European Union Regulations in AI Issues

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Abstract: Technology is always developing, so many fields are constantly changing under its auspices. We want to highlight the legal importance of artificial intelligence in the proposed study, and especially its development mode, referring also to the legal responsibility that it implies. We will use the legal source - the European norm - to highlight the actuality of our theme. The methods that will help us in structuring the paper are: the logical method, the descriptive method, and the sociological method. The novelty of the study will consist in the analysis and understanding of European provisions, with applicability *in concreto*. We want the chosen topic to arouse the interest of all legal experts, as well as of the novices in this field, but not only of them.

Keywords: norms; technology; risks; civil liability

1. Introduction

In the proposed study, we wanted to analyze the legal liability, in terms of artificial intelligence, through the provisions of the White Paper and to discover in which direction the European Union is heading from a legislative point of view, regarding AI.

We will also analyze the principles that must guide the development of artificial intelligence technologies, formulating personal points of view regarding the analysis of the proposed subject.

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We will give special importance to the risks posed by the independence of robots from human will and action, referring to the detailed documentation of the White Paper.

Therefore, the purpose of our analysis is to identify the European legislation that corresponds to the situations in which a damage is caused by an entity with artificial intelligence, but also to identify the future perspectives of AI.

The methods used are, mainly, the analysis of existing documents at the level of the European Union, but the case study method is also used, being analyzed several situations that could arise in the near future.

The present paper can be an interesting reading, as it presents a current issue that is not sufficiently developed legislatively in contemporary society.

2. Presentation of the Legislative Framework of the European Union

In all the "potpourri" of writings, researches and analyzes that are ongoing, or that are already used as reading for those interested in the proposed subject, we do not want an enumeration or an exhaustive analysis of the existing norms at the European level. Rather, we aspire to acquire a fixation of the legal framework, to be able to observe to what extent an entity with artificial intelligence can exist and, possibly, answer to the civil law.

Of course, we will list the normative acts currently existing at the level of the European Union, trying to capture the important aspects of the White Paper - the promoter of the rules regarding artificial intelligence.

These are the important normative acts:

- Directive 2001/95/EC on general product safety;
- Directive 2006/42/EC on technical equipment;
- Directive 2014/53/EU on radio equipment;
- The resolution of the European Parliament of February 16, 2017, containing recommendations addressed to the Commission regarding the rules of civil law regarding robotics;
- Report from the Commission to the European Parliament, the Council and the European Economic and Social Committee on the safety and liability implications of artificial intelligence, the Internet of Things and robotics, Brussels, 19.2.2020;

- White Paper: Artificial Intelligence - A European approach focused on excellence and trust, Brussels, 19.2.2020.

1.1. White Paper – Provisions

The White Paper contains a chapter dedicated to the AI regulatory framework, in which it is stated that artificial intelligence, like any other new technology, presents both opportunities and risks.

There is some reluctance among the population: citizens fear that they will have no power to defend their rights and safety, and businesses are concerned about legal insecurity. But on the other hand, AI can help protect citizen's security and help them enjoy their fundamental rights. However, people are concerned that AI can have unwanted effects or even be used for bad purposes. These concerns need to be taken into account, as a lack of trust is a main factor hindering the wider adoption of AI, in addition to a lack of investment and skills.

For these reasons, the Commission presented on 25 April 2018 an "AI Strategy", which addresses socio-economic aspects in parallel with increasing investment in research, innovation and AI capabilities across the European Union. The Commission also agreed with Member States on a "Coordinated Strategy Alignment Plan" and also set up a high-level expert group, which in April 2019 published the "Guidelines for Trusted AI".

We can see that the whole mechanism of integrating artificial intelligence into human life is being formed and perfected, in order to obtain the superlative from this technology. We consider that the initiative of the European Union to improve the human-artificial evolution is salutary.

Just to confirm what has been said, we will list the essential requirements set out in the guidelines of the high-level expert group, published by the Commission:

- human involvement and supervision;
- technical robustness and safety;
- respect for privacy and data governance;
- transparency;
- diversity, non-discrimination and equity;
- societal and environmental well-being;

- responsibility[1].

