a major advance in the field of technology and is the focus of legal scholarship exploring its legal implications, with previous scholarly approaches generally focusing on a particular study of ethical frameworks or legal mechanisms or the impact on fundamental rights and freedoms, without an integrated approach to the landscape of regulatory and governance frameworks for artificial intelligence, which is absolutely necessary to identify possible overlaps and juxtapositions. This interdisciplinary study takes a comprehensive look at the adequacy and limitations of existing ethical and legal frameworks related to artificial intelligence technology, with the aim of evaluating and improving its associated practices and regulations. The article is further organised as follows: Section 2 examines the regulatory landscape of artificial intelligence, Section 3 will be oriented towards the analysis of the main proposed governance systems with respect to the environment and artificial intelligence technology, in the perspective of preventing risks associated with them, and in the last section we will cover the conclusions of the study.

2. Regulating artificial intelligence

As in the past, uncertainty about the potential impact of new technologies and an existing legal framework not adapted to new socio-technical scenarios has been the main reason for legislative bodies to regulate⁸. The debate on the regulation of artificial intelligence is still fluid globally and legislative initiatives are at an early stage and fragmented.

As a result of technological progress and the growing impact of artificial intelligence on fundamental rights and freedoms, governments and international organisations have begun to focus on establishing ethical and legal frameworks for the use and development of this technology. These initiatives are criticised, on the one hand, for being premature given the early stage of development of the new technology⁹, and, on the other hand, for the unknown and difficult to control

⁷ Sean McGregor, *Preventing Repeated Real World AI Failures by Cataloging Incidents: The AI Incident Database*, the data are available online at <https://incidentdatabase.ai/apps/incidents/>, accessed on 29.02.2024.

⁸ Gary E. Merchant, Braden R. Allenby, Joseph R. Herkert, *The Growing Gap Between Emerging Technologies and Legal-Ethical Oversight*, The International Library of Ethics, Law and Technology, 2011, volume 7, the document is available online at <https://link.springer.com/book/10.1007/978-94-007-1356-7>, accessed on 02.06.2023.

⁹ Calo Ryan, *Peeping HALs: Making Sense of Artificial Intelligence and Privacy*, *European Journal of Legal Studies*, 2010, 2, 3, the document is available online at <https://hdl.handle.net/1814/15123>,

risks¹⁰.

The instruments adopted at the level of international bodies have focused initially on establishing principled ethical standards in the design, development and use of artificial intelligence, and more recently on regulatory and standardisation initiatives based on risk assessment.

Since 2016, there has been a real effervescence in the adoption of ethical frameworks on artificial intelligence from intergovernmental agencies (OECD¹¹, Council of Europe¹², European Union¹³, UNESCO¹⁴, G20¹⁵), government bodies¹⁶,

accessed on 08.06.2023; Gary Marchant, Lucille Tournas, Carlos Ignacio Gutierrez, *Governing emerging technologies through Soft Law: Lessons for Artificial Intelligence*, 07.12.2020, 'Jurimetrics', vol. 61, Issue no. 1 (Fall 2020), the document is available online at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3761871, accessed on 16.01.2023; Ryan Hageman, Jennifer Hudleston, Adam Thierer, *Soft Law for Hard Problems: The Governance of Emerging Technologies in an Uncertain Future*, 'Colorado Technology Law Journal', 05.02.2018, the document is available online at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3118539, accessed on 08.06.2023.

¹⁰ Buiten Miriam, *Towards Intelligent Regulation of Artificial Intelligence*, 29.04.2019, 'European Journal of Risk Regulation' 10(1), 2019, pp. 41–59, the document is available online at <https://www.cambridge.org/core/journals/european-journal-of-risk-regulation/article/towards-intelligent-regulation-of-artificial-intelligence/AF1AD1>, accessed on 13.12.2022.

¹¹ OECD, *Recommendation 0449 of the Council on Artificial Intelligence*, 22.05.2019, the document is available online at <https://oecd.ai/en/assets/files/OECD-LEGAL-0449-en.pdf>, accessed on 06.06.2023.

¹² The Council of Europe, European Commission for the Efficiency of Justice (CEPEJ), *European ethical Charter on the use of Artificial Intelligence in judicial systems and their environment*, the document is available online at <https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c>, accessed on 06.06.2023.

¹³ European Commission, High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI*, 08.04.2019, the document is available online at <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>, accessed on 29.02.2024.

¹⁴ UNESCO, *Recommendation on the Ethics of Artificial Intelligence*, 23.11.2021, the document is available online at <https://unesdoc.unesco.org/ark:/48223/pf0000381137>, accessed on 06.06.2023.

¹⁵ G20, *G20 AI Principles*, 2019, the document is available online at <https://wp.oecd.ai/app/uploads/2021/06/G20-AI-Principles.pdf>, accessed on 06.06.2023.

¹⁶ UK: House of Lords – Select Committee on Artificial Intelligence, *AI in the UK: ready, willing and able?*, 16.04.2018, the document is available online at <https://publications.parliament.uk/pa/ld201719/ldselect/ldai/100/100.pdf>; Japan: *Social Principles of Human-Centric AI*, 2019, the document is available online at <https://www.cas.go.jp/jp/seisaku/jinkouchinou/pdf/humancentricai.pdf>; China: National Governance Committee for the New Generation Artificial Intelligence, *Governance Principles for the New Generation Artificial Intelligence*, 2019, the document is available online at <http://www.chinadaily.com.cn/a/201906/17/WS5d07486ba3103dbf14328ab7.html>; Australia: Department of Industry, Science and Resources, *Australia's Artificial Intelligence Ethics Framework*, 07.11.2019, the document is available online at <https://www.industry.gov.au/publications/australias-artificial-intelligence-ethics-framework>; The United States: Executive Office of the President, *Executive Order 13960 on Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government*, 03.12.2020, the document is available online at <https://www.federalregister.gov/documents/2020/12/08/2020-27065/promoting-the-use-of-trustworthy-artificial-intelligence-in-the-federal-government>, all accessed on 06.06.2023.

private organisations (IBM¹⁷, Google¹⁸, Microsoft¹⁹, Tencent Institute²⁰), NGOs (Access Now and Amnesty International²¹, UNI Global Union²²) or with the participation of all stakeholders (Asilomar Principles²³, Montreal Declaration²⁴, IEEE²⁵, Beijing Principles²⁶). The vast majority of initiatives come from economically developed countries (the USA, the UK, Japan, Germany, China), with an under-representation of the Global South²⁷.

The report by the UN Secretary-General for Digital Cooperation²⁸ and Algorithm Watch²⁹ cites the existence of more than 160 instruments or mechanisms to regulate the ethics of artificial intelligence globally as the most effective proactive strategy to mitigate the risks posed by new disruptive technology. The plethora of proposed ethical initiatives on artificial intelligence runs the risk of unnecessary repetition and duplication if the different sets of principles are similar, or confusion and ambiguity if they differ³⁰. The landscape of ethical principles

¹⁷ IBM, *Everyday Ethics for Artificial Intelligence*, the document is available online at <https://www.ibm.com/downloads/cas/VDO5W3JK>, accessed on 06.06.2023.

¹⁸ Google, *AI at Google: Our Principles*, 2019, the document is available online at <https://www.blog.google/technology/ai/ai-principles/>, accessed on 06.06.2023.

¹⁹ Microsoft, *Microsoft AI Principles*, 2018, the document is available online at <https://www.microsoft.com/en-us/ai/our-approach?activetab=pivot1%3aprimar5>, accessed on 06.06.2023.

²⁰ Tencent Institute, *Technological ethics at intelligent era – reshape trustworthiness in digital society*, 08.07.2019, the document is available online at <https://tisi.org/10890>, accessed on 06.06.2023.

²¹ Access now, Amnesty International, *The Toronto Declaration*, 16.05.2018, the document is available online at <https://www.amnesty.org/en/documents/pol30/8447/2018/en/>, accessed on 06.06.2023.

²² UNI Global Union, *Top 10 Principles for Ethical Artificial Intelligence*, 2017, the document is available online at http://www.thefutureworldofwork.org/media/35420/uni_ethical_ai.pdf, accessed on 06.06.2023.

²³ The Future of Life Institute, *AI Principles*, 11.08.2017, the document is available online at <https://futureoflife.org/open-letter/ai-principles/>, accessed on 06.06.2023.

²⁴ *Montreal Declaration for a Responsible Development of Artificial Intelligence*, 2018, the document is available online at https://www.montrealdeclaration-responsibleai.com/_files/ugd/ebc3a3_5c89e007e0de440097cef36dcd69c7b0.pdf, accessed on 06.06.2023.

²⁵ The Institute of Electrical and Electronics Engineers, *Ethically Aligned Design*, 2019, the document is available online at <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=93986> 13, accessed on 06.06.2023.

