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THE INFLUENCE OF THE AI ACT ON THE ACHIEVEMENT OF THE UN SUSTAINABLE DEVELOPMENT GOAL 3: REGULATING AI FOR BETTER HEALTH OUTCOMES?

WPŁYW AKTU O SZTUCZNEJ INTELIGENCJI NA OSIĄGNIĘCIE TRZECIEGO CELU ZRÓWNOWAŻONEGO ROZWOJU: REGULACJA AI DLA LEPSZEGO STANU ZDROWIA?

The article assesses the influence of the Artificial Intelligence Act (AI Act) on the potential for achieving the health-related aims of Sustainable Development Goal 3 (SDG 3) from an EU law perspective. Although the impact of AI on health has been widely studied, the implications of the AI Act in this regard remain underexplored in academic literature. The influence of the new regulation on research and drug development is important in the context of SDG 3. A review of existing normative acts leads to the following conclusions. Firstly, the SDGs do not possess the status of binding acts within EU lawmaking. However, their objectives are included in policy and strategy documents and thus exert indirect influence on the EU legal order. Secondly, the AI Act does not contain a direct reference to the SDGs, despite a legislative-stage proposal by Parliament. Furthermore, the issue of sustainable development is mentioned only in passing. However, the incorporation of the SDGs into policy documents precludes any interpretation of the AI Act that would impede their attainment. This is significant in the context of the AI Act's direct impact on SDG 3, concerning prohibited practices such as profiling and scoring employed in health insurance risk assessment. A comparable situation arises regarding the indirect impact of the Act, as exemplified by its use in drug development. An interpretation aligned with the SDGs suggests that the research exemption set out in the AI Act should extend to any entity engaged in research, irrespective of its legal status.

Keywords: AI Act; artificial intelligence; SDGs; health; EU law

Celem niniejszego artykułu jest ocena wpływu Aktu o sztucznej inteligencji (Akt o AI) na potencjał realizacji celów zrównoważonego rozwoju w obszarze zdrowia, określonych w Sustainable Development Goal 3 (SDG 3) z punktu widzenia prawa UE. Tematyka ta nie została dotychczas wystarczająco rozwinięta w literaturze naukowej, pomimo licznych badań dotyczących zarówno pozytywnych, jak i negatywnych skutków sztucznej inteligencji dla zdrowia i dobrostanu. Szczególnie ważny jest wpływ nowej regulacji na badania i rozwój leków. Analiza obowiązujących aktów normatywnych prowadzi do następujących wniosków. Po pierwsze, należy zauważyć, że cele zrównoważonego rozwoju (SDG) nie mają wiążącego charakteru prawnego dla organów UE w procesie legislacyjnym. Niemniej jednak cele te są uwzględniane w dokumentach politycznych i strategicz-

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nych, co pośrednio wpływa na kształtowanie porządku prawnego w UE. Po drugie, Akt o AI nie zawiera bezpośrednich odniesień do SDG, pomimo propozycji Parlamentu na etapie legislacyjnym. Kwestia zrównoważonego rozwoju została w akcie wspomniana jedynie marginalnie. Jednakże uwzględnienie SDG w dokumentach politycznych uniemożliwia interpretację Aktu o AI w sposób, który mógłby utrudniać ich realizację. W kontekście bezpośredniego wpływu tego prawa na cele zrównoważonego rozwoju (SDG 3) szczególne znaczenie mają zakazane praktyki, takie jak profilowanie i ocena ryzyka w ubezpieczeniach zdrowotnych. Analogiczne kwestie dotyczą pośredniego wpływu Aktu o AI, na przykład w zakresie wykorzystania sztucznej inteligencji w rozwoju leków. Interpretacja zgodna z realizacji celów zrównoważonego rozwoju w obszarze zdrowia (SDG 3) sugeruje, że zwolnienie badawcze przewidziane w Akcie o AI powinno obejmować wszystkie podmioty prowadzące badania, niezależnie od ich statusu prawnego.

Słowa kluczowe: Akt o AI; sztuczna inteligencja; SDG; zdrowie; prawo UE

I. INTRODUCTION

Adopted by all the United Nations Member States in 2015, the 2030 Agenda for Sustainable Development (2030 Agenda)[1] 'is a blueprint for peace and prosperity for people and the planet' (United Nations Department of Economic and Social Affairs Sustainable Development, 2024). The Sustainable Development Goals (SDGs) place a strong emphasis on the need to combat climate change, promote economic growth, enhance health and education, end poverty, and protect forests and oceans. By adopting a human rights approach, the SDGs reflect a conception of sustainable development that was lacking in the global funding agenda and the Millennium Development Goals ([MDGs]; Bantekas & Akestoridi, 2023, p. 504).