We will present each of them separately, trying to understand the importance and meaning they have in the current social context.

Human involvement and supervision refers, in our opinion, to preserving the human component in the human-robot "equation". This human interaction with artificial intelligence must be permanently controlled and supervised by the former. It is true that many of the systems or machines developed by human intelligence end up surpassing human precision, but it is the personal imperfection of each individual's being that gives value to the action itself, leading it to perfection. The philosophical idea according to which perfection is born from its opposite has been circulated quite often. We consider this axiom also applicable in the relationship between humans and AI.

Of course, technical robustness and safety are *sine qua non* requirements when we refer to a robot. When one of these conditions is missing, the AI system no longer achieves its goal and creates damage. An edifying example could represent autonomous cars that have already caused serious accidents because they lacked the safety feature. The technical robustness existed, but in the absence of safety, damage and even loss of human life occurred. This is how, these two requirements are inextricably linked to the development of any system equipped with artificial intelligence.

Respect for privacy and data governance. Considering that it refers to an absolute human right, the importance of the respect for privacy requirement is undeniable. Two examples can constitute a strong argument for this topic. The first refers to the possibility of violating privacy through drones. Although judicial practice is still not very rich in this sense, cases of drones that flew over a person's airspace without right existed and exist daily. Regarding the respect of personal data, the well-known example is that of their violation by the Facebook company. In 2018, user data was stored without consent by Cambridge Analytica to be used mainly for political advertising[2].

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[1] *Cartea Albă: Inteligenţa artificială - O abordare europeană axată pe excelenţă şi încredere -* https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=CELEX:52020DC0065 – accessed on 3.11.2022.
[2] https://www.businessinsider.com/cambridge-analytica-whistleblower-christopher-wylie-facebook-data-2019-10 - accessed on 3.11.2022.

Transparency is closely related to respecting private life and implies the correctness with which the data stored in the "virtual space" is managed.

Diversity, non-discrimination and equity. This is also a European principle, established by the *Charter of Fundamental Rights of the European Union*[1]. We believe that this characteristic refers to the respect of the person and his identity. Everyone must be treated equally, impartially, respecting their choices, thinking, religion, and opinion, and without being discriminated against for these freedoms. In the analyzed issue, we believe that all these rights must be respected in relation to the new technology and the data it can obtain. More precisely, any person must be able to exercise these rights, without being harmed by an AI entity, under any circumstances.

Societal and environmental well-being we believe relates to everything we have expressed so far. It refers to the issue of human rights, seen as a unitary whole. That is, humanity as a whole must obtain more advantages and benefits through the use of technology and artificial intelligence than without them. Society and the environment must be helped by this new technology. We believe that an example of a major benefit would be the surveillance of the forests in our country and not only by a drone system, which would highlight when and where illegal tree cutting takes place.

Responsibility refers to using AI responsibly and carefully, so that its use does not cause harm. We also believe that this requirement also refers to the human component behind the artificial intelligence. The intentions of those who "give life" to AI technology must be as good as possible, objective and transparent.

2. Liability Provisions

The report on the safety and liability implications of artificial intelligence, the Internet of Things and robotics[2], which accompanies the White Paper, looks at the relevant legal framework. Uncertainties related to the application of this framework to the specific risks generated by AI systems and other digital technologies are described.

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[1] https://fra.europa.eu/ro/eu-charter/title/title-iii-equality - accessed on 3.11.2022.
[2] https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=CELEX:52020DC0064 – accessed on 4.11.2022;

2.1. Liability risks associated with the use of AI

These risks refer to the following aspects[1]:

A) The autonomous behavior of certain AI systems during their life cycle may involve important product changes likely to affect safety, which may require a new risk assessment. In addition, human oversight may be required as a safeguard, starting at the product design stage and throughout the life cycle of AI products and systems.