²⁶ Beijing Academy of Artificial Intelligence, *Beijing AI Principles*, 28.05.2019, the document is available online at <https://link.springer.com/content/pdf/10.1007/s11623-019-1183-6.pdf>, accessed on 06.06.2023.

²⁷ Schiff Daniel, *What's Next for AI Ethics, Policy, and Governance? A Global Overview*, the document is available online at <https://aies-conference.com/2020/wp-content/papers/030.pdf>, accessed on 29.02.2024.

²⁸ United Nations, *Report of the Secretary-General' Roadmap for Digital Cooperation'*, 2020, the document is available online at https://www.un.org/en/content/digital-cooperation-roadmap/assets/pdf/Roadmap_for_Digital_Cooperation_EN.pdf, p. 18, accessed on 06.06.2023.

²⁹ AlgorithmWatch, *AI Ethics Guidelines Global Inventory*, 2020, the document is available online at <https://inventory.algorithmwatch.org>, accessed on 06.06.2023.

³⁰ Floridi Luciano, Cows Josh, *A Unified Framework of Five Principles for AI in Society*, 29.04.2021, the document is available online at <https://papers.ssrn.com/sol3/papers.cfm?abstract>

is vast, but recent studies³¹ show global convergence around the following: transparency, fairness, non-abuse of artificial intelligence, accountability, privacy.

However, the ethical guidelines on artificial intelligence have some limitations in mitigating and preventing the risks associated with the new technology, mainly due to the formulation of sets of principles in too broad terms which may contribute to divergent interpretations³², the lack of balanced participation in their elaboration which may contribute to ‘ethics washing’³³, the lack of legal force to enforce compliance and legal consequences in case of violation³⁴, and the lack of enforcement mechanisms³⁵.

Due to the fact that ethical guidelines cannot provide full legal protection

_id=3831321, accessed on 01.12.2023; Rees Connor, Muller Berndt, *All that glitters is not gold: trustworthy and ethical AI principles*, *AI and Ethics*, 16.11.2022, the document is available online at <https://link.springer.com/article/10.1007/s43681-022-00232-x>, accessed on 30.11.2023.

³¹ Fjeld Jessica, Nele Achten, Hannah Hilligoss, Adam Nagy, Madhulika Srikumar, *Principled Artificial Intelligence: Mapping Consensus in Ethical and Right-based Approaches to Principles of AI*, Berkman Klein Center, Research Publication no. 2020-1, the document is available online at <https://ssrn.com/abstract=3518482>, accessed on 02.12.2023; Jobin Anna, Ienca Marcelo, Vayena Effy, *Artificial Intelligence: the global landscape of ethics guidelines*, 2019, the document is available online at <https://arxiv.org/abs/1906.11668>, accessed on 01.12.2022; Zeng Yi, Enmeng Lu, Cunqing Huangfu, *Linking Artificial Intelligence Principles*, the document is available online at <https://arxiv.org/abs/1812.04814>, accessed on 02.12.2023; Niels van Berkel, Eleftherios Papachristos, Anastasia Giachanou, Simo Hosio, *A systematic Assessment of National Artificial Intelligence Policies: Perspectives from the Nordics and Beyond*, the document is available online at <https://www.researchgate.net/publication/344320861>, accessed on 02.12.2023; Hagendorff Thilo, *The Ethics of AI Ethics. An Evaluation of Guidelines*, 11.10.2019, the document is available online at <https://arxiv.org/abs/1903.03425>, accessed on 30.11.2023; PwC, *Responsible AI – Maturing from theory to practice*, 2021, the document is available online at <https://www.pwc.com/gx/en/issues/data-and-analytics/artificial-intelligence/what-is-responsible-ai/pwc-responsible-ai-maturing-from-theory-to-practice.pdf>, accessed on 06.06.2023.

³² Whittlestone Jess, Rune Nyrup, Anna Alexandrova, Stephen Cave, *The Role and Limits of Principles in AI Ethics: Towards a Focus on Tensions*, AIES '19: Proceedings of the 2019 AAAI/ACM Conference on AI, Ethics, and Society, 2019, pp. 195–200, the document is available online at <https://dl.acm.org/doi/10.1145/3306618.3314289>, accessed on 29.02.2024.

³³ Stix Charlotte, *Actionable Principles for Artificial Intelligence Policy: Three Pathways*, *Science and Engineering Ethics*, 2021, Volume 27, the document is available online at <https://link.springer.com/article/10.1007/s11948-020-00277-3>, accessed on 02.02.2024.

³⁴ Bruschi Danilo, Diomede Nicla, *A framework for assessing AI ethics with applications to cybersecurity*, *AI and Ethics*, 2022, Volume 3, pp. 65–72, the document is available online at <https://link.springer.com/article/10.1007/s43681-022-00162-8>, accessed on 02.01.2022; Stahl Bernd Carsten, Rowena Rodrigues, Nicole Santiago, Kevin Macnish, *A European Agency for Artificial Intelligence: Protecting fundamental rights and ethical values*, *Computer Law & Security Review*, 2022, Volume 45, the document is available online at <https://sciencedirect.com/science/article/pii/S0267364922000097>, accessed on 09.12.2023.

³⁵ Fukuda-Parr Sakito, Gibbons Elisabeth, *Emerging Consensus on 'Ethical AI': Human Rights Critique of Stakeholders Guidelines*, *Global Policy*, 2021, Volume 12, Supplement 6, the document is available online at <https://onlinelibrary.wiley.com/doi/full/10.1111/1758-5899.12965>, accessed on 13.12.2022; Eileen Donahoe, Megan MacDuffee Metzger, *Artificial Intelligence and Human Rights*, *Journal of Democracy*, 2019, Volume 30(2), pp. 115–126, the document is available online at <https://www.proquest.com/docview/2295528777>, accessed on 07.06.2023.

of individual rights and interests against the risks associated with the new technology, there has been an increase in policy-makers' interest in adopting legislation on artificial intelligence. Ethical guidelines and legal regulation are not mutually exclusive but complementary. Legal regulation can provide clarity and a binding legal framework for the implementation of ethical principles.

The Ad hoc Committee on Artificial Intelligence of the Council of Europe, in its studies '*Towards Regulation of AI Systems*' (2020)³⁶ and '*A Legal Framework of AI Systems*' (2021)³⁷, considers that a comprehensive legal framework based on the Council of Europe's human rights standards is needed to fill the substantive and procedural gaps in ethical frameworks. The European Commission, through the *White Paper on Artificial Intelligence – A European Approach to Excellence and Trust, COM(2020) 65 Final*³⁸, proposes a European legal framework for trusted artificial intelligence. In the same vein, there are approaches to the need for federal legislation in the US or primary legislation in the UK.

There are, however, opinions that legal regulation in the field of artificial intelligence is inappropriate given that the law, in general, cannot keep up with technology³⁹, is not precise enough to regulate complex technology and is too inflexible to take into account all possible future developments⁴⁰, as well as due to the lack of expertise in the public sector to coordinate policies aimed at new technology in the industrial sector⁴¹. On the contrary, others⁴² consider that regulation by law is necessary in view of the intensity of the threats posed by artificial intelligence technology and its impact on the rule of law, democracy and human rights.

Many countries globally are developing or adopting specific laws to address the risks associated with artificial intelligence. The overarching theme of

³⁶ The document is available online at <https://edoc.coe.int/fr/intelligence-artificielle/9656-towards-regulation-of-ai-systems.html#>, accessed on 08.06.2023.

³⁷ The document is available online at <https://edoc.coe.int/fr/intelligence-artificielle/9648-a-legal-framework-for-ai-systems.html>, accessed on 08.06.2023.

³⁸ The document is available online at <https://eur-lex.europa.eu/legal-content/RO/TXT/HTML/?uri=CELEX:52020DC0065>, accessed on 08.06.2023.

³⁹ Taihagh Arez, *Assessing the regulatory challenges of emerging disruptive technologies*, 'Regulation & Governance', 2021, Volume 15, pp. 1009–1019, the document is available online at <https://onlinelibrary.wiley.com/doi/epdf/10.1111/rego.12392>, accessed on 16.12.2023.

⁴⁰ Nemitz Paul, *Constitutional democracy and technology in the age of artificial intelligence*, 15.10.2018, 'Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences', Volume 376, Issue 2133 the document is available online at <https://royal.societypublishing.org/doi/epdf/10.1098/rsta.2018.0089>, accessed on 28.02.2024.

⁴¹ Calo Ryan, *Artificial Intelligence Policy: A Primer and Roadmap*, "University of Bologna Law Review", 2018, Volume 3(2), pp. 180–218, the document is available online at <https://doaj.org/article/cc06b2b47fbc4e3d9b6d6835b7fc6bca>, accessed on 23.02.2024.