The UN has made a significant contribution to national development through a goal-setting approach to international cooperation, beginning with the first development goal – focused on education in Asia – set at the UNESCO Karachi Conference (Pires, 1960). UN-led global goal-setting began with the United Nations Development Decade,[2] which aimed to increase economic growth rates in developing countries and attract foreign investment from developed countries by the end of the period. Although the goal was initially dismissed as unrealistic, it was ultimately exceeded: developing countries recorded average growth rates of 5.5%, with over 50 countries surpassing the target (Jolly et al., 2009, p. 87).

One of the general goals set out in the SDGs is to 'ensure healthy lives and promote well-being for all at all ages' (2030 Agenda, Goal 3). This objective is to be measured through specific indicators linked to a set of targets. These include:

[1] General Assembly, Transforming our world: The 2030 Agenda for Sustainable Development: Resolution adopted by the General Assembly on 25 September 2015, A/RES/70/1, United Nations, 2015 (https://undocs.org/A/RES/70/1).

[2] A/RES/1710 (XVI). United Nations Development Decade: A programme for international economic cooperation (I) (1961). These goals were subsequently augmented and modified at various conferences of differing focus, most notably: The Earth Summit (3–14 June 1992), Millennium Summit (6–8 September 2000), World Summit on Sustainable Development (26 August – 4 September 2002), United Nations Conference on Sustainable Development – Rio +20 (20–22 June 2012, and UN Climate Change Conference – COP21 (30 November – 12 December 2015).

reducing maternal mortality to less than 70 per 100,000 live births by 2030; ending preventable deaths among newborns and children under 5; eliminating epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases; reducing premature mortality from non-communicable diseases; strengthening prevention and treatment of substance abuse; halving road traffic accident deaths and injuries by 2020; and ensuring universal access to sexual and reproductive health-care services by 2030 (Goal 3.1–3.7). In addition to its specific targets, Goal 3 also calls for more research and development, more diverse and larger health funding, a better-trained health workforce and improved capacity to reduce and manage health risks in all countries (Howden-Chapman et al., 2017, p. 84). As the literature points out, improvements in health outcomes will not be achieved without progress in other related sectors (ECESA Plus et al., 2017, pp. 1–2; UNICEF, 2018, p. 10; Venkatesh, 2022, p. 143). Technological developments play a distinctive role in this context, directly influencing the advancement of healthcare across its multiple dimensions and contributing to broader improvements in living standards. Particular attention must therefore be paid to the development of new medical technologies, including artificial intelligence.

The field of medicine offers a vast array of potential applications for artificial intelligence (AI), particularly through machine learning technologies, which account for a significant share of recent healthcare innovations. Such solutions include those that identify the most appropriate algorithm to assist healthcare providers in treating patients based on the analysis of medical records, analyse diagnostic images (Kim et al., 2019, pp. 405–410), and predict health deterioration in hospitalized patients (Escobar et al., 2016, pp. 18–24). The scale of this trend is evidenced by the financial resources allocated to investment in this domain, estimated at USD22 billion in 2023 and projected to rise to USD 208 billion by 2030. In contrast, the EU's share of investment in AI for healthcare represents only a small fraction of global funding, accounting for just 0.08% of total investment, and is projected to decline slightly (Grand View Horizon, 2023).

Simultaneously, the deployment of artificial intelligence in the medical field entails a multitude of risks, which may be attributed to three primary factors: the malicious actions of third parties (Greser, 2023, pp. 221–222), defects in the design of these systems (ENISA, 2023, p. 29), and human error stemming from overreliance on the results generated by AI (Lee & See, 2004, p. 55). In light of these considerations, regulatory initiatives have been undertaken with the objective of establishing standards for the creation and utilization of AI. At present, there is no legally binding global regulatory framework[3] governing the use of AI. However, regional regulations[4] and initiatives have

[3] Global AI governance is fragmented and relies largely on voluntary commitments and private standards; see, e.g. 'ISO/IEC JTC 1/SC 42 – Artificial Intelligence.' *ISO*, 2017 (https://www.iso.org/committee/6794475.html); UNESCO, *Recommendation on the Ethics of Artificial Intelligence*, 23 November 2021.

