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ARTIFICAL INTELLIGENCE AND CHILDREN'S RIGHTS

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INTRODUCTION

The increasingly widespread use of artificial intelligence (AI) is fundamentally reshaping our daily lives, and these changes are equally significant for children. AI-based systems are no longer merely background technological processes; they now play an active role in supporting children's learning, leisure activities and social interactions, and even indirectly influence decision-making mechanisms that affect their wellbeing.

It is important to emphasise from the outset that the relationship between children and AI does not constitute a distinct policy area. There is no dedicated policy framework for this issue, as it lies at the intersection of several disciplines. In virtually every environment where children are present, AI may also appear in some form. For this reason, discussions about children's rights must go beyond traditional frameworks and adopt an interdisciplinary approach.

AI offers both opportunities and risks. It can create positive, enriching experiences that make life easier, yet if used improperly, it may endanger users' rights and healthy development, including those of children. Designing appropriate regulation is therefore a complex and challenging task, one that remains high on the global policy agenda. Developing ethical and user-friendly platforms, establishing adequate legal safeguards, and finding a balance between the interests of businesses and users are all questions to which we must find sound answers as soon as possible.

This is particularly important because the rise of AI may also affect children's rights. The most comprehensive definition of these rights is set out in the Convention on the Rights of the Child, adopted in 1989 and ratified by every state except the United States. Hungary incorporated the Convention into national law in 1991, thereby recognising its binding force. The rights and principles enshrined in the Convention have since been integrated into Hungarian legislation, including child protection, healthcare and public education laws, and are also reflected in judicial practice.

INTRODUCTION

Children are not only users but often vulnerable subjects of the latest technologies. It is therefore essential that the development and use of AI take into account the internationally recognised framework of children's rights and ensure that new technologies- do not undermine but rather support the realisation of these rights.

This guide, which is intended for parents, child protection professionals and policymakers alike, aims to present the basic concepts, functioning and most common applications of AI in a professionally sound yet accessible way, with particular attention to the challenges and opportunities related to children's rights. It also provides an overview of the current national and international regulatory frameworks and the global policy directions shaping public debate. The guide includes a range of recommendations that outline the necessary steps with the best interests of children in mind and identify the relevant competent actors and decision makers.

We are aware that due to rapid technological development this document can only offer a snapshot, and that our findings and recommendations require ongoing review and continuous monitoring.

ABBREVIATIONS

AI: Artificial Intelligence
CSAM: Child Sexual Abuse Material
CRC: Convention on the Rights of the Child
DSA: Digital Services Act
E2EE: End-to-End Encryption
EU: European Union
GDPR: General Data Protection Regulation
GSRP: General Product Safety Regulation
IEEE: Institute of Electrical and Electronics Engineers
JRC: Joint Research Centre
UN: United Nations
UNICEF: United Nations International Children's Emergency Fund
WEF: World Economic Fórum

DEFINITIONS

Chatbot: A software application capable of communicating with people through text or speech. It operates based on predefined rules and input data, enabling automated responses and conversations.

Deepfake: An image, video or audio recording created using artificial intelligence and machine learning that convincingly depicts people saying or doing things they never actually said or did. The technology is often used to produce deceptively realistic but false content.

EU Regulation: A legally binding legislative act that must be applied in its entirety across all EU member states.

Generative AI: A form of artificial intelligence capable of creating entirely new content, including images, videos, audio and text.

Child: According to Article 1 of the Convention on the Rights of the Child, a child is any person below the age of 18 years.

Artificial Intelligence: A software or machine-based system that can learn from its environment, draw conclusions, make decisions and, to some extent, imitate human thinking processes through mathematical and logical methods.

Artificially Generated Child Sexual Abuse Material: Digital content created by artificial intelligence that depicts the sexual abuse of children without involving real children in any sexual acts.

Sextortion: A form of online blackmail in which a person is threatened with the release of intimate images or videos unless they provide money or further explicit material.

1. BASIC CONCEPTS

1.1. AI and digitalisation

Digitalisation is a broad concept that refers to the increasingly widespread use of information technologies, now extending to almost every area of life. Within this process, AI represents one of the most advanced technologies, capable of elevating the effects of digitalisation to a new level. AI is an umbrella term for machine and software-based applications and algorithms designed to imitate human behaviour and thinking.[1] AI serves as the driving force of the digital transition, opening up new opportunities while also raising new regulatory and ethical challenges on a global scale.[1]

1.2. How does AI work?

AI uses mathematical and logical methods to imitate human learning and decision-making. Computer systems that employ AI generate predictions or perform operations based on patterns found in existing data. They are also capable of learning from their mistakes, thereby improving their accuracy over time.

Thanks to their ability to process data quickly and precisely, AI systems can be used for both simple and complex tasks and are applicable across almost all areas of life. AI technologies underpin self-driving cars, virtual assistants, various educational platforms, financial analysis tools and even certain medical diagnostic instruments.

Although AI can process vast amounts of data at high speed, it does not think or feel like a human being and therefore cannot be held morally responsible for its actions. This is one of the key reasons why appropriate regulation and clear frameworks are essential.

[1]European Parliament. (4 September 2020). What is artificial intelligence and what is it used for?

1.3. The three types of AI

Narrow Artifical Intelligence (Weak AI)	Narrow artificial intelligence, also known as weak AI, is the most advanced form of artificial intelligence currently available. All AI solutions used in real-life applications fall into this category, including self-driving cars and digital personal assistants. Generative AI also belongs to this category. It is capable of creating entirely new content that has never existed before, such as images, videos, audio recordings and text. Although weak AI may appear to think independently and in real time, it in fact coordinates pre-programmed, narrowly defined processes and makes decisions based on predetermined rules. What is missing from AI “thinking” is consciousness and emotional understanding.
General Artificial Intelligence (Strong AI)	General artificial intelligence, also known as strong AI, refers to a type of computer capability that would allow a machine to outperform humans in any intellectual task. This form of AI is often depicted in films, where robots possess conscious thought and act according to their own objectives. If a system were to reach the level of general AI, it would theoretically be able to solve highly complex problems, make well-founded decisions even in uncertain situations, and apply previous experiences to current decision-making. It would possess human-level creativity and imagination and be capable of performing a far wider range of tasks than current narrow artificial intelligence systems.
Artificial Superintelligence	Artificial superintelligence would surpass human capabilities in almost every domain, including scientific creativity, general wisdom and social skills.

1.4. Artificial Intelligence in Children's Lives

AI is present in many areas of our lives; sometimes we consciously perceive and use it, while at other times it affects us indirectly and unnoticed. Children, like adults, encounter AI in various forms depending on their age and access to digital platforms. Games, social media, virtual assistants and educational software all have a direct impact on their daily lives. Algorithms determine which videos or films they watch, what music they listen to, who they connect with on social platforms, and even how they submit answers for homework.