⁴² Nemitz Paul, *op. cit.*; Clarke Roger, *Regulatory alternatives for AI*, "Computer Law & Security Review", 2019, Volume 35, pp. 398–409, the document is available online at <https://www.science-direct.com/science/article/abs/pii/S0267364919301281>, accessed on 27.12.2023.

the regulations adopted or being adopted globally is to maintain the accountability, transparency and fairness of artificial intelligence. According to the *'2023 AI Index Report'*⁴³ there will be 37 such legislative initiatives in 2022, compared to 2016 when only one legislative proposal was registered.

At the national level, the United States, through the Algorithmic Accountability Act of 2022⁴⁴, requires companies to assess the impact of artificial intelligence. During 2022, the UK has put forward proposals for the future regulation of artificial intelligence⁴⁵ that address future risks and opportunities. In the same year, a regulatory instrument⁴⁶ came into force in China regulating companies' use of algorithms in online recommender systems, requiring such services to be moral, ethical, accountable and transparent. In Romania, a legislative project on the responsible use of technology in the context of the deepfake phenomenon was initiated in 2023, aimed at limiting the use of artificial intelligence in connection with the creation, distribution and storage of digital content⁴⁷.

At European level, the European Commission has published a general proposal for a regulatory framework called the Artificial Intelligence Act⁴⁸. The proposed regulation aims to create a harmonised legal framework in the European Union on the operation and use of artificial intelligence and follows a risk prevention approach: unacceptable risk (new technology poses a clear threat to safety, livelihoods and human rights: artificial intelligence systems that manipulate human behaviour to prevent users from exercising their free will, i.e. those that allow governments to conduct social scoring); high risk (technology is used in areas such as critical infrastructure, educational or vocational training, product safety components, employment, essential public and private services, law enforcement, migration, asylum and border control management, administration of justice and democratic processes), limited risk (applications are subject to specific transparency obligations – e.g. in the case of chatbot users must be aware

⁴³ Stanford Institute for Human-Centered Artificial Intelligence, *2023 AI Index Report*, the data is available online at <https://aiindex.stanford.edu/report/>, accessed on 06.06.2023.

⁴⁴ The document is available online at <https://www.congress.gov/bill/117th-congress/house-bill/6580/text>, accessed on 08.06.2023.

⁴⁵ Department for Science, Innovation and Technology, Office for Artificial Intelligence, *Establishing a pro-innovation approach to regulating AI*, the document is available online at <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper>, accessed on 08.08.2023.

⁴⁶ The Cyberspace Administration of China, *Internet Information Service Algorithmic Recommendation Management Provisions*, the document is available online at <https://digichina.stanford.edu/work/translation-internet-information-service-algorithmic-recommendation-management-provisions-effective-march-1-2022>, accessed on 08.08.2023.

⁴⁷ The document is available online at https://www.cdep.ro/pls/proiecte/upl_pck.proiect?cam=2&idp=20853, accessed on 24.07.2023.

⁴⁸ European Commission, *Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts*, 21.04.2021, the document is available online at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0206>, accessed on 29.02.2024.

that they are interacting with software), minimal risk (rules do not intervene in this case). The proposed Regulation also provides for the creation of a framework for conformity assessment and supervision of compliance with the obligations and requirements imposed on developers and users of artificial intelligence systems.

The proposed new EU regulatory framework for artificial intelligence has been the subject of criticism and debate in the technological and legal community. Some critics⁴⁹ argue that the proposed Regulation could limit innovation and progress of the new technology by placing strict rules and requirements on developers and users. The proposed Regulation focuses on compliance assessment and less on fundamental rights impact assessment⁵⁰, overlaps with Regulation (EU) 2019/881 on cybersecurity⁵¹ in relation to the certification process which may undermine the objectives of the certification mechanisms⁵², i.e. it is not synchronised with the provisions of other EU legislation (such as the GDPR legislation – it does not provide rights for data subjects and authorities were complaints can be lodged). The provisions of the future Regulation only offer providers the possibility to assess risks, there are no provisions for sanctions in case of non-compliance and no authorities to supervise this process⁵³, while compliance of artificial intelligence products with private standards presents risks⁵⁴.

⁴⁹ Mariarosaria Taddeo, *On the Risks of Trusting Artificial Intelligence: The Case of Cybersecurity*, Josh Cowls, Jessica Morley (editors), *The 2020 Yearbook of the Digital Ethics Lab.*, Springer, 2020, pp. 97–108, the document is available online at https://link.springer.com/chapter/10.1007/978-3-030-80083-3_10, accessed on 29.02.2024.

⁵⁰ Smuha Nathalie, Ahmed-Rengers Emma, Harkens Adam, Li Wenlong, MacLaren James, Piselli Riccardo, Yeung Karen, *How the EU can achieve legally trustworthy AI: a response to the European Commission's proposal for an Artificial Intelligence Act*, 05.08.2021, "Artificial Intelligence – Law, Policy & Ethics eJournal", SSRN Network, the document is available online at <https://ssrn.com/abstract=389991>, accessed on 29.12.2023; Lane Lottie, *Clarifying Human Rights Standards through Artificial Intelligence Initiatives*, "International & Comparative Law Quarterly", 2022, Volume 71(4), pp. 915–944, the document is available online at <https://www.cambridge.org/core/journals/international-and-comparative-law-quarterly/article/clarifying-human-rights-standards-through-artificial-intelligence-initiatives/52D69ACE49CE1E0B5D9E69E51CA14690>, accessed on 07.12.2023.

⁵¹ The European Parliament and the Council of the European Union, *Regulation (EU) 2019/881 on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology cybersecurity certification and repealing Regulation (EU) No 526/2013 (Cybersecurity Act)*, the document is available online at <https://eur-lex.europa.eu/eli/reg/2019/881/oj>, accessed on 01.03.2024.

⁵² Federica Casarosa, *Cybersecurity certification of Artificial Intelligence: a missed opportunity to coordinate between Artificial Intelligence Act and the Cybersecurity Act*, "International Cybersecurity Law Review", 2022, Volume 3, pp. 115–130, the document is available online at <https://link.springer.com/article/10.1365/s43439-021-00043-6>, accessed on 09.06.2023.

⁵³ Smuha Nathalie, Ahmed-Rengers Emma, Harkens Adam, Li Wenlong, MacLaren James, Piselli Riccardo, Yeung Karen, *op. cit.*

⁵⁴ Martin Ebers, Veronica R.S. Hoch, Frank Rosenkranz, Hannah Ruschemeier, Björn Steinrötter, *The European Commission's Proposal for an Artificial Intelligence Act – A Critical Assessment by*

As artificial intelligence achieves its goals by processing a large amount of personal data, there is a collision with all the fundamental data protection principles that are laid down in the European General Data Protection Regulation (GDPR) 2016/679⁵⁵, considered to be the first legal instrument applicable to artificial intelligence. At the same time, Directive (EU) 2016/680⁵⁶ and Regulation (EU) 2018/1725⁵⁷ should be mentioned.

Unlike the proposed Regulation establishing harmonised rules on artificial intelligence, the GDPR proposes a framework based on rights rather than risk prevention. Although it does not explicitly refer to artificial intelligence, the GDPR Regulation aims to impose a high standard of personal data protection that may limit the free flow of data that lies at the heart of the development of the new technology⁵⁸.

There are, however, opinions⁵⁹ that GDPR would be incompatible with

members of the Robotics and AI Law Society, "Multidisciplinary Scientific Journal", 2021, Volume 4(4), pp. 589–603, the document is available online at <https://www.mdpi.com/2571-8800/4/4/43>, accessed on 25.11.2023.

⁵⁵ The European Parliament and the Council of the European Union, *Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)*, the document is available online at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R0679>, accessed on 29.02.2024.

⁵⁶ The European Parliament and the Council of the European Union, *Directive (EU) 2016/680 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA*, the document is available online at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016L0680>, accessed on 29.02.2024.

⁵⁷ The European Parliament and the Council of the European Union, *Regulation (EU) 2018/1725 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC*, the document is available online at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018R1725>, accessed on 29.02.2024.

⁵⁸ Herve Allan, *Data Protection and Artificial Intelligence*, Shin-Yi Peng, Ching-Fu Lin, Thomas Streinz (editors), Artificial Intelligence and International Economic Law, Cambridge University Press, 2021, pp. 193–214, the document is available online at <https://www.cambridge.org/core/books/artificial-intelligence-and-international-economic-law/data-protection-and-artificial-intelligence/B98076D59C2B75892D58CC11518E2217>, accessed on 19.12.2023.