[4] 'Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law,' Vilnius, Council of Europe Treaty Series – No. 225, 5 September 2024.

emerged in the countries at the forefront of AI development, including the USA[5] and China.[6] Among these, the Artificial Intelligence Act (AI Act)[7] adopted by the European Union stands out for its comprehensive scope and legal authority.

The available literature indicates that the implementation of artificial intelligence has the potential to have both positive (Ametepey et al., 2024, pp. 13–14; Priebe et al., 2023, p. 194; Vinuesa et al., 2020, p. 3) and negative (Ametepey et al., 2024, p. 16; Obermeyer et al., 2019, p. 447; Wakunuma et al., 2020, p. 7) effects on the achievement of Sustainable Development Goal 3 (SDG 3). It can thus be inferred that the adoption of specific regulatory measures may also facilitate or impede the attainment of this objective. The aim of this article is to examine the extent to which the solutions adopted in the AI Act will impact the achievement of SDG 3.

The article is divided into six sections. The second section of this article examines the extent to which the EU is obliged to adhere to the Sustainable Development Goals. The third part examines the direct references to sustainable development in the AI Act. The following sections (IV) analyse the direct impact of the AI Act on the achievement of SDG 3, using the example of the ban on scoring and the use of recognition systems introduced by the Act. The reason for choosing this example is the influence of these systems on potential limitations in access to healthcare and on discriminatory and biased practices during the provision of such services. The fifth section explores the indirect impact of the Artificial Intelligence Act on the achievement of Sustainable Development Goal 3, focusing in particular on medicine development, which is identified as a specific sub-goal aimed at ensuring universal access to medicines. The article concludes with a summary and final remarks.

II. THE INTERSECTION OF SUSTAINABLE DEVELOPMENT GOALS AND EU LAW

Cooperation in the implementation of the Sustainable Development Goals (SDGs) has given rise to a debate concerning their legal status. Three different positions on this issue can be found in the existing literature. The first

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[5] Executive Office of the President, Safe, secure, and trustworthy development and use of artificial intelligence: Executive Order 14110 / 2023-24283, 88 FR 75191 (1 November 2023) (https://www.federalregister.gov/documents/2023/11/01/2023-24283/safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence).

[6] CAC, MIIT, MPS, SAMR, Provisions on the Management of Algorithmic Recommendations in Internet Information Services, 31 December 2021 (English translation available at https://www.chinalawtranslate.com/algorithms/).

[7] Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence and amending regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), Official Journal of the European Union [OJ] L, 2024/1689.

position maintains that the SDGs constitute a social contract, the objective of which is to enhance global security and freedom through a collaborative partnership between countries and stakeholders. While the SDGs are not legally binding, signatory states are required to establish national or transnational frameworks to facilitate their implementation. At the European Union level, the 2030 Agenda is perceived as a comprehensive and inclusive framework, coherent with EU policy, rather than a disruptive force (European Commission, n.d.). It is therefore incumbent upon all states and stakeholders to collaborate to achieve these goals.

The second position regards the SDGs as a form of soft law. As Duvic Paoli (2021, p. 5) notes, the SDGs were initially regarded as political aspirations devoid of normative potential. Moreover, their adoption as a UN resolution renders them non-legally binding. The SDGs are regarded as 'aspirational' goals, seeking to guide international action without holding states to account. Therefore, the SDGs can be viewed as a high-level statement and policy tool reflecting existing international and national commitments (Harrington, 2021, p. 24); however, they are not legally binding.[8]

The third position, as put forth by Bantekas and Akestoridi (2023, p. 509), asserts that the SDGs cannot be classified as either a normative instrument or as non-binding soft law. Their argument is that the SDGs are not based solely on strict normative considerations, and therefore cannot be defined as purely normative. The SDGs establish international political norms, thereby enabling parties to implement them as if they were based on normative commitments. The SDG mechanism differs from other intergovernmental organizations in three key respects. Firstly, it does not make claims. Secondly, normativity is not an essential component. Thirdly, it is multi-layered and complex. The establishment of goals represents an efficacious instrument for the governance of sustainable development. It serves to delineate policy priorities, mobilize resources, and facilitate the benchmarking of stakeholders' performance in accordance with shared development objectives.