Human control over the entity with artificial intelligence is therefore necessary, as we have already presented. For safety reasons and others, it is more prudent for technology to remain subordinate to human intelligence, at least for now.

B) The imposition of explicit obligations for producers could also be considered with regard to risks to the mental safety of users, where appropriate (for example, in the case of collaboration with humanoid robots).

As far as we are concerned, we believe that analyzing the health of the human psyche requires a lot of study and a thorough research. What is nevertheless easy to observe, especially in the generations of children of recent years, represents a rather acute general problem. More and more tablet or mobile phone users are too young to perceive the "virtual reality" that these gadgets project. For this reason, many children develop diseases that affect their mental and emotional health.

We believe that humanoid robots can also present a danger to the integrity of the human psyche, but the problem of children being allowed to come into contact with technology too early is much more serious and, unfortunately, increasingly present in today's society.

C) Union legislation on product safety could provide for specific requirements to address safety risks from bad data at the design stage, as well as mechanisms to ensure that data quality is maintained throughout the use of AI products and systems.

The argument regarding the sale of Facebook users' data for political purposes remains relevant. It is therefore to be appreciated that the European Union wants to secure this data circulated in the virtual space, so that no more abuses take place.

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[1] *Cartea Albă: Inteligenţa artificială - O abordare europeană axată pe excelenţă şi încredere -* https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=CELEX:52020DC0065 – accessed on 4.11.2022.

D) The opacity of algorithm-based systems could be addressed through transparency requirements.

We bring back to the attention again what we have previously stated: AI must be subject to fairness and transparency requirements that result in the respect of users privacy.

E) Existing rules may need to be adapted and clarified in the case of stand-alone software that is placed on the market or downloaded into a product after it has been placed on the market, when it has an impact on safety.

Of course, being a science in continuous development and change, the rules should also have a certain flexibility. And of course, the current law must be updated, through the necessary additions to the existing situation today.

F) Given the increasing complexity of supply chains in the case of new technologies, the introduction of provisions specifically requiring cooperation between economic operators in the supply chain and users could provide legal certainty.

We believe that the idea is not without criticism, but it is interesting, especially from the point of view of civil liability, in case of damage. It is a delicate subject because depending on the new regulation, the relationship between economic operators - consumers, users will acquire legal valences, of civil liability, more precisely. It remains to be seen to what extent the categories of persons in question will be liable.

G) Those who have been harmed by the involvement of AI systems should enjoy the same level of protection as people who have suffered harm caused by other technologies, but technological innovation should be able to continue to develop.

Guided by a Latin proverb - *Semper ad meliora*[1] - we will consider that AI is entitled to develop even if it also causes harm to people. The latter will have to be protected from any damage, but if this does occur, the new technology must continue its course, being constantly improved.

H) All options for achieving this objective should be carefully assessed, including possible amendments to the Product Liability Directive and further harmonization of national liability rules. The Commission wishes to know whether and to what extent it may be necessary to mitigate the consequences of complexity by adapting

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[1] "Always to better things!".

the burden of proof imposed by national rules on liability for damages caused by the operation of AI applications.

Although the expression is rather loose, we appreciate that what the European Commission wants is for the national rules of the states to be modified in accordance with the European ones and it is considering changes regarding the civil legal liability for the damages caused by AI.

From our analysis, it appears that there is a real legislative concern on the part of the European Union, which wants to standardize the human-AI relationship and harmonize the Union legislation with that of the member states. In our opinion, the initiative is salutary and certainly welcome.

2.2. Possible adjustments to the existing EU legislative framework

The European Commission wants changes to the legislative framework, with the aim of removing the following risks and situations[1]:

-applying and ensuring effective compliance with existing EU and state legislation. AI, by its essential characteristics, creates challenges for the enforcement and proper enforcement of EU and national legislation. The lack of transparency (referred to as - as we have previously observed - "the opacity of artificial intelligence") makes it difficult to identify and demonstrate possible violations of the laws. Reference is also made to the legal provisions that protect fundamental rights, but the attribution of civil liability and the fulfillment of the conditions that allow the request for compensation are also taken into account. The bottom line is that: to ensure effective enforcement and compliance, it may be necessary to adapt or clarify existing legislation in certain areas.