Example: A 12-year-old child using TikTok may have their preferences recognised within a few days, such as enjoying funny animal videos. The recommendation algorithm then predominantly presents this type of content while other videos are pushed to the background. The child may move through a narrowed content world without realising it, which can influence their interests and social connections over time.

Beyond direct interaction, AI-powered automated decision-making systems also exert significant indirect effects on children's lives and wellbeing. Increasingly, AI-driven systems influence the allocation of social benefits, healthcare diagnostics and learning opportunities. This presents many possibilities and advantages for children.

Example: Diagnostic software that uses AI to analyse children's health data, such as X-rays or laboratory results, is becoming more widespread. In a Hungarian paediatric clinic, AI could help identify early signs of pneumonia. However, questions arise regarding how much the specialist can rely on the system's decisions and who is responsible if the algorithm makes a mistake.

At the same time, the spread of AI also carries serious risks and raises numerous regulatory and ethical questions. Addressing these challenges is our responsibility both at a micro level, in children's immediate environments, and at a macro level, within state and institutional frameworks. It is crucial that governments and responsible adults respond consciously and preparedly to these changes, ensuring that children's rights and artificial intelligence can coexist in a mutually reinforcing and complementary manner.

2. CURRENT REGULATORY ENVIRONMENT

In order for artificial intelligence to truly serve the interests of children without endangering their rights, safety or development, clear and effective regulatory frameworks are essential.

In recent years, the regulation and harmonisation of AI has become increasingly prominent both within the European Union and internationally, emerging as a central topic in public discourse. Most countries currently lack a comprehensive legal framework that specifically addresses the relationship between AI and children's rights. It is generally observed that legislation often lags behind technological development, and lawmakers struggle to keep pace with rapid advancements.

Approaches to AI regulation also vary. Some countries consider existing international frameworks, such as the UN Convention on the Rights of the Child, sufficient for protecting children, while others question this and call for more comprehensive regulation. The EU was the first international organisation to adopt a legislative regulation on AI in 2024.

This chapter not only presents the EU legislation relevant to Hungary but also includes a dedicated section on the Hungarian regulatory environment, covering relevant strategies, programmes and laws that can provide a framework for addressing the intersection of child protection and artificial intelligence.

The documents listed in this chapter can be divided into three main categories based on their legal force and application. The first category consists of EU regulations, which are directly applicable in all member states. The second category includes directives, which set common objectives but leave the method of implementation to individual states. The third category comprises non-binding documents, such as guidelines, reports and recommendations, which, while not legally enforceable, offer valuable guidance for policy and practical decision-making, particularly for policymakers, AI developers and child protection professionals.

2.1. INTERNATIONAL FRAMEWORK - The UN Convention on the Rights of the Child

When examining the relationship between artificial intelligence and children, it is particularly important to consider how regulations protect children's rights. The most comprehensive international document in this regard is the United Nations Convention on the Rights of the Child (UNCRC), adopted by the UN General Assembly in 1989 and ratified by Hungary in 1991.

The Convention is one of the most widely accepted human rights instruments, ratified by 196 states, making it practically applicable worldwide. It is important to note, however, that the United States has not ratified the Convention, although it has signed it. This is significant because many leading global technology companies, such as Google, Meta (Facebook), Apple and Microsoft, are headquartered in the United States, and their digital services have an impact on children's lives worldwide. The absence of US ratification means that these companies are not directly obliged to comply with the Convention, so the protection of children's rights largely depends on the regulations of each individual country.

A core principle of the Convention is that the best interests of the child must be a primary consideration in all decisions. Laws, public policies and practical measures must uphold this principle. This is especially important in AI regulation, as digital technologies directly and indirectly affect children's daily lives, learning opportunities, social relationships and access to healthcare.

In the following chapters, we will outline the articles of the UNCRC whose implementation may be influenced by the spread of AI. The rights concerned are grouped into three main categories: protection, care and participation. It is our shared responsibility to ensure that these rights are upheld in line with technological progress, and that children's rights remain a primary consideration when shaping the digital environment.

PROTECTION	PROVISION	PARTICIPATION
Article 3 – The best interests of the child must be a top priority in all decisions and actions that affect children	Article 24 – The best interests of the child must be a top priority in all decisions and actions that affect children	Article 12 – Every child has the right to express their views, feelings and wishes in all matters affecting them, and to have their views considered and taken seriously.
Article 8 – Every child has the right to an identity	Article 26 –Every child has the right to benefit from social security	Article 13 – Every child must be free to express their thoughts and opinions and to access all kinds of information, as long as it is within the law.
Article 9 –Children must not be separated from their parents against their will unless it is in their best interests (for example, if a parent is hurting or neglecting a child).	Article 27 – Every child has the right to a standard of living that is good enough to meet their physical and social needs and support their development.	Article 17 – Every child has the right to reliable information from a variety of sources, and governments should encourage the media to provide information that children can understand.
Article 16 – Every child has the right to privacy	Article 28 – Every child has the right to an education	
Article 19 – Governments must do all they can to ensure that children are protected from all forms of violence, abuse, neglect and bad treatment by their parents or anyone else who looks after them.	Article 31 – Every child has the right to relax, play and take part in a wide range of cultural and artistic activities	
Article 34 – Governments must protect children from all forms of sexual abuse and exploitation.	Article 39 - Children who have experienced neglect, abuse, exploitation, torture or who are victims of war must receive special support to help them recover their health, dignity, self-respect and social life.	
Article 36 – Governments must protect children from all other forms of exploitation, for example the exploitation of children for political activities, by the media or for medical research.		
Article 40 – A child accused or guilty of breaking the law must be treated with dignity and respect.		

2.2. EU Regulations and Directives

Currently, within the European Union, several regulations and directives are in force that affect the regulation of artificial intelligence. These primarily address data protection, product safety, liability and fundamental rights. The first comprehensive regulation specifically focused on AI, the so-called AI Act, came into effect in 2024. This represents a milestone in EU technology regulation, as it establishes a unified framework for the development and application of artificial intelligence.

Title	Entry into force	Description
Regulation on Artificial Intelligence /AI Act/ (2024/1689)	2024	The world's first comprehensive legislation specifically aimed at regulating artificial intelligence. Its purpose is to ensure safe, transparent and ethical AI systems in the EU.
General Product Safety Regulation /GPSR/ (2023/988)	2024	Its purpose is to ensure a high level of consumer protection and to provide a level playing field for businesses within the European Union.
Digital Services Act /DSA/ (2022/2065)	2024	Its purpose is to create a safer online environment for consumers and businesses within the European Union.
General Data Protection Regulation /GDPR/ (2016/679)	2018	It harmonises data protection practices within the European Union and strengthens the protection of individuals' personal data in both the private and public sectors.
Product Liability Directive /PLD/ (2024/2853)	2024	Its purpose is to modernise product liability rules by expanding the definition of "product" to include software, AI systems, digital manufacturing files, digital services and similar items.