⁵⁹ Sartor Giovanni, *The impact of the General Data Protection Regulation (GDPR) on artificial intelligence*, the document is available online at [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/641530/EPRS_STU\(2020\)641530_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/641530/EPRS_STU(2020)641530_EN.pdf), accessed on 20.12.2022; Cate Fred, Kuner Christopher, Orla Lynskey, Christopher Millard, Nora Ni Loideain, Dan Jerker B. Svantesson, *Expanding the Artificial Intelligence – Data Protection Debate*, "International Data Privacy Law", 2018, Volume 8, No. 4, pp. 289–292, the document is available online at <https://www.academic.oup.com/idpl/article/8/4/289/5299551>, accessed on 19.12.2023; Paal Boris, *Artificial Intelligence as a Challenge for Data Protection Law*, Silja Voienky, Philipp Kellmeyer, Oliver Mueller, Wolfgang Burgard (editors), *The Cambridge Handbook of Responsible Artificial Intelligence*, Cambridge University Press, 2022, pp. 290–308, the document is available online at <https://www.cambridge.org/core/books/cambridge-handbook-of-responsible-artificial-intelligence/artificial-intelligence->

artificial intelligence, as the EU Regulation is based on principles such as purpose limitations, data minimisation, special treatment of sensitive data, limitation of automated decisions, thus forcing the EU to abandon the application of GDPR. In addition, the GDPR provisions contain specific rules for certain types of automated individual decision-making, but not for collective decisions⁶⁰. From another perspective, the GDPR does not provide for the right to explain all algorithmic decisions, but only those that have a legal or significant effect⁶¹. On the other hand, there are views⁶² that it is possible to implement an interpretation of the GDPR in the case of technologies using artificial intelligence, so as to reconcile both needs: the protection of subjective data, on the one hand, and the development of useful applications on the other.

Standardisation documents are also part of the efforts associated with the challenge of regulating artificial intelligence. At the level of standards development bodies, there is a real effervescence in the preparation of more or less consistent and early-stage guidelines and standards for artificial intelligence. The StandICT report⁶³ identified more than 250 documents in this regard, with the

as-a-challenge-for-data-protection-law/84B9874F94043E8AFC81616A60 BA69CC, accessed on 27.12.2023; Wallace Nick, Castro Daniel, *The Impact of the EU's New Data Protection Regulation on AI*, Centre for Data Innovation, 27.03.2018, the document is available online at <https://www2.datainnovation.org/2018-impact-gdpr-ai.pdf>, accessed on 27.12.2022.

⁶⁰ Zuiderveen Borgesius Frederik, *Strengthening legal protection against discrimination by algorithms and artificial intelligence*, "International Journal of Human Rights", 2020, pp. 1–22, the document is available online at <https://ssrn.com/abstract=3561441>, accessed on 22.12.2023; Castets-Renard Celine, *Accountability of Algorithms in the GDPR and Beyond: A European Legal Framework on Automated Decision-Making*, "Fordham Intellectual Property, Media & Entertainment Law Journal, Futurecoming", 20.05.2019, the document is available online at <https://ssrn.com/abstract=3391266>, accessed on 28.12.2023.

⁶¹ Brkan Maja, Bonner Gregory, *Legal and Technical Feasibility of the GDPR's Quest for Explanation of Algorithmic Decisions: of Black Boxes, White Boxes and Fata Morganas*, "European Journal of Risk Regulation", Volume 11, Issue 1, 2020, pp. 18–50, the document is available online at <https://www.cambridge.com/core/journals/european-journal-of-risk-regulation/article/legal-and-technical-feasibility-of-the-gdprs-quest-for-explanation-of-algorithmic-decision-s-of-black-boxes-white-boxes-and-fata-morganas/7324CDE80A300179C170C5BA8CA7E851>, accessed on 27.12.2023; Sava Ruxandra, *Când decizia o ia mașina ... Despre profilare, drepturi și echilibru într-un univers digital*, "Revista Română pentru Protecția și Securitatea Datelor cu Caracter Personal" NR. 3/2020, the document is available online at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3721413, accessed on 28.12.2023; Wachter Sandra, Mittelstadt Brent, Floridi Luciano, *Why a Right to Explanation of Automated Decision-Making Does Not Exist in General Data Protection Regulation*, "International Data Privacy Law", 2017, the document is available online at <https://ssrn.com/abstract=2903469>, accessed on 23.12.2023; Wachter Sandra, Brent Mittelstadt, Russel Chris, *Counterfactual explanations without opening the black box: automated decisions and the GDPR*, "Harvard Journal of Law and Technology", 2018, Volume 31(2), the document is available online at <https://ssrn.com/abstract=3063289>, accessed on 30.12.2023.

⁶² Mantelero Alessandro, *Artificial Intelligence and Data Protection: Challenges and Possible Remedies*, 25.01.2019, the document is available online at <https://rm.coe.int/artificial-intelligence-and-data-protection-challenges-and-possible-re/168091f8a6>, accessed on 12.12.2023.

⁶³ Lindsay Frost, Ray Walshe, Silvana Muscella, *Report of TWG AI: Landscape of AI Standards*,

International Organisation for Standardisation (ISO), the International Electrotechnical Commission (IEC), the European Telecommunications Standards Institute (ETSI), the Institute of Electrical and Electronics Engineers (IEEE), the International Telecommunication Union (ITU) and SAE International⁶⁴ being very active in this regard and in various stages of development.

The landscape of artificial intelligence regulation is very diverse and still in formation. The global nature of the impact of artificial intelligence requires interstate cooperation and the involvement of all stakeholders, especially as the Global South is underrepresented at this time. Although many policies and governance recommendations have been made, instead of strong government regulation, no concrete set of mechanisms to mitigate the risks of artificial intelligence has emerged and legislation needs to be adapted⁶⁵. There is both a lack of regulation and considerable gaps in what we know and can hope to know about the risks posed by artificial intelligence⁶⁶. On the other hand, over-regulation or excessive regulation can hamper innovation and progress of new technology⁶⁷.

3. Governance of artificial intelligence

Due to the complexity, the accelerated pace of development, the risks to which users are exposed as a result of interaction with artificial intelligence applications, the possibility of use for criminal purposes (fake news, deep fakes, cyber-attacks, terrorism, warfare, manipulation of the population)⁶⁸ and the cross-border nature of cybercrime, it is necessary to ensure an adequate system of governance⁶⁹ of this information environment at the global level.

The challenges of artificial intelligence can only be effectively addressed

20.05.2021, the data is available online at <https://zenodo.org/record/5011179#.YhvgLOjMK5c>, accessed on 19.06.2023.

⁶⁴ For details see ENISA, *Cybersecurity of AI and Standardisation*, 14.03.2023, the document is available online at <https://www.enisa.europa.eu/publications/cybersecurity-of-ai-and-standardisation>, accessed on 15.01.2024.

⁶⁵ Gerard's Janneke, *The fundamental rights challenges of algorithms*, "Netherlands Quarterly of Human Rights", 2019, Volume 37(3), pp. 205–209, the document is available online at <https://journals.sagepub.com/doi/full/10.1177/0924051919861773>, accessed on 07.12.2023.

⁶⁶ James M. White, Rolf Lidskog, *Ignorance and the regulation of artificial intelligence*, "Journal of Risk Research", 2022, Volume 25, Issue 4, pp. 488–500, the document is available online at <https://www.tandfonline.com/doi/full/10.1080/13669877.2021.1957985>, accessed on 03.02.2024.

⁶⁷ Mariarosaria Taddeo, *op.cit.*

⁶⁸ Gomez Rego de Almeida Patricia, Denner dos Santos Carlos, Silva Farias Josivania, *Artificial Intelligence Regulation: a framework for governance*, "Ethics and Information Technology", 2021, Volume 23, pp. 505–525, the document is available online at <https://link.springer.com/article/10.1007/s10676-021-09593-z>, accessed on 13.12.2023.

⁶⁹ For more on the concept of "governance" see Edward (Ted) A. Parson, Richard M. Re, Alicia Solow-Niederman, Elana Zeide, *Artificial Intelligence in Strategic Context: An Introduction*, "UCLA School of Law, Public Law Research Paper", 2019, No. 19–45, the document is available online at <https://ssrn.com/abstract=3476384>, accessed on 18.02.2024.

through international coordination, as its regulation has externalities that go beyond national borders⁷⁰. New governance frameworks can be adapted to approaches taken to regulate previous emerging technologies⁷¹. Given that artificial intelligence is a transformative technology that offers both great benefits and poses a number of challenges, effective governance is important to ensure that ethical concerns and fundamental rights are met.

Artificial intelligence governance is at an early stage⁷², with research results showing a predominance of ethics-oriented systems rather than rule-based systems⁷³.

Soft law is insufficient for reasons such as lack of efficiency (voluntary nature of initiatives cannot ensure that established principles will always be adhered to), not subject to uniform application standards, governments will face the challenge of ensuring consistent application of these guidelines in designing the same AI technologies in different sectors if the principles differ in several guidelines and are not well coordinated with regulations, inability to ensure inclusiveness and representation of different stakeholders, and not subject to public scrutiny⁷⁴. By taking advantage of soft law, leading technology companies can attempt to set the ‘ethical AI’ narrative on their own terms and serve as a shield against regulation (avoiding the introduction of binding legal rules)⁷⁵, concentrating digital power in the hands of a few players (‘Big Five’ — Google, Facebook, Microsoft, Apple, Amazon)⁷⁶.