A critical examination of these three positions reveals that, from the perspective of international law, the SDGs do not constitute a direct binding obligation for the EU in the law-making process.[9] At the same time, we can observe the indirect impact of the goals formulated in the SDGs through their inclusion in programming and strategic acts. As indicated by the European Commission (2023b, p. 8), the measures to achieve SDG 3 can be found in the

[8] As a General Assembly Resolution, the SDGs have a hortatory character. For more on soft law and General Assembly resolutions, see Acosta (2015, p. 3); Crawford (2021b, p. 14).

[9] It is important to note that academic literature suggests the UN *2030 Agenda* may signal the emergence of customary law and, consequently, a binding norm of international law (Duvic Paoli, 2021, pp. 20–23). However, as of today, it appears that the conditions necessary to conclude that we are dealing with custom – understood as the primary source of international law – have not yet been fulfilled (Wood & Omri 2024, pp. 10–28).

European Green Deal,[10] an Economy that Works for People,[11] Promoting our European way of life,[12] and the Global Gateway.[13] It should be emphasized that these documents are not only the basis for the annual legislative work programs and special initiatives such as the Better Regulation Toolbox[14]; but also, or perhaps above all, express the values to be achieved in the law-making process. Consequently, the absence of a binding character does not exclude the consideration of the SDGs in the legislative process. It should be noted, however, that A Europe Fit for the Digital Age, the policy document underpinning the AI Act, does not directly refer to SDG 3 (European Commission, 2023b, p. 8). Nevertheless, there is broad consensus that the goals are interdependent and that the achievement of each goal depends on the achievement, or at least progress, of the others (ECESA Plus et al., 2017, pp. 1–2; UNICEF, 2018, p. 10; Venkatesh, 2022, p. 143).

In terms of digital transformation, SDG 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all) and SDG 9 (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation) were found to be the most relevant in the *EU voluntary review on the implementation of the 2030 Agenda* (European Commission, 2023b, p. 14). Needless to say, a strong relationship has been identified in the literature between SDG 4 and SDG 9 (Howden-Chapman et al., 2017, p. 84; Long, 2017, p. 3). Thus, it can be assumed that the goals that the AI Act aims to achieve should not only be in line with the SDGs but should also actively contribute to their achievement.

III. DIRECT REFERENCES TO THE SDGs IN THE AI ACT

The legislative journey of the AI Act commenced with the European Commission's proposal on 21 April 2021, which sought to regulate artificial intelligence across the EU.[15] Since SDGs are primarily a policy instrument, it is

[10] 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: The European Green Deal, COM(2019) 640 final, 11 December 2019.

[11] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Building an Economy that Works for People: An Action Plan for the Social Economy, COM(2021) 778 final, 9 December 2021.

[12] European Commission, Promoting our European way of life: Protecting our citizens and our values, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/promoting-our-european-way-life_en

[13] Joint Communication to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank: The Global Gateway, JOIN(2021) 30 final, 1 December 2021.

[14] Delivering on the UN's Sustainable Development Goals – A comprehensive approach: Commission Staff Working Document / SWD(2020) 400 final, Brussels, 18 November 2020.

[15] 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, COM(2021) 206 final (2021).

useful to analyse how the proposal for the AI Act changed to underline how SDGs were shaping EU policy, and consequently EU regulation of AI. Following extensive discussions, the Slovenian Presidency organized a conference on AI ethics in July 2021, and a public consultation was concluded in August, with 304 submissions received.[16] By December 2021, the European Parliament's Internal Market and Civil Liberties Committees had assumed the role of primary negotiators. At the end of November 2022, the Council of the EU adopted a common position, thereby facilitating further discussions.[17] In June 2023, the European Parliament approved its negotiating stance,[18] which resulted in the conclusion of a provisional agreement by December.[19] The AI Act was formally adopted by the European Council on 21 May 2024 and published in the *Official Journal* on 12 July 2024.[20]