2.3. International Guidelines, Reports and Recommendations

There are numerous non-binding documents, such as guidelines, reports and recommendations, that provide valuable guidance for policy and practical decision-making, particularly for policymakers, developers and child protection professionals. These documents support stakeholders in responding to technological challenges in a responsible and informed manner.

Given that AI is one of the fastest evolving fields, only documents published in 2023 or later that specifically examine the relationship between AI and children are considered here. Earlier documents or those addressing other aspects of the digital world are not listed. These recent guidelines provide current and relevant knowledge on the impacts of AI on children, supporting responsible decision-making and child-centred technology development.

Organisation	Title	Publication	Information
Alan Turing Institute	AI, children's rights, & wellbeing: Transnational frameworks	2023	The report presents how the spread of AI affects children's rights and well-being and analyses the extent to which international regulatory frameworks take these considerations into account.
5Rights	Child Rights by Design: Guidance for innovators of digital products and services used by children	2023	The purpose of the document is to highlight the importance of child-friendly development of digital products and services and to encourage designers and developers to prioritise children's rights and needs throughout the development process.
Council of Europe (CDENF), Alan Turing Institute	Mapping study on the rights of the child and artificial intelligence: Legal frameworks that address AI in the context of children's rights	2024	The document presents the findings of a study examining the relationship between children's rights and AI, focusing on three main challenges: the lack of legal frameworks, AI design that overlooks children's rights, and the limited availability of scientific evidence.

Organisation	Title	Publication	Information
Alan Turing Institute	The children's manifesto for the future of AI: Making our voices heard	2025	A dokumentum egy kinyilatkoztatás, amelyben gyerekek mondják el, mit gondolnak az MI-ről és szerintük mik lehetnének a lehetséges irányok.
5Rights	Children & AI Design Code	2025	Gyakorlati útmutató fejlesztőknek a gyermekek jogait szem előtt tartó, felelős MI-terméktervezéshez.

2.4. The Situtation in Hungary

Currently, Hungary does not have a separate law specifically regulating artificial intelligence. However, under EU law, several regulations are directly applicable and enforceable in the country. The most important of these is the legislation on artificial intelligence, which came into force in the EU on 1 August 2024. The regulation is being implemented gradually in several stages and will become fully mandatory from mid-2026.

In terms of strategies, several documents are available. For example, Hungary's Digital Child Protection Strategy, completed in 2016, aims to protect children from harmful online content and risks and to prepare them for responsible internet use. However, it does not address the new challenges posed by AI.

In 2020, the Hungarian government adopted the National Artificial Intelligence Strategy (2020–2030), which outlines the directions for AI development and application, with particular emphasis on ethical and societal considerations, safety, and support for human-centred applications. The strategy was revised in 2024 under the leadership of the Ministry for National Economy in cooperation with the Artificial Intelligence Coalition.

The implementation of the strategy is supported by a dedicated government commissioner, whose role is to achieve the so-called National AI Goals. The commissioner is responsible for ensuring the broad utilisation of AI opportunities in key areas such as education, healthcare, industry, transport, national security and public administration, while also monitoring the risks posed by the technology. In addition, the commissioner oversees the professional coordination of the domestic implementation of EU regulations and represents Hungary's position internationally. The commissioner works closely with the Minister for National Economy.

In Hungary, the Ministry for National Economy plays a prominent role in matters related to artificial intelligence. The NGM prepares domestic regulatory proposals on AI, participates in the work of EU and international AI bodies, and represents the government in decision-making processes related to the EU AI Regulation as well as in the European institutions supporting its implementation.

According to plans, by September 2025 the will prepare the bill to establish a new state authority, the Hungarian Artificial Intelligence Office, with regulatory powers, which is expected to begin operations in 2026. The proposal for the creation of the Office, as well as for the domestic implementation of the EU AI Regulation (2024/1689), aims to provide statutory regulation to ensure the establishment of Hungary's AI institutional framework and its legal harmonisation with the European Union.

3. BENEFITS AND POSITIVE IMPACTS

In discussions about children and artificial intelligence, the focus tends to fall almost exclusively on risks and negative aspects. However, it is important to recognise that AI can also offer numerous benefits, both for children and their immediate environments. When developed and applied consciously, ethically, and with children's rights in mind, these systems can make a significant contribution to children's well-being and the realisation of their rights.

Therefore, when considering the spread of AI, it is not sufficient to assess only the dangers; the opportunities must also be weighed, and a proper balance sought. Artificial intelligence was, after all, created fundamentally to serve humans. When used responsibly and thoughtfully, it has the potential to meaningfully support everyday life, including many aspects of children's experiences.

This chapter highlights the social and child-focused positive impacts that have become achievable with the emergence and spread of artificial intelligence.

3.1. System-level Positive Effects

3.1.1. ccessible Education

Article 28 – Every child has the right to an education

As discussed in previous chapters, the use of artificial intelligence in education undoubtedly carries certain risks in terms of social inequality. However, when applied within appropriate frameworks, AI can also become one of the most effective tools for promoting equal access to education.

One of AI's greatest advantages lies in its ability to support flexible digital learning systems that are not limited by time or location. Such systems can be particularly valuable for children living in conflict zones, disadvantaged regions, or those suffering from illness who are often unable to access traditional schooling. Through personalised online platforms, learners can take part in education regardless of their circumstances.

Intelligent learning systems, chatbots, and gamified teaching materials can make learning not only more accessible but also more engaging. If these technologies reach beyond well-equipped institutions and affluent families to benefit the most vulnerable communities, they can genuinely help to reduce learning gaps. In this regard, governments play a key role, as digital inclusion benefits not only the future of children but also the long-term competitiveness of the country.
From a child protection perspective, it is essential that AI-based educational tools are developed and introduced in a fair and equitable manner. This includes ensuring proper access as well as preparing teachers and support professionals to use these tools effectively. Only under such conditions can artificial intelligence become a means of reducing, rather than reinforcing, educational inequalities.

3.1.2. Health and Wellbeing

Article 24 – The best interests of the child must be a top priority in all decisions and actions that affect children
Article 27 – Every child has the right to a standard of living that is good enough to meet their physical and social needs and support their development.

Artificial intelligence plays a key role in the advancement of healthcare, and its social benefits are undeniable. Digital health solutions, such as home health monitoring applications, remote medical consultation services, and behaviour analysis platforms, provide innovative ways to support wellbeing. Moreover, AI-based technologies are capable of processing vast amounts of medical data quickly and accurately, contributing to early disease detection, the development of personalised treatments, and stronger preventive care.