On the other hand, it is considered necessary to adopt a centralised framework for the governance of artificial intelligence through the adoption of specific

⁷⁰ Olivia Erdelyi, Judy Goldsmith, *Regulating artificial intelligence: Proposal for a global solution*, “Government Information Quarterly”, 2022, Volume 39, Issue 4, the document is available online at <https://www.sciencedirect.com/science/article/abs/pii/S0740624X22000843>, accessed on 27.11.2023.

⁷¹ Gasser Urs, Virgilio A.F. Almeida, *A layered model for AI governance*, “IEEE Internet Computing”, 2017, Volume 21, Issue 6, pp. 58–62, the document is available online at <https://ieeexplore.ieee.org/document/8114684>, accessed on 14.12.2023.

⁷² Butcher James, Beridze Irakli, *What is the State of Artificial Intelligence Governance Globally*, “RUSI Journal”, 2019, Volume 164, Nos 5/6, pp. 88–96, the document is available online at <https://www.researchgate.net/publication/337640603>, accessed on 16.12.2023.

⁷³ Radu Roxana, *Steering the governance of artificial intelligence: national strategies in perspective*, “Policy and Society”, 2021, Volume 40, Issue 2, pp. 178–193, the document is available online at <https://www.tandfonline.com/doi/full/10.1080/14494035.2021.1929728>, accessed on 13.02.2024.

⁷⁴ Taeihagh Arez, *Governance of artificial intelligence*, “Policy and Society”, 2021, Volume 40, Issue 2, pp. 137–157, the document is available online at <https://academic.oup.com/policyandsociety/article/40/2/137/6509315>, accessed on 14.12.2023.

⁷⁵ Vasiliki Koniaku, *From the “rush to ethics” to “race for governance” in Artificial Intelligence*, “Information Systems Frontiers”, 2022, Volume 25, pp. 71–102, the document is available online at <https://link.springer.com/article/10.1007/s10796-022-10300-6>, accessed on 27.02.2024.

⁷⁶ Muller Catelijne, *The impact of Artificial Intelligence on Human Rights, Democracy and the Rule of Law*, 24.06.2020, the document is available online at <https://rm.coe.int/cahai-2020-06-fin-c-muller-the-impact-of-ai-on-human-rights-democracy-16809ed6da>, accessed on 17.12.2023.

legislative instruments⁷⁷ (binding legal rules) and governmental institutions⁷⁸, or by adapting existing ones (Global Partnership for Artificial Intelligence, ONE-AI Working Groups adjacent to the OECD Policy Observatory, European Commission – International Alliance for a Human-Centred Approach to Artificial Intelligence), or by creating new ones (creation of a G20 coordination committee⁷⁹, international governance coordination committee for artificial intelligence⁸⁰, international regulatory agency for artificial intelligence⁸¹, institutional alternative of a new ‘Ombudperson’⁸²), to avoid conflicts of jurisdiction, ensure rules on cooperation and accountability or coordination and control institutions.

In the face of concerns generated by the use of artificial intelligence, data governance frameworks⁸³ or forms of ‘hybrid’ governance⁸⁴ (considering the increasing role played by non-state actors) have also been proposed.

Possibly human rights will also serve to guide the development and governance of the new technology⁸⁵. Human rights can complement existing ethics initiatives⁸⁶. International human rights law provides a universally accepted

⁷⁷ Dixon Red Bin Lee, *A principled governance for emerging AI regimes: lessons from China, the European Union, and the United States*, "AI and Ethics", 2023, Volume 3, pp. 793–810, the document is available online at <https://link.springer.com/article/10.1007/s43681-022-00205-0>, accessed on 29.11.2023.

⁷⁸ Stix Charlotte, *Foundations for the future: institution building for the purpose of artificial intelligence governance*, "AI & Ethics", 2022, Volume 2, pp. 463–476, the document is available online at <https://link.springer.com/article/10.1007/s43681-021-00093-w>, accessed on 29.11.2023.

⁷⁹ Thorsten Jelinek, Wendell Wallach, Danil Kerimi, *Policy brief: the creation of a G20 coordinating committee for the governance of AI*, "AI and Ethics", 2021, Volume 1, pp. 141–150, the document is available online at <https://link.springer.com/article/10.1007/s43681-020-00019-y>, accessed on 29.11.2023.

⁸⁰ Wallach Marchant, *An agile ethical/legal model for the international and national governance of AI and robotics*, 2018, the document is available online at https://www.aies-conference.com/2018/contents/papers/main/AIES_2018_paper_77.pdf, accessed on 21.02.2024.

⁸¹ Olivia Erdelyi, Judy Goldsmith, *op. cit.*, p. 9.

⁸² Simon Chesterman, *Weapons of Mass Disruption: Artificial Intelligence and International Law*, "Cambridge International Law Journal", 2021, Volume 10, pp. 181–203, the document is available online at <https://ssrn.com/abstract=3832563>, accessed on 30.11.2023.

⁸³ Janssen Marjin, Brous Paul, Estevez Elsa, Barbosa S. Luis, Janowski Tomasz, *Data governance: Organizing data for trustworthy Artificial Intelligence*, "Government Information Quarterly", 2020, Volume 37, Issue 3, the document is available online at <https://www.sciencedirect.com/science/article/pii/S0740624X20302719>, accessed on 16.12.2023.

⁸⁴ Radu Roxana, *op. cit.*, Taeihagh Arez, *op. cit.*

⁸⁵ Latonero Mark, *Governing Artificial Intelligence: Upholding Human Rights & Dignity*, Data & Society, 2018, the document is available online at <https://datasociety.net/library/governing-artificial-intelligence/>, accessed on 04.12.2023; Smuha Natalie, *Beyond a Human Rights-based to AI Governance: Promise, Pitfalls, Plea*, "Philosophy & Technology", 2021, Volume 34, pp. 91–104, the document is available online at <https://link.springer.com/article/10.1007/s13347-020-00403-w>, accessed on 29.02.2024; Risse Matthias, *Human Rights and Artificial Intelligence: An Urgently Needed Agenda*, "HKS Faculty Research Working Paper Series RWP18-015", 2018, the document is available online at <https://www.hks.harvard.edu/publications/human-rights-and-artificial-intelligence-urgently-needed-agenda>, accessed on 17.12.2023.

⁸⁶ Access now, *Human Rights in the Age of Artificial Intelligence*, 2018, the document is available

framework for analysing, assessing and ultimately remedying the impact of artificial intelligence on individuals and society⁸⁷. A number of arguments⁸⁸ are put forward in support of this governance framework: a) human rights law sets global standards and accountability mechanisms that specify how individuals are entitled to be treated; b) the EU legal order is rooted in constitutional and human rights commitments; c) the well-developed institutional framework through which human rights norms are systematically monitored, promoted and enforced around the world can support/ensure the ethical governance of AI; d) resolution of ethical conflicts can be carried out by judicial institutions (at national or international level) responsible for adjudicating cases involving complaints of human rights violations; e) recognition of human rights law in all national jurisdictions.

4. Conclusions

The technological advance brought about by the emergence and evolution of new digital technologies brings a number of opportunities to society, but also challenges related to certain risks to fundamental rights and freedoms, artificial intelligence being no exception in this respect. Technological and cybersecurity risks arising from the use of artificial intelligence technology require proactive and convergent measures by policy-makers and organisations developing such systems, by adopting specific prevention mechanisms. The current regulatory landscape for artificial intelligence, while complex and dynamic, is highly fragmented and non-harmonised, which can lead to legal uncertainty and confusion. For these reasons, in order to prevent the risks associated with the use of artificial intelligence systems, there must be a global consensus to adopt a specific legal framework, with balanced participation and representation of all stakeholders, given the ubiquity of the digital space. However, we must bear in mind that such an initiative is currently difficult to achieve, given the continuous evolution of this new technology, the dynamics and lack of knowledge of all the associated

online at <https://www.accesnow.org/cms/assets/uploads/2018/11/AI-and-Human-Rights.pdf>, accessed on 08.12.2023.

⁸⁷ Raso Fillippo, Hannah Hilligoss, Vivek Krishnamurthy, Christopher Bavitz, Levin Kim, *Artificial Intelligence & Human Rights: Opportunities & Risks*, Berkman Klein Center for Internet & Society Research Publication, 2018, the document is available online at <https://dash.harvard.edu/handle/1/38021439>, accessed on 07.12.2022.