As stated in Recital 1 of the AI Act, the EU's aim is to establish a comprehensive regulatory framework that ensures safety, accountability, and fundamental rights protection while fostering innovation and harmonization across member states, positioning the EU as a global leader in AI governance. It appears that this outlining of objectives is consistent with the SDGs, and it is probable that the legislator will make reference to them when formulating a rationale for specific solutions. A review of the Proposal reveals references only to environmental sustainability, accessibility, stakeholder participation, and diversity in Recital 81. Furthermore, Article 95(2b) of the AI Act suggests a focus on ethical considerations rather than a direct commitment to sustainable development. While these aspects are important, their voluntary nature and lack of enforceable standards indicate a limited impact on achieving comprehensive sustainable development goals. The opinion of the European Economic and Social Committee (EESC) places an emphasis on environmental and social wellbeing, yet does not make any explicit references to the SDGs or to specific goals within the framework. In Amendment 83, which introduced

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[16] See *Have Your Say* – Public Consultations and Feedback Portal https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12527-Artificial-intelligence-ethical-and-legal-requirements/feedback_en?p_id=24212003

[17] Council of the European Union, Note on the general approach to the 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 (Issue 2021/0106(COD)), 6 December 2022.

[18] European Parliament, Artificial Intelligence Act: Amendments adopted by the European Parliament on 14 June 2023 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts (Issue 2021/0106(COD)).

[19] Council of the European Union, 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: Analysis of the final compromise text with a view to agreement: Note from Presidency to Permanent Representatives Committee / 5662/24, Interinstitutional File: 2021/0106(COD), Brussels, 26 January 2024.

[20] Regulation (EU) 2024/1689 of the European Parliament and of the Council laying down harmonised rules on artificial intelligence and amending regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), OJ L 2024/1689.

Recital 46b, the Parliament emphasized the necessity of developing targets for sustainability and a methodology to achieve them, with reference to the Sustainable Development Goals. Other amendments, including Amendment 213, Amendment 516, Amendment 364, and Amendment 697, also addressed sustainability issues, emphasizing the need for AI systems to be developed in an environmentally friendly manner and to promote socially beneficial outcomes, while encouraging compliance with principles that support environmental sustainability and the Union's commitments under the European Green Deal; however, there are no direct references to the SDGs.

The final text of the AI Act was the result of a compromise between the Proposal and the amendments proposed by the Parliament. The AI Act highlights sustainability in Recital 27, which emphasizes the need for AI systems to be developed sustainably and to benefit humanity while assessing their long-term societal impacts. Recital 165 further encourages AI providers and deployers to voluntarily implement additional requirements related to environmental sustainability, inclusive design, and stakeholder involvement, fostering a diverse and ethically responsible approach to AI development that addresses the needs of vulnerable groups and ensures accessibility. Furthermore, Recitals 4, 56 and 58 demonstrate the existence of indirect references that indicate the capacity of AI systems to contribute to the achievement of goals set out in other Sustainable Development Goals. The AI Act specifies sustainability as one of the options for the use of Article 59(1)(a)(iii), which allows the use of personal data for the development of AI systems aimed at energy sustainability. Article 95(2)(b) requires codes of conduct to assess and minimize the environmental impact of AI systems, with a focus on energy-efficient practices. In addition, Article 112(7) requires the Commission to evaluate the effectiveness of these voluntary codes every three years to ensure continued attention to environmental sustainability in the development of AI.

It is important to note that the final version of the AI Act does not contain direct references to the SDGs. The legislator has included references to issues that are already on the EU's agenda and are closely linked to the policies it implements. The fact that these policies are, at the same time, coherent with some of the SDGs' targets positively influences the implementation of the SDGs. However, it is difficult to attribute this to a deliberate action; instead, it seems more accurate to describe it as an overlap of targets. Moreover, it is reasonable to concur with the position presented in the literature that the AI Act lacks a robust legal framework for the implementation of the Sustainable Development Goals. This impedes effective action against the climate impacts of artificial intelligence technologies by focusing on the creation of non-binding instruments (Hacker 2023, p. 374). Concurrently, the AI Act incorporates a multitude of instruments designed to prevent discriminatory practices, with a particular emphasis on explainability, transparency, identification, and mitigation of biases in AI systems. As previously indicated, this contributes to the SDGs related to gender equality (SDG 5) and reducing inequalities (SDG 10; Priebe et al., 2023, p. 194). It is important to note, however, that the AI Act itself makes no direct reference to the EU's recognized key goals related to digi-

tal transformation, namely SDG 4 and SDG 9 (European Commission, 2023b, p. 14), nor to SDG 3, which is directly related to health. This is a cause for concern, given that an act of this stature has not only normative significance but also a momentous political character. It is therefore a clear indication of the values that the EU will be guided by when implementing AI systems.