For children, these systems are particularly valuable as they often provide solutions that go beyond traditional healthcare services. AI can, for instance, identify developmental disorders, mental health challenges, or predispositions to chronic illnesses at an early stage, allowing for timely intervention and targeted support.
Beyond protecting children's health, AI can also enhance their physical safety. Through intelligent urban systems, issues such as transport management, air quality, street lighting, and waste management can be addressed more efficiently. These improvements contribute to creating cleaner, healthier, and more liveable environments that directly support children's wellbeing.
However, the full potential of AI in healthcare can only be realised if social inequalities are taken into account during development and implementation. Ensuring equal access to tools, promoting digital literacy, and engaging local communities are essential to prevent these technologies from deepening existing divides. When applied responsibly and inclusively, artificial intelligence can serve not only as a driver of technological innovation but also as a powerful instrument for realising every child's right to health.

3.1.3. Strengthening Child Protection and Social Care Systems

Article 26 –Every child has the right to benefit from social security

Although the use of artificial intelligence in social care systems carries certain risks, particularly those related to bias and discrimination, with careful development and ethical implementation AI can significantly enhance the capacity and efficiency of social services, including child protection.

Algorithms are capable of processing large amounts of data rapidly, enabling the early identification of risk factors such as neglect, school absenteeism, or abuse. This is especially valuable for overburdened child welfare services, where AI can help prioritise cases requiring urgent intervention more quickly and accurately.

In addition, intelligent systems can support social workers by providing a more comprehensive understanding of a family's circumstances, helping them make better-informed decisions about the most appropriate forms of support or intervention. AI can also improve access to services by offering families user-friendly digital platforms for administrative procedures, personalised information, or automated guidance when applying for assistance.

It is essential, however, that the introduction of these technologies is accompanied by transparency, professional oversight, and opportunities for review. In this way, artificial intelligence does not replace human expertise but rather strengthens it, contributing to the creation of a fairer, more responsive, and child-centred social care system.

3.2. Benefits of AI for Children's Lives

3.2.1. Personalised learning

Article 28 – Every child has the right to an education

One of the greatest advantages of artificial intelligence is its ability to personalise the learning process. Adaptive systems allow learning to adjust to each child's individual pace, interests, and abilities. This is particularly valuable for children with learning difficulties or special educational needs, as traditional teaching methods often fail to provide adequate support for them.

AI-based learning systems offer continuous feedback, multilingual access, and materials available around the clock, helping children progress regardless of their social, linguistic, or geographical background. These tools not only deliver information but can also enhance motivation. Gamified learning, visual reinforcement, and gradually increasing challenges enable children to gain knowledge through positive experiences and a sense of achievement.

From a child protection perspective, it is essential that learning adapts to the child, rather than the other way around. Personalised learning supported by artificial intelligence can strengthen children's self-confidence and foster a positive attitude towards education.

3.2.2 Overcoming Communication Barriers

Article 27 – very child has the right to a standard of living that is good enough to meet their physical and social needs and support their development.

Artificial intelligence offers significant opportunities for children who experience communication difficulties, live with disabilities, or face any form of developmental delay. It can provide personalised and flexible solutions that are not always available in traditional educational or care settings. AI-based tools such as speech-to-text systems, communication applications using visual symbols, or customised learning materials can help children express their thoughts, feelings, and needs, and enable them to participate more actively in everyday activities.

These digital solutions not only support learning but also help children build and maintain social relationships while strengthening their sense of independence and competence. Artificial intelligence can therefore serve not only as an educational aid but also as a digital companion that adapts to each child's unique needs, contributing to a life of dignity and fulfilment for every child.

4. PROBLEMS AND CHALLENGES

Just as the spread of the internet once contributed to the rise of both offline and online abuse and sexual exploitation of children, the use of artificial intelligence technologies also carries significant risks in various areas of child protection. These risks range from challenges in identifying offenders to the emergence of new forms of abuse and the increasing difficulty of prevention.

The Challenges section highlights the broader societal issues that have emerged alongside the growing use of AI. The Risks section, in turn, focuses on the ways in which the spread of artificial intelligence can expose children as individuals to specific dangers. Together, these perspectives make it clear how the improper or unregulated use of AI may infringe upon children's rights at both the micro and macro levels.

However, addressing this topic remains particularly difficult, as comprehensive impact assessments are not yet available. Artificial intelligence has only recently become part of children's lives, meaning that current recommendations and professional discussions are still largely risk-based. Due to the lack of reliable statistical data and methodological tools, systemic consequences are either not yet measurable or only to a very limited extent. Nevertheless, anecdotal evidence already points to a range of potentially harmful effects.

Artificial intelligence is fundamentally transforming digital content creation. It can generate human-like texts, images, videos, music and other types of content automatically, requiring little to no technical expertise. As a result, virtually anyone can produce and distribute any kind of material. This is particularly concerning in light of a 2024 study by the National Media and Infocommunications Authority (NMHH), which found that just over half (50.6%) of respondents aged 13–16 had encountered an image generated by AI that they initially believed to be real but later discovered was not.

Although generative artificial intelligence has many positive effects on users, including children, its use also carries significant risks. This is particularly true given that the legal and policy frameworks regulating AI from the perspective of children's rights are currently incomplete, fragmented or, in some areas, entirely absent.

The following section presents the systemic challenges and specific, direct risks affecting children, in line with the articles of the United Nations Convention on the Rights of the Child. Some variations may appear depending on the level of existing knowledge or experience available on each issue.

4.1. System-level challenges

4.1.1. Privacy and Data Protection

Article 8 – Every child has the right to an identity
Article 16 – Every child has the right to privacy
Article 17 – Every child has the right to reliable information from a variety of sources, and governments should encourage the media to provide information that children can understand
Article 19 – Governments must do all they can to ensure that children are protected from all forms of violence, abuse, neglect and bad treatment by their parents or anyone else who looks after them
Article 34 – Governments must protect children from all forms of sexual abuse and exploitation
Article 36 – Governments must protect children from all other forms of exploitation, for example the exploitation of children for political activities, by the media or for medical research

AI poses new challenges to the protection of children's right to privacy. Platforms and applications that rely on AI often collect data about users' behaviour, interests, location and online networks automatically, without the child's knowledge or explicit consent. This type of data profiling carries significant risks, including identity theft, manipulation and unauthorised surveillance.

This is particularly concerning because children, due to their age and limited digital literacy, are often digitally naïve users. They may not recognise the hidden mechanisms of data collection and are rarely able to assess the long-term consequences of sharing personal or sensitive information. The situation is further complicated by the fact that the platforms most frequently used by children tend to lack transparency and are not designed with user-friendly privacy settings, making it difficult to understand how personal data are collected and used.

Such practices can undermine children's right to privacy and jeopardise the protection of their identity, particularly if their data are later used for manipulative or harmful purposes. To safeguard children effectively, it is essential that they receive clear, age-appropriate and transparent information about how their data are being handled, especially on platforms that employ artificial intelligence.