We believe that the tendency of the European Union is to clarify everything related to artificial intelligence, so that precise rules can be developed, which can be respected, without any confusing situation arising. More precisely, no room should be left for interpretations in the application of the law, because in the future those who are "creators" of AI should not prevail over the principle "What is not forbidden, is allowed"[2] and act accordingly.

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[1] *Cartea Albă: Inteligenţa artificială - O abordare europeană axată pe excelenţă şi încredere -* https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=CELEX:52020DC0065 – accessed on 4.11.2022.
[2] See for further details (Stoica, 2020, p. 373).

- limitations of the scope of existing EU legislation: EU product safety legislation focuses on placing products on the market. Although EU product safety legislation, when part of the final product, software must comply with the relevant product safety rules, it is not clear whether stand-alone software falls under EU product safety legislation, apart from certain sectors with explicit rules. The general EU safety legislation already in place applies to products, not services; therefore, in principle, it also does not apply to services based on AI technology - for example health services, financial services, transport services.

Our opinion is that, *in extenso*, the legislation of the Union should include the services that are based on artificial intelligence, because in the absence of these regulations, in practice, the services in question may present high risks from the point of view of safety, and the areas affected - health services, transport, etc. - are inextricably linked to the notion of safety.

- the changing functionality of AI systems: the integration of software into products, including artificial intelligence, can change the operation of such products and systems during their life cycle. This is especially true for systems that require frequent software updates or rely on machine learning. These features may generate new risks that were not present when the system was introduced to the market. The risks are not adequately addressed in existing legislation, which focuses mainly on safety risks present at the time of market introduction.

We agree with the Commission: systems based on artificial intelligence can generate new situations in practice, which are not covered by the existing norm and create an impasse in the application of the law. That is why, although the norm must keep its predictability, it must also be adaptable to the concrete situations that arise.

-modification of the concept of safety: the use of AI in products and services can generate risks that currently EU legislation does not explicitly address. These risks may be related to cyber threats, personal security (associated with, for example, new applications of AI such as in home appliances) or may arise from loss of connectivity, etc. Risks may be present at the time the products are introduced to the market or may arise as a result of software updates or self-learning that occurs during product use. The EU should make full use of the tools at its disposal to strengthen its database of potential risks related to AI applications, including leveraging the expertise of the European Union Agency for Cyber Security (ENISA) in assessing the AI threat landscape.

Those mentioned regarding the previous risk provided by the Commission also apply in the case of AI applications. We maintain our previously expressed point of view also regarding these applications.

3. Conclusions

We note that in order to help the economy, as well as other fields, artificial intelligence requires the creation of a set of rules at the European level. Specialists and lawyers must find the right "formula" for AI to be a component of contemporary society, but which does not harm citizens.

Likewise, fundamental human rights must remain an EU priority in relation to new technology.

It is desirable for artificial intelligence to have beneficial effects, to be used and designed in favor of people, to improve living conditions.

That is why it is necessary that any irregularity or any risk of abuse be prevented by rules. That is, the legislation must encourage the development of AI, but it must weigh the potential damages that could arise due to the use of artificial intelligence.

The example that demonstrates our support is that of autonomous vehicles, which in recent years have produced several accidents resulting in injuries and deaths. In such situations, the already existing legislation is applied, but it would be ideal for these situations to be the subject of special rules, of laws specifically adopted for such a reality.

Of course, until there is very accurate technical information about the performances that an entity with artificial intelligence can achieve, the legal framework is also called into question.

The corollary of all that has been presented is that although it is at the beginning, the science of artificial intelligence needs more study, more analysis and teams of researchers specialized in all the fields that robotics will affect, in one way or another.

In order to be able to develop, this science must "rely" on the other already existing sciences, which "yield" to it certain concepts, ideas, and ways of putting some notions into practice.

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