IV. THE EXPLICIT IMPACT OF THE AI ACT ON THE ACHIEVEMENT OF SDG 3

The direct impact on the ability to achieve SDG 3 can be considered from a number of perspectives. One such perspective is the prohibition on the utilization of AI for specific purposes and its ramifications in the context of SDG 3. This perspective will be adopted in this section of the article, with a particular focus on systems designed for scoring, profiling and emotion recognition. In accordance with Article 5 of the AI Act, the utilization of such solutions is, in principle, proscribed. The rationale behind this provision is to prevent potential harm to individuals and society and to protect fundamental rights. This is in line with the Act's overarching goal of developing safe, reliable and ethical artificial intelligence, which is emphasized not only in the Act itself, but also in policy[21] and programme documents (European Commission & von der Leyen, 2019). At the same time, systems using these solutions are or can be used in healthcare in the broadest sense.

In the context of scoring and profiling systems, they are deployed, for instance, to evaluate risks in the health insurance industry (Dhieb et al., 2020, p. 58546) or to minimize insurance-covered scenarios (Alam & Prybutok, 2024, p. 41). Such algorithms employ predictive analysis mechanisms that facilitate the forecasting of specific events pertaining to an individual's health status. Concurrently, the literature indicates the existence of a multitude of discriminatory and biased effects associated with these algorithms (Greser & Dymitruk, 2022, pp. 135–159). These effects are not merely the consequence of errors during the training process, but they may also be the result of deliberate actions undertaken by the manufacturers (Joseph & Lipp, 2018). Furthermore, data from sources other than medical records, such as social media (Gstrein et al., 2023) or information about purchases or shopping habits (Krumme et al., 2016), can be employed to enhance the efficacy of such systems.

Article 5(1)(c) of the AI Act stipulates that scoring systems which result in the detrimental or unfavourable treatment of certain individuals or groups of individuals in social contexts unrelated to the contexts in which the

[21] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: 2030 Digital Compass: the European way for the Digital Decade, COM(2021) 118 final, 9 March 2021; Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Shaping Europe's digital future, COM(2020) 67 final, 19 February 2020.

data was originally generated or collected, or which are unjustified or disproportionate to their social behaviour or its gravity, are prohibited outright. It is important to note that this prohibition does not, in itself, prohibit the use of scoring systems in the context of health insurance. Rather, it serves to limit their use in order to protect the rights of the individual. Furthermore, an analysis of this prohibition through the lens of SDG 3, which explicitly underscores the necessity to 'achieve universal health coverage, including financial risk protection,' leads to the conclusion that a comprehensive risk assessment is a valuable tool for strengthening the health system. It enables a more effective allocation of limited resources and, concurrently, enhances the protection of individuals against excessive expenses. It is imperative to underscore that the introduction and utilization of such a system must adhere to the highest standards of design and implementation. It should be noted that while it is relatively straightforward to meet the condition of adequate training data that precludes the pooling of data sets, it may be considerably more challenging in the case of data sets that are unjustified or disproportionate to social behaviour. This is because it is possible to reduce the score as a result of behaviours that are legally permitted or inconsequential yet are known to have a detrimental impact on health. Such behaviours include, for example, smoking or excessive alcohol consumption. This issue requires further investigation to address, particularly in light of Goal 3.5, which aims to enhance the prevention and treatment of substance abuse, including narcotic drug abuse and harmful alcohol use.

The second category of AI systems that are banned by the AI Act encompasses solutions designed to infer the emotional state of a human being in the contexts of the workplace and educational institutions. The literature emphasizes that such systems, despite being widely used, can unfairly assess job applicants and students based on their facial expressions and vocal tones, leading to biased interpretations and negative consequences for individuals (Crawford, 2021a, p. 167). Furthermore, surveillance has been linked to a number of other negative outcomes. Research indicates that it can lead to increased anxiety, encourage self-censorship, and discourage engagement in controversial political discussions (Buckham, 2021, p. 4). It is also noteworthy that such systems are increasingly being used in the field of medicine. For instance, they are employed in the management of chronic pain (Bates, 2023). Furthermore, they have applications in the diagnosis and support of the treatment of mental illness and the maintenance of mental well-being (Olawade et al., 2024). Article 5(1)(f) of the AI Act explicitly indicates that such systems may be used in the workplace and in educational institutions if the system was 'put in place or into the market for medical or safety reasons'. In order to correctly interpret this, consideration must be given to Recital 44, which indicates that such systems are to be used 'strictly for medical or safety reasons, such as systems intended for therapeutic use'. This interpretation, while limiting the application of emotion recognition systems, does not appear to impede the attainment of the objectives set forth in SDG 3. On the contrary, it could be argued that the provision in question supports the use of emotion

recognition systems, given that it explicitly indicates that a medical purpose is a sufficient justification for their use in the context of work or education, where there is an imbalance of power.