However, there is a recurring dilemma that highlights the gap between data protection and the retrospective monitoring of online crimes. From a regulatory perspective, a persistent challenge is ensuring that data and information management and law enforcement work in a mutually reinforcing way. This issue has recently become more pronounced in relation to end-to-end encryption, E2EE.

The essence of E2EE is that the content of communication is accessible only to the sender and the recipient and cannot be traced afterwards. This ensures that shared information does not fall into the hands of unauthorised third parties. At the same time, it creates complex new challenges from a child protection perspective. Messaging services that implement full E2EE, such as the Meta Messenger system introduced in 2023, make it significantly more difficult to detect, remove, and identify perpetrators of illegal content related to online child abuse and exploitation. Previously, the platform could filter messages if suspicious content was detected. After the introduction of E2EE, however, a specific user report is required to investigate an incident. While this practice represents a step forward in terms of data protection, it may indirectly undermine states' obligations to protect children, as it renders crimes against children less visible.

Education is another important and often controversial area that raises data protection concerns. The use of new technologies offers many opportunities to enhance learning but also carries significant risks for the online safety and privacy of children. Educational technology is increasingly data-driven and often relies on information that can identify individuals. This means that data generated during learning can easily enter a global, heavily commercialised data ecosystem, the long-term consequences of which are currently unpredictable. A recent study found that when a child uses Google Classroom, Google's secure educational platform, and clicks on a link shared by a teacher that leads to Vimeo or YouTube, many companies begin tracking their online activity. The study showed that a single click can result in 92 different external sites, including Google, Facebook, and Amazon advertising networks, collecting data about the child.

It is important to emphasise that respecting privacy and protecting children from violence are not fundamentally mutually exclusive. Today, technological solutions exist that can lawfully and proportionately serve both purposes. The objective is for these approaches to comply with both data protection and child protection requirements.

Public opinion is also receptive to such balanced solutions. According to a 2023 EU survey, an overwhelming majority of European citizens support the detection of online sexual abuse against children, even on private channels such as email and messaging applications, with 87 per cent in favour, and on end-to-end encrypted messaging services, with 83 per cent support.

Recommendations to Support the Implementation of Children's Rights in the Area of Privacy and Data Protection
Develop and implement regulatory and technological solutions that reinforce both data protection and child protection, rather than treating them as mutually exclusive.
Prepare and widely disseminate child-friendly, age-appropriate privacy notices across digital platforms.
Establish effective, easily accessible complaint mechanisms that children can also use independently.
Equip children to recognise AI-related data protection risks through awareness-raising programmes and educational materials integrated into school curricula.
Institutionalise collaboration between data protection authorities and child protection organisations, including the creation of joint monitoring mechanisms.

4.1.2. Fairness and Equality

Article 3 – The best interests of the child must be a top priority in all decisions and actions that affect children
Article 13 – Every child must be free to express their thoughts and opinions and to access all kinds of information, as long as it is within the law.
Article 24 – The best interests of the child must be a top priority in all decisions and actions that affect children
Article 26 –Every child has the right to benefit from social security
Article 28 – Every child has the right to an education

AI can serve both as a tool for and a barrier to social justice. When well designed, it can promote inclusion; when poorly applied, it may reinforce existing inequalities or create new forms of exclusion.

Fairness

From a fairness perspective, AI systems that do not consider the age, social background, or cultural characteristics of users, including children, are particularly risky. Algorithms trained on biased data can produce flawed decisions that negatively affect children.

Such datasets can embed bias not only through the way data is collected, but also through how it is structured and weighted. This can occur even if obviously sensitive variables, such as gender, ethnicity, or sexual orientation, are removed. Inaccuracies and simplifications in modelling can disproportionately impact vulnerable groups, such as children with disabilities, marginalised backgrounds, or atypical developmental paths, undermining the consideration of their individual needs.

Concrete examples highlight the dangers of algorithmic bias. Amazon, for instance, discontinued a recruitment algorithm that favoured resumes containing words more commonly used by men. In other cases, facial recognition systems have proven less accurate for minority ethnic groups, as the training datasets did not adequately represent societal diversity.

Equality

The question of equality is primarily about access. AI-based solutions often require conditions such as a stable internet connection, digital skills, or financial resources, which are not available to many children. This is particularly important in health, social, and education systems, where equal access is a fundamental right.

Health: Children have an equal right to health and healthcare services, yet the spread of AI-based solutions may create new inequalities. Tools such as image-processing diagnostic systems or predictive analytics can improve efficiency and accuracy in healthcare, but they require substantial financial, technological, and professional resources. As a result, these tools are typically accessible to children living in more developed regions or from wealthier families, while those in rural, low-income, or minority communities are often excluded.

Education: Access to education is a fundamental right for every child, and AI-based tools, such as adaptive learning systems or language-learning applications, offer significant opportunities. However, these tools can only fulfil their potential if families and schools have the necessary technological infrastructure and resources. In reality, many children lack reliable digital devices or internet access, which can deepen the digital divide.

Social Welfare Systems: AI applications in social welfare systems, for example in assessing benefits or prioritising case management, can increase efficiency, especially in overloaded institutions. However, algorithms often rely on historical or inaccurate data, which can disproportionately disadvantage marginalised families. For instance, an AI system might automatically reject a benefit application due to a parent's employment status or place of residence without considering the family's individual circumstances.

Recommendations to Support the Realisation of Children's Rights in the Area of Fairness and Equality
Ensure diverse datasets are used in the development of AI systems so that they operate fairly and reflect social and cultural diversity.
Conduct regular and independent audits of AI-based algorithmic decision-making. For automated decisions affecting children, provide accessible complaint mechanisms and human review.
Provide child-appropriate and age-sensitive information on how AI systems operate, enabling children and their parents to understand how decisions about them are made and which data is used.
Expand digital infrastructure, develop technology in disadvantaged areas, and introduce programmes to build digital skills from an early age.
Encourage child-friendly AI development through regulatory and financial incentives, such as grants and funding programmes that prioritise inclusive and opportunity-enhancing technological solutions.
Support educational, healthcare, and social institutions in implementing and using AI tools effectively.
Promote social dialogue and meaningful child participation in AI-related decision-making processes.

4.1.3 Age Regulation

Article 3 – The best interests of the child must be a top priority in all decisions and actions that affect children
Article 17 – Every child has the right to reliable information from a variety of sources, and governments should encourage the media to provide information that children can understand

AI has become a key tool in online age verification, as traditional methods such as self-reporting or parental supervision can be easily bypassed. AI technologies including facial analysis-based age estimation, behavioural and biometric profiling, and automated document recognition aim to effectively prevent children from accessing online content that is not appropriate for their age.