⁸⁸ Yeung Karen, Andrew Howes, Ganna Pogrebna, *AI Governance by Human Rights-Centred Designed, Deliberation and Oversight: An End to Ethics Washing*, Markus D. Dubber (editor), The Oxford Handbook of Ethics of AI, 2020, pp. 76–106, the document is available online at <https://academic.oup.com/edited-volume/34287/chapter-abstract/290657408?redirectedFrom=full-text>, accessed on 28.02.2024; Pielemeier Jason, *The Advantages and Limitation of Applying the International Human Rights Framework to Artificial Intelligence*, 26.02.2019, the document is available online at <https://cpr.unu.edu/publications/articles/ai-global-governance-the-advantages-of-applying-the-international-human-rights-framework-to-artificial-intelligence.html>, accessed on 08.12.2022.

threats and the lack of consensus in defining the concept of ‘artificial intelligence’. It is particularly important that the future framework incorporates a number of principles already introduced by ethical standards and legal mechanisms adopted or proposed, such as transparency, fairness, accountability, privacy and non-abuse, but ensuring a full balance between respect for fundamental rights and technological progress.

Bibliography

I. Books and articles

1. Brkan, Maja & Bonner Gregory, *Legal and Technical Feasibility of the GDPR’s Quest for Explanation of Algorithmic Decisions: of Black Boxes, White Boxes and Fata Morganas*, ‘European Journal of Risk Regulation’, Volume 11, Issue 1, 2020, pp. 18-50, <https://www.cambridge.com/core/journals/european-journal-of-risk-regulation/article/legal-and-technical-feasibility-of-the-gdprs-quest-for-explanation-of-algorithmic-decisions-of-black-boxes-white-boxes-and-fata-morganas/7324CDE80A300179C170C5BA8CA7E851>.
2. Bruschi, Danilo & Diomedede Nicla, *A framework for assessing AI ethics with applications to cybersecurity*, ‘AI and Ethics’, 2022, Volume 3, pp. 65–72, <https://link.springer.com/article/10.1007/s43681-022-00162-8>.
3. Buiten, Miriam, *Towards Intelligent Regulation of Artificial Intelligence*, 29.04.2019, ‘European Journal of Risk Regulation’ 10(1), 2019, pp. 41–59, <https://www.cambridge.org/core/journals/european-journal-of-risk-regulation/article/towards-intelligent-regulation-of-artificial-intelligence/AF1AD1>.
4. Butcher, James & Beridze Irakli, *What is the State of Artificial Intelligence Governance Globally*, ‘RUSI Journal’, 2019, Volume 164, Nos 5/6, pp. 88–96, <https://www.researchgate.net/publication/337640603>.
5. Carsten, Stahl Bernd, Rowena Rodrigues, Nicole Santiago & Kevin Macnish, *A European Agency for Artificial Intelligence: Protecting fundamental rights and ethical values*, ‘Computer Law & Security Review’, 2022, Volume 45, <https://sciencedirect.com/science/article/pii/S0267364922000097>.
6. Casarosa, Federica, *Cybersecurity Certification of Artificial Intelligence: a missed opportunity to coordinate between Artificial Intelligence Act and the Cybersecurity Act*, ‘International Cybersecurity Law Review’, 2022, Volume 3, pp. 115–130, <https://link.springer.com/article/10.1365/s43439-021-00043-6>.
7. Castets-Renard, Celine, *Accountability of Algorithms in the GDPR and Beyond: A European Legal Framework on Automated Decision-Making*, ‘Fordham Intellectual Property, Media & Entertainment Law Journal, Futurecoming’, 20.05.2019, <https://ssrn.com/abstract=3391266>.
8. Cate, Fred, Kuner Christopher, Orla Lynskey, Christopher Millard, Nora Ni Loideain & Dan Jerker B. Svantesson, *Expanding the Artificial Intelligence – Data Protection Debate*, ‘International Data Privacy Law’, 2018, Volume 8, No. 4, pp. 289–292, <https://www.academic.oup.com/idpl/article/8/4/289/5299551>.
9. Chesterman, Simon, *Weapons of Mass Disruption: Artificial Intelligence and International Law*, ‘Cambridge International Law Journal’, 2021, Volume 10, pp. 181–203, <https://ssrn.com/abstract=3832563>.

10. Clarke, Roger, *Regulatory alternatives for AI*, 'Computer Law & Security Review', 2019, Volume 35, pp. 398-409, <https://www.sciencedirect.com/science/article/abs/pii/S0267364919301281>.
11. Connor, Rees & Muller Berndt, *All that glitters is not gold: trustworthy and ethical AI principles*, 'AI and Ethics', 16.11.2022, <https://link.springer.com/article/10.1007/s43681-022-00232-x>.
12. Dixon, Red Bin Lee, *A principled governance for emerging AI regimes: lessons from China, the European Union, and the United States*, 'AI and Ethics', 2023, Volume 3, pp. 793–810, <https://link.springer.com/article/10.1007/s43681-022-00205-0>.
13. Donahoe, Eileen & Megan MacDuffee Metzger, *Artificial Intelligence and Human Rights*, 'Journal of Democracy', 2019, Volume 30(2), pp. 115-126, <https://www.proquest.com/docview/2295528777>.
14. Ebers, Martin, Veronica R.S. Hoch, Frank Rosenkranz, Hannah Ruschemeier & Björn Steinrötter, *The European Commission's Proposal for an Artificial Intelligence Act – A Critical Assessment by members of the Robotics and AI Law Society*, 'Multidisciplinary Scientific Journal's', 2021, Volume 4(4), pp. 589–603, <https://www.mdpi.com/2571-8800/4/4/43>.
15. Erdelyi, Olivia & Judy Goldsmith, *Regulating artificial intelligence: Proposal for a global solution*, 'Government Information Quarterly', 2022, Volume 39, Issue 4, <https://www.sciencedirect.com/science/article/abs/pii/S0740624X22000843>.
16. Fjeld, Jessica, Nele Achten, Hannah Hilligoss, Adam Nagy & Madhulika Sriku-mar, *Principled Artificial Intelligence: Mapping Consensus in Ethical and Right-Based Approaches to Principles of AI*, Berkman Klein Center, Research Publication no. 2020-1, <https://ssrn.com/abstract=3518482>.
17. Floridi, Luciano & Cowl Josh, *A Unified Framework of Five Principles for AI in Society*, 29.04.2021, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3831321.
18. Fukuda-Parr, Sakito & Gibbons Elisabeth, *Emerging Consensus on 'Ethical AI': Human Rights Critique of Stakeholders Guidelines*, 'Global Policy', 2021, Volume 12, Supplement 6, <https://onlinelibrary.wiley.com/doi/full/10.1111/1758-5899.12965>.
19. Gomez Rego, de Almeida Patricia, Denner dos Santos Carlos & Silva Farias Jovivania, *Artificial Intelligence Regulation: a framework for governance*, 'Ethics and Information Technology', 2021, Volume 23, pp. 505-525, <https://link.springer.com/article/10.1007/s10676-021-09593-z>.
20. Hageman, Ryan, Jennifer Hudleston & Adam Thierer, *Soft Law for Hard Problems: The Governance of Emerging Technologies in an Uncertain Future*, 'Colorado Technology Law Journal', 05.02.2018, https://papers.ssrn.com/sol3/papers.cfm?abstract_id3118539.
21. Hagendorff, Thilo, *The Ethics of AI Ethics. An Evaluation of Guidelines*, 11.10.2019, <https://arxiv.org/abs/1903.03425>.
22. Herve, Allan, *Data Protection and Artificial Intelligence*, in Peng Shin-Yi, Ching-Fu Lin, Thomas Streinz (editors), *Artificial Intelligence and International Economic Law*, Cambridge University Press, 2021, pp. 193–214, <https://www.cambridge.org/core/books/artificial-intelligence-and-international-economic-law/data-protection-and-artificial-intelligence/B98076D59C2B75892D58CC115>