V. THE IMPLICIT IMPACT OF THE AI ACT ON THE ACHIEVEMENT OF SDG 3

The comprehensive regulatory scope of the AI Act affects a wide range of issues that are covered by SDG 3. It is clear that access to medicines represents a significant accomplishment within the context of the 'Good Health and Well-being' objective, as outlined in this goal. This section will examine one aspect of this issue, namely drug development. This issue is becoming increasingly significant, particularly in light of the emergence of novel therapeutic modalities such as personalized medicine and gene therapy, as well as the declining efficacy of existing pharmaceuticals due to factors such as antibiotic resistance. As defined in the literature, 'drug development' constitutes a holistic and interdisciplinary process encompassing drug discovery, chemical and pharmacological investigation, nonclinical safety evaluation, manufacturing, clinical trials, and regulatory approval (Buckley et al., 2020, p. 379). This section will concentrate on the first stage, which encompasses the growing deployment of AI systems for the identification of novel drug targets, predicting drug-target interactions, and optimizing lead compounds (Vamathevan et al., 2019).

Such activities align with the definition of *conducting research* (Kötter-ing, 2024, p. 130),[22] and thus may be encompassed by the research exemption outlined in the AI Act. Article 2(6) explicitly indicates that: 'This Regulation does not apply to AI systems or AI models, including their output, specifically developed and put into service for the sole purpose of scientific research and development.' Guidance on the interpretation of this provision is provided by Recital 25, which indicates that the regulation encourages innovation and safeguards scientific autonomy by excluding AI systems and models developed solely for research from its scope, ensuring no interference with research and development activities. Furthermore, Recital 109 specifies an exemption from the obligation to comply with the relevant requirements for providers of general-purpose AI models that are used for scientific research purposes.

It should be noted, however, that depending on the objective the researcher wishes to achieve, the research may be classified as either basic or applied research (R&D). This distinction is important in the context of the AI Act, since some authors argue that the latter type of research is not covered by the research exemption (Glauner & Schlüter, 2024) or raise doubts in this

[22] A number of definitions of 'conducting research' have been proposed, and of these, the one suggested by Köttering appears to be particularly relevant to the argument presented here, as it refers explicitly to research in medical fields that uses AI. Consequently, it is a definition that is wholly consistent with the situation described in the article.

regard (Lamb & Maisnier-Boché, 2024). This argument is misplaced for three reasons. The first is the explicit recognition of research and development as a form of scientific research in the European Union legal framework. The fundamental basis for the Union's concept of research is established in Article 179 Treaty on the Functioning of the European Union (TFEU).[23] This provision serves as the cornerstone for the formulation of the Union's legal norms. For instance, the European Health Data Space,[24] in its Article 53 (1)(e)(i), explicitly encompasses 'development and innovation activities for products or services' in its definition of research.

For instance, Directive 2016/1164[25] Article 172(1) defines R&D as activities of a scientific or technical nature, the results of which cannot be known in advance, and whose main purpose is to acquire new knowledge or to use existing knowledge to create new or improved products, processes or services. Similarly, Regulation 1901/2006[26] Article 2, point 1 defines R&D as any scientific research aimed at increasing knowledge relating to the development of medicinal products for paediatric use.

The second argument concerns the distinction, not justified by the legislation, between public entities conducting research, such as universities, and private entities, such as pharmaceutical companies. No limitation is imposed on the conduct of research activities restricting them to those conducted exclusively by public entities. Moreover, the commercialization of research represents a fundamental aspect of university operations – a practice also explicitly permitted under EU and national law (Kozien & Kozien, 2017).