However, the reliability of algorithms used to determine age is limited, as inaccuracies and misclassifications can occur, creating significant challenges. A further point of tension is that protecting children may require handling sensitive biometric data, such as facial images or behavioural patterns, which raises data protection concerns in the context of age verification.

Research and development are currently advancing in several directions. In some cases, privacy-enhancing techniques are being developed so that service providers only receive a result indicating whether a user is a minor or an adult, without accessing the raw images or data. In other cases, risk-based adaptive models are being developed to adjust the level of verification according to the sensitivity of the content.

Overall, a major challenge lies in ensuring that children can access age-appropriate and valuable digital content while being effectively protected from harmful online influences. In addition, the secure and responsible handling of their personal data remains a high-priority risk.

Recommendations to Support the Implementation of Child Rights in Age Regulation
Support the introduction of privacy-enhancing technologies that enable age verification without giving service providers access to users' personal or biometric data
Require service providers to inform children and their parents in clear, age-appropriate language about the age verification methods used, how they operate, and the details of data processing.
Establish a unified, EU-wide framework for AI-based age regulation. This can prevent confusion arising from differing national regulations, enhance child protection, and provide legal certainty for the industry.

4.1.4 Child Participation

Article 12 – Every child has the right to express their views, feelings and wishes in all matters affecting them, and to have their views considered and taken seriously

Children's rights in the digital environment are as valid as in the physical world, as highlighted in General Comment No. 25 of the UN Committee on the Rights of the Child. This includes the right for children to be heard in all matters concerning digital environments that affect them.

This is particularly important in the development of AI-based systems, as well as in policymaking and strategic decision-making. Currently, a major challenge is that children are rarely meaningfully consulted, and their views are often completely absent from development and decision-making processes. Yet involving children is essential to ensure that technology genuinely serves their best interests.

Participation can take many forms, such as conducting surveys and interviews with children, organising focus group discussions, establishing advisory councils composed of young people, or gathering feedback through digital platforms. These approaches allow developers to directly understand children's experiences and needs, leading to more responsible, effective, and child-centred solutions.

Recommendations to Support the Implementation of Children's Rights in the Area of Child Participation
It is essential to involve children regularly and meaningfully in the design and evaluation of AI systems. The introduction of mandatory protocols requiring the collection of children's views is recommended.
It is important that children not only have the opportunity to express their opinions but also see the impact of their input. During development, mechanisms should be put in place to provide feedback on how children's suggestions have been considered or incorporated. This strengthens trust and encourages future participation.

44.1.5 Rehabilitation and Remedy

Article 39 - Children who have experienced neglect, abuse, exploitation, torture or who are victims of war must receive special support to help them recover their health, dignity, self-respect and social life.
Article 40 – A child accused or guilty of breaking the law must be treated with dignity and respect.

The use of AI unfortunately often results in violations of the rights of child users, whether through discriminatory algorithms, online harassment, exploitation, or abuse. In such cases, children have the right to appropriate protection and support. Article 39 of the Convention on the Rights of the Child requires that all affected children be provided with opportunities for physical, mental, and social rehabilitation. A key part of this is the establishment of child-friendly complaint mechanisms that allow children to report grievances safely, in ways that are appropriate to their age and maturity.

It is essential that children also have access to justice. If they become victims of a crime or any form of abuse, they must have the opportunity to seek legal remedy. A pressing challenge is to ensure that children are provided with effective and practical avenues to initiate proceedings, pursue remedies, and obtain legal representation.

In other cases, when a child becomes an offender, particularly in relation to AI-related violations, justice and procedural frameworks must take their specific circumstances into account, guaranteeing fair treatment, protection, and opportunities for rehabilitation.

In both scenarios, emotional and psychological support for children is indispensable. Rehabilitation should be understood not only in physical terms but also as the restoration of mental well-being, encompassing trauma recovery, the re-establishment of a sense of safety, and reintegration into the community. It is crucial that children are not seen merely as legal subjects but as individuals with unique needs and developmental requirements. Therefore, a child-centred approach, adequate psychosocial support, and access to child-friendly legal and social services play a central role for both victims and children who have offended.

As AI becomes increasingly prevalent, it is vital that child protection systems evolve accordingly and are able to respond quickly to new forms of harm and injustice.

Recommendations to Support the Realisation of Children's Rights in the Area of Rehabilitation and Remedy
Establish accessible, safe, and understandable online complaint channels that enable children to initiate any form of legal remedy.
Develop legal support systems to assist children in enforcing their rights. This includes access to legal representation, child-friendly information about legal procedures, and the provision of emotional and psychological support before, during, and after the process

4.1.6 Social Interactions

Article 3 – The best interests of the child must be a top priority in all decisions and actions that affect children
Article 24 – The best interests of the child must be a top priority in all decisions and actions that affect children

Real-life human interactions are crucial for the development of children's social behaviour, as they learn socially acceptable norms and appropriate communication. In contrast, AI systems do not always support these values. It is common for children to use demanding or rude language in conversations with AI. Although a direct link has not yet been proven, there is a potential risk that communication patterns learned through AI could transfer to real-life interactions.

It is therefore important to develop AI systems that promote respectful, reciprocal communication and support the social development of children, prioritising their best interests. A good example is the Amazon Echo Dot's "polite mode," which responds to children's use of the word "please" with a thank you, thereby reinforcing positive language habits.

Recommendations to Support Children's Rights in the Area of Social Interactions
AI chatbots and conversational platforms used by children should include mechanisms that recognise disrespectful, aggressive, or demanding language and respond in a constructive, educational manner – for example, providing feedback or suggesting alternative, more polite phrasing.
It is recommended to provide guidance and educational resources for adults to better understand how interactions with AI may influence children's social behaviour and how they can support the development of healthy communication patterns in digital environments.

4.1.7 Climate and Child Protection

Article 24 – The best interests of the child must be a top priority in all decisions and actions that affect children

Operating AI requires significant computational capacity and energy, which directly contributes to greenhouse gas emissions and accelerates climate change. While AI offers many benefits, such as improving the efficiency of healthcare systems or supporting solutions to societal challenges, it is essential to consider its environmental impact, including energy demand and the ecological footprint of hardware production. The responsible and sustainable use of technology is therefore crucial to minimising long-term environmental risks.

Climate change directly affects children's health and wellbeing: air pollution, heatwaves, extreme weather events, and uncertainties in food security all increase physical and mental health risks. As AI can indirectly contribute to these environmental pressures, its development and deployment must pay particular attention to children's rights and health. Creating sustainable, climate-friendly AI solutions is thus fundamental not only for protecting the planet but also for safeguarding the future of the youngest generations.

Recommendations to Support Children's Rights in the Area of Climate and Child Protection
Governments and regulatory bodies should mandate guidelines for climate-friendly AI development, taking into account the impacts on children's health and wellbeing.
Children should be taught in schools and community programmes about the environmental impacts of technology and how to use AI responsibly.