- 18E2217.
23. Janneke, Gerards, *The fundamental rights challenges of algorithms*, 'Netherlands Quarterly of Human Rights', 2019, Volume 37(3), pp. 205–209, <https://journals.sagepub.com/doi/full/10.1177/0924051919861773>.
 24. Jelinek, Thorsten, Wendell Wallach & Danil Kerimi, *Policy brief: the creation of a G20 coordinating committee for the governance of AI*, 'AI and Ethics', 2021, Volume 1, pp. 141–150, <https://link.springer.com/article/10.1007/s43681-020-00019-y>.
 25. Jobin, Anna, Ienca Marcelo & Vayena Effy, *Artificial Intelligence: the global landscape of ethics guidelines*, 2019, <https://arxiv.org/abs/1906.11668>.
 26. Latonero, Mark, *Governing Artificial Intelligence: Upholding Human Rights & Dignity*, Data & Society, 2018, <https://datasociety.net/library/governing-artificial-intelligence/>.
 27. Lottie, Lane, *Clarifying Human Rights Standards through Artificial Intelligence Initiatives*, 'International & Comparative Law Quarterly', 2022, Volume 71(4), pp. 915–944, <https://www.cambridge.org/core/journals/international-and-comparative-law-quarterly/article/clarifying-human-rights-standards-through-artificial-intelligence-initiatives/52D69ACE49CE1E0B5D9E69E51CA14690>.
 28. Marchant, Gary, Lucille Tournas & Carlos Ignacio Gutierrez, *Governing emerging technologies through Soft Law: Lessons for Artificial Intelligence*, 07.12.2020, » Jurimetrics', vol. 61, Issue 1, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3761871.
 29. Marjin, Janssen, Brous Paul, Estevez Elsa, Barbosa S. Luis & Janowski Tomasz, *Data governance: Organizing data for trustworthy Artificial Intelligence*, 'Government Information Quarterly', 2020, Volume 37, Issue 3, <https://www.sciencedirect.com/science/article/pii/S0740624X20302719>.
 30. Merchant, Gary E., Braden R. Allenby & Joseph R. Herkert, *The Growing Gap Between Emerging Technologies and Legal-Ethical Oversight*, The International Library of Ethics, Law and Technology, 2011, volume 7, <https://link.springer.com/book/10.1007/978-94-007-1356-7>.
 31. Nemitz, Paul, *Constitutional democracy and technology in the age of artificial intelligence*, 15.10.2018, 'Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences', Volume 376, Issue 2133, <https://royalsocietypublishing.org/doi/epdf/10.1098/rsta.2018.0089>.
 32. Niels, Berkel van, Eleftherios Papachristos, Anastasia Giachanou, Simo Hosio, *A systematic Assessment of National Artificial Intelligence Policies: Perspectives from the Nordics and Beyond*, <https://www.researchgate.net/publication/344320861>.
 33. Paal, Boris, *Artificial Intelligence as a Challenge for Data Protection Law*, in Voenekey, Silja, Philipp Kellmeyer, Oliver Mueller & Wolfram Burgard (editors), *The Cambridge Handbook of Responsible Artificial Intelligence*, Cambridge University Press, 2022, pp. 290–308, <https://www.cambridge.org/core/books/cambridge-handbook-of-responsible-artificial-intelligence/artificial-intelligence-as-a-challenge-for-data-protection-law/84B9874F94043E8AFC81616A60BA69CC>.
 34. Parson, Edward (Ted) A., Richard M. Re, Alicia Solow-Niederman & Elana Zeide, *Artificial Intelligence in Strategic Context: An Introduction*, UCLA

- School of Law, Public Law Research Paper's, 2019, No. 19–45, <https://ssrn.com/abstract=3476384>.
35. Pielemeier, Jason, *The Advantages and Limitation of Applying the International Human Rights Framework to Artificial Intelligence*, 26.02.2019, <https://cpr.unu.edu/publications/articles/ai-global-governance-the-advantages-of-applying-the-international-human-rights-framework-to-artificial-intelligence.html>.
 36. Radu, Roxana, *Steering the governance of artificial intelligence: national strategies in perspective*, 'Policy and Society', 2021, Volume 40, Issue 2, pp. 178–193, <https://www.tandfonline.com/doi/full/10.1080/14494035.2021.1929728>.
 37. Raso, Fillippo, Hannah Hilligoss, Vivek Krishnamurthy, Christopher Bavitz & Levin Kim, *Artificial Intelligence & Human Rights: Opportunities & Risks*, Berkman Klein Center for Internet & Society Research Publication, 2018, <https://dash.harvard.edu/handle/1/38021439>.
 38. Risse, Matthias, *Human Rights and Artificial Intelligence: An Urgently Needed Agenda*, » HKS Faculty Research Working Paper Series RWP18-015,' 2018, <https://www.hks.harvard.edu/publications/human-rights-and-artificial-intelligence-urgently-needed-agenda>.
 39. Ryan, Calo & Kate Crawford, *There is a blind spot in AI research*, 'Nature' 538, 2016, pp. 311–313, <https://www.nature.com/articles/538311a>.
 40. Ryan, Calo, *Artificial Intelligence Policy: A Primer and Roadmap*, » University of Bologna Law Review', 2018, Volume 3(2), pp. 180–218, <https://doaj.org/article/cc06b2b47fbc4e3d9b6d6835b7fccbca>.
 41. Ryan, Calo, *Peeping HALs: Making Sense of Artificial Intelligence and Privacy*, » European Journal of Legal Studies', 2010, 2, 3, <https://hdl.handle.net/1814/15123>.
 42. Sava, Ruxandra, *Când decizia o ia mașina ... Despre profilare, drepturi și echilibru într-un univers digital*, „Revista Română pentru Protecția și Securitatea Datelor cu Caracter Personal” No. 3/2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3721413.
 43. Schiff, Daniel, *What's Next for AI Ethics, Policy, and Governance? A Global Overview*, <https://aies-conference.com/2020/wp-content/papers/030.pdf>.
 44. Schwab, Klaus, *The Fourth Industrial Revolution*, World Economic Forum, 2016, https://law.unimelb.edu.au/_data/assets/pdf_file/0005/3385454/Schwab-The_Fourth_Industrial_Revolution_Klaus_S.pdf.
 45. Smuha, Natalie, *Beyond a Human Rights-based to AI Governance: Promise, Pitfalls, Plea*, 'Philosophy & Technology', 2021, Volume 34, pp. 91–104, <https://link.springer.com/article/10.1007/s13347-020-00403-w>.
 46. Smuha, Nathalie, Ahmed-Rengers Emma, Harkens Adam, Li Wenlong, MacLaren James, Piselli Riccardo & Yeung Karen, *How the EU can achieve legally trustworthy AI: a response to the European Commission's proposal for an Artificial Intelligence Act*, 05.08.2021,' Artificial Intelligence – Law, Policy & Ethics eJournal', SSRN Network, <https://ssrn.com/abstract=389991>.
 47. Stix, Charlotte, *Actionable Principles for Artificial Intelligence Policy: Three Pathways*, 'Science and Engineering Ethics', 2021, Volume 27, <https://link.springer.com/article/10.1007/s11948-020-00277-3>.
 48. Stix, Charlotte, *Foundations for the future: institution building for the purpose of artificial intelligence governance*, 'AI & Ethics', 2022, Volume 2, pp. 463–476, <https://link.springer.com/article/10.1007/s43681-021-00093-w>.

49. Taddeo, Mariarosaria, *On the Risks of Trusting Artificial Intelligence: The Case of Cybersecurity*, in Cows, Josh & Jessica Morley (editors), *The 2020 Yearbook of the Digital Ethics Lab.*, Springer, 2020, pp. 97–108, https://link.springer.com/chapter/10.1007/978-3-030-80083-3_10.
50. Taeihagh, Arez, *Assessing the regulatory challenges of emerging disruptive technologies*, "Regulation & Governance", 2021, Volume 15, pp. 1009–1019, <https://onlinelibrary.wiley.com/doi/epdf/10.1111/rego.12392>.
51. Taeihagh, Arez, *Governance of artificial intelligence*, 'Policy and Society', 2021, Volume 40, Issue 2, pp. 137-157, <https://academic.oup.com/policyandsociety/article/40/2/137/6509315>.
52. Urs, Gasser & Virgilio A. F. Almeida, *A layered model for AI governance*, 'IEEE Internet Computing', 2017, Volume 21, Issue 6, pp. 58–62, <https://ieeexplore.ieee.org/document/8114684>.
53. Vasiliki, Koniaku, *From the rush to ethics' to race for governance' in Artificial Intelligence*, 'Information Systems Frontiers', 2022, Volume 25, pp. 71–102, <https://link.springer.com/article/10.1007/s10796-022-10300-6>.
54. Wachter, Sandra, Brent Mittelstadt & Russel Chris, *Counterfactual explanations without opening the black box: automated decisions and the GDPR*, 'Harvard Journal of Law and Technology', 2018, Volume 31(2), <https://ssrn.com/abstract=3063289>.
55. Wachter, Sandra, Mittelstadt Brent & Floridi Luciano, *Why a Right to Explanation of Automated Decision-Making Does Not Exist in General Data Protection Regulation*, 'International Data Privacy Law', 2017, <https://ssrn.com/abstract=2903469>.
56. Wallace, Nick & Castro Daniel, *The Impact of the EU's New Data Protection Regulation on AI*, Centre for Data Innovation, 27.03.2018, <https://www2.datainnovation.org/2018-impact-gdpr-ai.pdf>.
57. Wallach, Marchant, *An agile ethical/legal model for the international and national governance of AI and robotics*, 2018, https://www.aies-conference.com/2018/contents/papers/main/AIES_2018_paper_77.pdf.
58. White, James M. & Rolf Lidskog, *Ignorance and the regulation of artificial intelligence*, 'Journal of Risk Research', 2022, Volume 25, Issue 4, pp. 488–500, <https://www.tandfonline.com/doi/full/10.1080/13669877.2021.1957985>.
59. Whittlestone, Jess, Rune Nyrup, Anna Alexandrova & Stephen Cave, *The Role and Limits of Principles in AI Ethics: Towards a Focus on Tensions*, AIES '19: Proceedings of the 2019 AAAI/ACM Conference on AI, Ethics, and Society, 2019, pp. 195–200, <https://dl.acm.org/doi/10.1145/3306618.3314289>.
60. Yeung, Karen, Andrew Howes & Ganna Pogrebna, *AI Governance by Human Rights-Centred Designed, Deliberation and Oversight: An End to Ethics Washing*, in Dubber, Markus D. (editor), *The Oxford Handbook of Ethics of AI*, 2020, pp. 76–106, <https://academic.oup.com/edited-volume/34287/chapter-abstract/290657408?redirectedFrom=fulltext>.
61. Zeng, Yi, Enmeng Lu & Cunqing Huangfu, *Linking Artificial Intelligence Principles*, <https://arxiv.org/abs/1812.04814>.
62. Zuiderveen, Borgesius Frederik, *Strengthening legal protection against discrimination by algorithms and artificial intelligence*, 'International Journal of Human Rights', 2020, pp. 1–22, <https://ssrn.com/abstract=3561441>.