The third issue is the realization of SDG 3. The fundamental concept underlying the SDGs is the achievement of these goals themselves, with the specific means of achieving them left to the discretion of individual countries. In light of the complexity of the drug development process, which is characterized by close interactions between the public and private sectors (Gans et al., 2017), it would be inconsistent with the underlying principles of SDG 3 to assume that the research exemption applies exclusively to one of these sectors. It is important to acknowledge that, despite the arguments presented in the literature regarding the concentration of research efforts on commercially viable projects – which may potentially result in the neglect of areas with high public health needs (Qiao, 2023) or the ethical challenges (Poplazarova et al., 2020) associated with collaboration between private and public entities – greater access to medicines is only achievable when these two sectors engage in cooperation.

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[23] Treaty on the Functioning of the European Union, OJ C 326, 26.10.2012, pp. 1–390.

[24] Regulation (EU) 2025/327 of the European Parliament and of the Council of 11 February 2025 on the European Health Data Space and amending Directive 2011/24/EU and Regulation (EU) 2024/2847, OJ L 2025/327, 5.3.2025.

[25] Council Directive (EU) 2016/1164 of 12 July 2016 laying down rules against tax avoidance practices that directly affect the functioning of the internal market, OJ L 193, 19.7.2016, pp. 1–14.

[26] Regulation (EC) No 1901/2006 of the European Parliament and of the Council of 12 December 2006 on medicinal products for paediatric use and amending Regulation (EEC) No 1768/92, Directive 2001/20/EC, Directive 2001/83/EC, and Regulation (EC) No 726/2004, OJ, L 378, 27.12.2006, pp. 1–19.

In conclusion, the horizontal dimension of the AI Act has a direct impact on the implementation of SDG 3, as well as indirect effects on other domains that contribute to the achievement of this goal, despite not being directly regulated by the Act. It is therefore imperative that the provisions of the AI Act are interpreted in a manner that neither impedes nor prevents the achievement of these goals. It can therefore be argued that, in the case of the development of new medicines, the research exemption should apply to any entity that conducts research in this field, regardless of its legal form. It is important to note that this will not compromise the other tenets of the AI Act, which are to build trust in AI while safeguarding fundamental rights and ensuring the safety and well-being of individuals (European Commission, 2023a). This is because the process of bringing medicines to market is structured in a way that allows for a comprehensive assessment of the safety of the marketed product.

VI. CONCLUSIONS

When examining the relationship between the AI Act and the SDGs, it is of paramount importance to determine whether the European Union is obliged to take them into account when creating legislation on artificial intelligence. The analysis carried out shows that there is no direct legal obligation to do so. At the same time, the incorporation of the SDGs into the EU's strategic and planning documents means that the goals that the AI Act aims to achieve should not only be in line with the SDGs, but should ideally also actively contribute to their achievement. Therefore, it must be assumed that the AI Act cannot be interpreted in a way that prevents the achievement of the goals adopted in the SDGs.

There is no doubt that AI has a huge impact on broader issues of health and well-being. As such, its application has a direct impact on the achievement of SDG 3. At the same time, during the drafting of the AI Act, direct references to these goals were made in the parliamentary amendments that were not included in the final text. References to sustainable development were included in the law itself, although admittedly in a limited form, primarily the introduction of codes of conduct. This decision by the legislator undoubtedly weakens the position that the AI Act should also contribute to sustainable development, but in no way negates the thesis presented above, namely the need for an interpretation that supports the achievement of the SDGs.

Considering the direct impact of the AI Act on SDG 3, it is important to note that the regulation prohibits certain solutions that are applicable in the field of healthcare. In the case of scoring and profiling systems, this may affect the achievement of the goal related to universal health coverage. At the same time, it appears that the prohibition in this form is primarily intended to protect individuals from discriminatory or biased decisions resulting from erroneous decisions made by scoring systems. Considering the current state of development of this technology – which still faces issues of transparency

and non-discrimination, as well as concerns related, for example, to the assessment of legitimate but harmful behaviour – the introduction of this prohibition seems justified despite its potential impact on SDG 3. In the case of systems related to emotion recognition, the introduced prohibition contains an exception related to the use of systems for medical purposes; therefore, it is unlikely to hinder the achievement of SDG 3.

In the case of the indirect impact of the AI law on SDG 3, many research perspectives can be considered. In this article, the analysis focused on the drug development process and the applicability of the research exemption formulated in the AI Act to research conducted by commercial entities. The analysis conducted leads to the conclusion that an interpretation that aligns with the achievement of SDG 3 must lead to the assumption that the research exemption applies to all entities conducting research, regardless of their legal form.

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