4.2. Key Risks to Childrem

4.2.1 Online Grooming and Manipulation

Article 8 – Every child has the right to an identity.
Article 16 – Every child has the right to privacy
Article 17 – Every child has the right to reliable information from a variety of sources, and governments should encourage the media to provide information that children can understand.

With the emergence of AI, online grooming and manipulation have taken on new and previously unknown dimensions. Through deepfake technology, it is now possible to create highly realistic but entirely fabricated images, videos, and audio recordings in which children's faces, voices, personal characteristics, or data (such as place and date of birth) are used without their consent. Using these acquired data, perpetrators can create false identities or steal existing profiles and gain access to content that children would otherwise be unable to reach, all while building their trust.

A common perpetrator strategy involves using fake profiles to gradually gain a child's trust, which may later lead to online abuse or sexual exploitation. AI can also analyse children's online behavioural patterns, enabling perpetrators to apply personalised, targeted harassment or manipulation tactics. In most cases, children are unaware that they are becoming victims of digital manipulation.

Recommendations to Uphold Children's Rights in the Area of Online Grooming and Manipulation
Develop educational materials that help children recognise signs of digital manipulation, understand how online harassment and grooming operate, and know how to respond effectively in such situations.
Establish and strengthen AI-supported protection systems capable of detecting and preventing the unauthorised use of children's facial images, voices, or other biometric data.
Prepare parents, guardians, and educators to recognise early signs of online abuse and manage such situations appropriately.

4.2.2 Artificially Generated Child Sexual Abuse Material (AI-CSAM)

Article 17 – Every child has the right to reliable information from a variety of sources, and governments should encourage the media to provide information that children can understand.
Article 19 – Governments must do all they can to ensure that children are protected from all forms of violence, abuse, neglect and bad treatment by their parents or anyone else who looks after them.
Article 34 – Governments must protect children from all forms of sexual abuse and exploitation.
Article 36 – Governments must protect children from all other forms of exploitation, for example the exploitation of children for political activities, by the media or for medical research.

Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography

AI presents a new type of risk in the area of sexual and other forms of exploitation of children. The technology enables the creation of highly realistic, yet partially or entirely artificially generated images, videos, and audio recordings depicting abuse. This phenomenon, often referred to as “deepfake,” aims to produce content that appears real but is in fact false. Such material may depict real children, use partial features of real individuals, or be entirely AI-generated.

These materials, whether depicting real or artificially generated children, often become the subject of sexual crimes. The creation of such images, videos, or audio recordings renders children victims of abuse and violence even if they are not physically involved, as their dignity and personal integrity are violated. The existence of such content, and the fact that a child is represented as a victim of sexual abuse, is traumatising in the same way as abuse occurring in the real world.

Perpetrators frequently use AI-generated child content to satisfy sexual desires, commit sextortion, harass, or even as a tool for sexual abuse against children. These cases highlight how AI can become a new instrument for child sexual exploitation, posing significant risks to child protection. AI-generated content may also facilitate other forms of exploitation, particularly when images are distributed online, used commercially, or leveraged to exert power over a child through blackmail.

In Hungary, AI-CSAM can currently be reported to the Information Office, and at the international level, hotlines exist to receive and manage such reports.

Recommendations to Support the Implementation of Children's Rights in the Area of Artificially Generated Child Sexual Abuse Material
Improve and continuously review legal frameworks regarding AI-generated content depicting child abuse.
Service providers must take effective action against artificially generated abusive material.
Ensure that victims of such content have access to rapid removal, legal assistance, and psychosocial support.
Provide simple and secure reporting channels for children and caregivers to report abuse.
Foster global cooperation to regulate AI-generated child sexual abuse material.

4.2.3.Exploitation

Article 36 – Governments must protect children from all other forms of exploitation, for example the exploitation of children for political activities, by the media or for medical research.

Subscription-based applications that use AI-powered features pose particular risks for children. These applications, whether video platforms, online stores, or digital games, often track users' online behaviour and preferences, including those of minors, and use the collected data to present personalised offers designed to encourage impulse purchases.

Such applications, which incentivise children to purchase premium content, are hazardous because they are intended to mislead. They deliberately employ psychological tactics, such as reward systems, daily challenges, or elements that encourage repeated engagement, which can foster addictive behaviours and prompt children to spend repeatedly without fully understanding the real financial consequences. As a result, children may incur excessive expenses for "extra" or "special" content, creating both financial and psychological burdens for themselves and their families.

Recommendations to Safeguard Children's Rights in the Area of Exploitation
Age-appropriate purchase limits or approval systems should be introduced for children.
Parents should be provided with tools to monitor, authorise, or restrict their children's purchases.
Applications and systems that encourage spending should be monitored and regulated.

4.2.4. Misinformation

Article 17 – Every child has the right to reliable information from a variety of sources, and governments should encourage the media to provide information that children can understand.

AI can generate highly realistic but false texts, images, or videos that can easily mislead children. Since young people often rely on online sources for information and may lack the critical thinking skills to assess their credibility, AI-generated fake news and manipulated content pose a particular risk to them. On platforms such as TikTok, YouTube, or Instagram, AI-created videos or news stories frequently appear, depicting fictional events, such as fabricated natural disasters, false school announcements, or manipulated footage of well-known influencers.

Children often struggle to distinguish between what is real and what is not. Such content can distort their understanding of the world, provoke fear, or lead to the formation of false opinions. This is especially concerning because it undermines children's right to accurate, reliable, and trustworthy information, which is fundamental for their safe, informed, and responsible participation in the digital environment.

Recommendations to Promote Children's Rights in the Area of Misinformation
Platforms should clearly indicate when content has been generated by AI and alert users to the potential for false or misleading information.
Schools and digital education programmes should help children recognise fake news and develop the skills to use reliable sources.
Applications and platforms that disseminate misleading content targeted at children should be monitored and regulated.

4.2.5. Artificial Relationships and Digital Addiction

Article 3 – The best interests of the child must be a top priority in all decisions and actions that affect children
Article 27 – Every child has the right to a standard of living that is good enough to meet their physical and social needs and support their development.
Article 31 – Every child has the right to relax, play and take part in a wide range of cultural and artistic activities

AI-based technologies can have significant psychological effects on children in multiple ways. Chatbots that use natural language processing, for example, pose very different risks compared to recommendation algorithms.

In the first case, these systems can provide personalised responses resembling human communication, which can easily trigger emotional attachment in children. Those particularly at risk are children who seek social or emotional support online due to its absence in their immediate environment, and who may perceive such digital entities as friends or confidants. This can distort emotional development, especially if these artificial relationships are not balanced by real human interaction.