II. Reports and expert studies

1. Access Now, *Human Rights in the Age of Artificial Intelligence*, 2018, <https://www.accesnow.org/cms/assets/uploads/2018/11/AI-and-Human-Rights.pdf>.
2. AlgorithmWatch, *AI Ethics Guidelines Global Inventory*, 2020, <https://inventory.algorithmwatch.org>.
3. ENISA, *Cybersecurity of AI and Standardisation*, 14.03.2023, <https://www.enisa.europa.eu/publications/cybersecurity-of-ai-and-standardisation>.
4. Mantelero Alessandro, *Artificial Intelligence and Data Protection: Challenges and Possible Remedies*, 25.01.2019, <https://rm.coe.int/artificial-intelligence-and-data-protection-challenges-and-possible-re/168091f8a6>.
5. Muller Cateljine, *The impact of Artificial Intelligence on Human Rights, Democracy and the Rule of Law*, 24.06.2020, <https://rm.coe.int/cahai-2020-06-fin-c-muller-the-impact-of-ai-on-human-rights-democracy-/16809ed6da>.
6. Pupillo Lorenzo, Fantin Stefano, Ferreira Afonso, Polito Carolina, *Artificial Intelligence and Cybersecurity. Technology, Governance and Policy Challenges*, Centre for European Policy Studies (CEPS), Brussels, 2021, <https://www.ceps.eu/ceps-publications/artificial-intelligence-and-cybersecurity-2/>.
7. PwC, *Sizing de prize. What's the real value of AI for your business and how can you capitalise?*, 2017, <https://www.pwc.com/gx/en/issues/data-and-analytics/publications/artificial-intelligence-study.html>.
8. Sartor Giovanni, *The impact of the General Data Protection Regulation (GDPR) on Artificial intelligence*, [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/641530/EPRS_STU\(2020\)641530_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/641530/EPRS_STU(2020)641530_EN.pdf).
9. Sean McGregor, *Preventing Repeated Real World AI Failures by Cataloging Incidents: The AI Incident Database*, <https://incidentdatabase.ai/apps/incidents/>.
10. Stanford Institute for Human-Centered Artificial Intelligence, *2023 AI Index Report*, <https://aiindex.stanford.edu/report/>.
11. The Council of Europe, *Towards Regulation of AI Systems*, 2020, <https://edoc.coe.int/fr/intelligence-artificielle/9656-towards-regulation-of-ai-systems.html#>.
12. The Council of Europe, *A Legal Framework of AI Systems*, 2021, <https://edoc.coe.int/fr/intelligence-artificielle/9648-a-legal-framework-for-ai-systems.html>.
13. United Nations, *Report of the Secretary-General' Roadmap for Digital Cooperation*, 2020, https://www.un.org/en/content/digital-cooperation-roadmap/assets/pdf/Roadmap_for_Digital_Cooperation_EN.pdf.

III. Regulations

1. Access Now, Amnesty International, *The Toronto Declaration*, 16.05.2018, <https://www.amnesty.org/en/documents/pol30/8447/2018/en/>.
2. Beijing Academy of Artificial Intelligence, *Beijing AI Principles*, 28.05.2019, <https://link.springer.com/content/pdf/10.1007/s11623-019-1183-6.pdf>.
3. Camera Deputaților, *Proiect de Lege privind utilizarea responsabilă a tehnologiei în contextul fenomenului deepfake*, https://www.cdep.ro/pls/proiecte/upl_pk.proiect?cam=2&idp=20853.
4. Department of Industry, Science and Resources, *Australia's Artificial Intelli-*

- gence Ethics Framework*, 07.11.2019, <https://www.industry.gov.au/publications/australias-artificial-intelligence-ethics-framework>.
5. Department for Science, Innovation and Technology, Office for Artificial Intelligence, *Establishing a pro-innovation approach to regulating AI*, <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper>.
 6. European Commission, *Communication from the Commission to the European Parliament, The European Council, The Council, The European Economic and Social Committee and The Committee of the Regions – Artificial Intelligence for Europe, COM (2018) 237 final*, Bruxelles, 25.04.2018, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0237>.
 7. European Commission, High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI*, 08.04.2019, <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>.
 8. European Commission, *White Paper on Artificial Intelligence – A European approach to excellence and trust*, 2020, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0065>.
 9. European Commission, *Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union legislative acts*, 21.04.2021, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0206>.
 10. Executive Office of the President, *Executive Order 13,960 on Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government*, 03.12.2020, <https://www.federalregister.gov/documents/2020/12/08/2020-27065/promoting-the-use-of-trustworthy-artificial-intelligence-in-the-federal-government>.
 11. Google, *AI at Google: Our Principles*, 2019, <https://www.blog.google/technology/ai/ai-principles/>.
 12. G20, *G20 AI Principles*, 2019, <https://wp.oecd.ai/app/uploads/2021/06/G20-AI-Principles.pdf>.
 13. House of Lords – Select Committee on Artificial Intelligence, *AI in the UK: ready, willing and able?*, 16.04.2018, <https://publications.parliament.uk/pa/ld201719/ldselect/ldai/100/100.pdf>.
 14. IBM, *Everyday Ethics for Artificial Intelligence*, <https://www.ibm.com/downloads/cas/VDO5W3JK>.
 15. Microsoft, *Microsoft AI Principles*, 2018, <https://www.microsoft.com/en-us/ai/our-approach?activetab=pivot1%3aprimar5>.
 16. *Montreal Declaration for a Responsible Development of Artificial Intelligence*, 2018, https://www.montrealdeclaration-responsibleai.com/_files/ugd/ebc3a3_5c89e007e0de440097cef36dcd69c7b0.pdf.
 17. National Governance Committee for the New Generation Artificial Intelligence, *Governance Principles for the New Generation Artificial Intelligence*, 2019, <http://www.chinadaily.com.cn/a/201906/17/WS5d07486ba3103dbf14328ab7.html>.
 18. OECD, *Recommendation 0449 of the Council on Artificial Intelligence*, 22.05.2019, <https://oecd.ai/en/assets/files/OECD-LEGAL-0449-en.pdf>.
 19. Tencent Institute, *Technological ethics at intelligent era – reshape trustworthiness in digital society*, 08.07.2019, <https://tisi.org/10890>.

20. The Council of Europe, European Commission for the Efficiency of Justice (CEPEJ), *European ethical Charter on the use of Artificial Intelligence in judicial systems and their environment*, <https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c>.
21. The Cyberspace Administration of China, *Internet Information Service Algorithmic Recommendation Management Provisions*, <https://digichina.stanford.edu/work/translation-internet-information-service-algorithmic-recommendation-management-provisions-effective-march-1-2022>.
22. The European Parliament and the Council of the European Union, *Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)*, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R0679>.
23. The European Parliament and the Council of the European Union, *Directive (EU) 2016/680 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA*, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016L0680>.
24. The European Parliament and the Council of the European Union, *Regulation (EU) 2018/1725 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC*, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018R1725>.
25. The European Parliament and the Council of the European Union, *Regulation (EU) 2019/881 on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology Cybersecurity Certification and repealing Regulation (EU) No 526/2013 (Cybersecurity Act)*, <https://eur-lex.europa.eu/eli/reg/2019/881/oj>.
26. The Future of Life Institute, *AI Principles*, 11.08.2017, <https://futureoflife.org/open-letter/ai-principles/>.
27. The Institute of Electrical and Electronics Engineers, *Ethically Aligned Design*, 2019, <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9398613>.
28. UNESCO, *Recommendation on the Ethics of Artificial Intelligence*, 23.11.2021, <https://unesdoc.unesco.org/ark:/48223/pf0000381137>.
29. UNI Global Union, *Top 10 Principles for Ethical Artificial Intelligence*, 2017, http://www.thefutureworldofwork.org/media/35420/uni_ethical_ai.pdf.