In the second case, the constant presence of AI-based systems and digital platforms can contribute to excessive screen time. This includes social media platforms, games, and video-sharing services. Given that children's self-regulation skills are still developing, they are particularly vulnerable to digital overload. Prolonged and excessive technology use can negatively affect healthy development.

AI algorithms and systems are frequently designed to capture and hold attention for extended periods, contributing to addiction and overload, whether through chatbots or other AI-driven services. Globally, while awareness of the risks of digital overload is high, few regulations exist to manage it effectively.

Increased screen time and artificial social connections may lead to reduced opportunities for free play, creative activities, and real-life community engagement. Over time, this can undermine children's ability to exercise their rights to leisure, play, and participation in cultural life.

Recommendations to Support the Implementation of Children's Rights in the Area of Artificial Relationships and Digital Overload
Children and their parents should be informed about the psychological strain that AI-based systems can cause.
AI-based applications should include built-in, age-appropriate usage time limits and alerts.
Parents should have access to tools and information that help prevent overuse.

4.2.6. Surveillance

Article 3 – The best interests of the child must be a top priority in all decisions and actions that affect children
Article 16 – Every child has the right to privacy

In recent years, the use of facial recognition cameras has become increasingly widespread worldwide, primarily for security purposes. These technologies are sometimes used to prevent crime, while in other cases they are applied for immigration control through facial recognition drones or video cameras. Such devices result in heightened surveillance of both public and private spaces, raising various data protection concerns. AI-based technologies can be particularly risky in terms of children's rights.

It is often unclear exactly why, how, and for how long authorities collect and process children's data. The use of AI frequently lacks the legal safeguards necessary to ensure children's right to privacy and to guarantee that their best interests are taken into account in all decisions affecting them.
The tension between safety and privacy is particularly apparent in this context. While the stated purpose of surveillance systems is typically to enhance security, the reliable storage and ethical use of recordings involving children raise serious questions and challenges that must be addressed.

Recommendations to Safeguard Children's Rights in the Area of Surveillance
The purpose, legal basis, and use of recordings involving children must be clearly communicated.
The operation of AI-based surveillance systems should be bound by legal frameworks and guided by children's rights considerations.
Special attention must be given to the specific risks associated with the surveillance of refugee and migrant children.

5. WHAT CAN BE DONE? - RECOMMENDATIONS

A well-functioning AI system must adhere to a number of core principles, particularly when interacting with children. AI should operate in a way that takes into account children's developmental stages, diverse needs, and vulnerabilities, and these considerations should be integrated into its design from the outset. It is essential that the system fully complies with legal requirements, including children's rights, data protection and online safety regulations, anti-discrimination rules, and consumer protection standards. The system must not pose risks to children's physical, mental, or emotional safety, and it must treat children and their data fairly and equitably. It should function reliably and ensure that human intervention is possible at any time.

It is crucial that children, as well as adults acting in their best interests, can easily raise complaints, ask questions, or seek assistance, and that the system's decisions are explained to them in an understandable manner. Furthermore, the operation of AI must be transparent: it should be clear how decisions are made, what impact they have on children, and who is accountable in any given situation. Ultimately, AI must always prioritise the best interests of children, respect their rights, enable their participation and ensure their voices are heard, and consistently promote their well-being.

Based on these principles, and taking into account the identified risks and challenges, it is essential to develop recommendations that support the responsible development and optimal operation of AI systems.

Szereplői kategória	Szereplői csoport	Beavatkozás típusa	Ajánlás
Nemzetközi szervezetek	Európai Unió, ENSZ, UNICEF	Jogszabályok, irányelvek létrehozása	• Gyermekvédelmi szempontból korszerű és releváns jogszabályok, ajánlások és irányelvek kidolgozása az MI használatára vonatkozóan
Jogalkotók és jogérvényesítés	Országgyűlés, ágazati irányítás	Jogalkotás, implementáció	• Nemzetközi gyermekvédelmi szempontok integrálása a nemzeti jogszabályokba! • Mesterséges intelligencia alkalmazására vonatkozó gyermekvédelmi szabályok és kötelező hatásvizsgálatok bevezetése
Állami szabályozók és felügyeleti szervek	NMHH, NAIH	Felügyelet, ellenőrzés, védelem	• Szigorúbb adatvédelmi és online tartalomszabályozási protokollok bevezetése Rendszeres auditok az MI-alapú rendszerekre! • Panaszmechanizmusok kialakítása • EU-s jogszabályi keretek betartatása
Igazságszolgáltatás	Bíróságok	Jogérvényesítés	• Képzések indítása a bírák és ügyészek számára az MI-vel kapcsolatos gyermekvédelmi ügyek kezeléséről
Szociális és egészségügyi szolgáltatók, szakszervezetek	Szociális munkások, pszichológusok, érdekképviseletek	Tanácsadás, gyermekvédelmi munka, szakszervezeti képviselet	• Képzések szervezése a mesterséges intelligencia és a gyermekjogok kapcsolatáról • Protokollok kialakítása a gyermekeket fenyegető veszélyek, digitális túlhasználat, online zaklatás és algoritmikus kockázatok felismerésére és kezelésére! • Digitális kompetenciák fejlesztése felnőttek körében!
Oktatási szereplők	Pedagógusok szakszervezete, iskolák, tanárok	Oktatás, tudatosítás, irányítás	• Tanári továbbképzések indítása, digitális kompetenciák fejlesztése! • Egységes, nemzeti MI használati útmutató elkészítése az oktatási szereplők számára! • Gyerekek felkészítése a biztonságos online jelenlétre, köztük a tudatos MI használatra! • Egységes MI • Tananyagfejlesztés MI témában (kritikus gondolkodás, adatbiztonság, etikusság),

Szereplői csoport	Példa	Beavatkozás típusa	Konkrét cselekvés / ajánlás
Technológiai és média vállalatok	MI fejlesztők	Termékfejlesztés	• Gyermekbarát, etikus elvek mentén fejlesztett MI-alkalmazások! • Jól működő életkor-szabályási rendszerek fejlesztése! • Tudatos fejlesztés, bevezetés, ellenőrzés, felülvizsgálat és javítás!
Nemzetközi és magyar civil szervezetek	Kék Vonal, Hintalovon, Kidea	Jogvédelem, érdekképviselet, kampányok	• Rendszeres monitoring jelentések publikálása az MI gyermekekre gyakorolt hatásairól, tudatosságnövelő kampányok szervezése, gyermekek véleményének becsatornázása szakpolitikai folyamatokba (pl. gyermekrészvételi fórumok).
Gyermekek és családok	Szülők, gyerekek	Digitális nevelés, tudatosság, részvétel	• Szülők támogatása digitális nevelési útmutatókkal, workshopokkal; gyermekek bevonása iskolai és közösségi szinten a digitális szabályozási kérdésekbe; jogtudatossági programok a gyerekek digitális jogairól.

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