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THE REGULATION OF AI LIABILITY IN EUROPE: A CRITICAL OVERVIEW OF TWO RECENT DIRECTIVE PROPOSALS – THE (NEW) AILD AND THE (REVISED) PLD

A REGULAÇÃO DA RESPONSABILIDADE PELA UTILIZAÇÃO DA IA: COMENTÁRIO CRÍTICO A DUAS RECENTES PROPOSTAS DE DIRETIVA: A (NOVA) DRIA E A (REVISTA) DRP

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Abstract: One of the main legal challenges Artificial Intelligence brings is the liability towards its use. In fact, its complexity and opacity, combined with the lack of human control of the processes, gives rise to doubts and questionings regarding some key aspects of liability, such as the proof of causal link and fault. The European Union recently presented two proposals for the regulation of AI liability: a new directive, covering fault-based claims, and the revision of the Product Liability Directive, which includes the understanding of software – namely, AI-enabled ones – as products. Having in mind the challenges and difficulties AI liability demands from the law practitioners, this article critically comments both proposals, aiming to find out if the solutions proposed are adequate in terms of the regulation of AI liability in Europe.

Keywords: artificial intelligence, liability, Artificial Intelligence Liability Directive, Product Liability Directive, artificial intelligence regulation

Resumo: Um dos principais desafios que a Inteligência Artificial traz para o mundo do Direito diz respeito à responsabilidade civil extracontratual derivada da sua utilização. De facto, a sua complexidade e opacidade, combinadas com a falta de controlo humano dos processos, levanta dúvidas e questionamentos no que respeita a determinados aspetos decisivos da responsabilidade, como a prova do nexo causal e da culpa. A União Europeia, recentemente, apresentou duas propostas para a regulação da responsabilidade da IA: uma nova diretiva, aplicável a situações de responsabilidade culposa, e uma revisão da Diretiva da Responsabilidade do Produtor, que agora considera *softwares* – nomeadamente, baseados em IA – como produtos. Tendo em consideração os desafios e dificuldades que a responsabilidade da IA traz para os juristas, este artigo consubstancia um comentário crítico a ambas as propostas, com o objetivo de descortinar se as soluções propostas são adequadas no quadro da regulação da IA na Europa.

Palavras-chave: inteligência artificial, responsabilidade civil extracontratual, Diretiva Responsabilidade da IA, Diretiva da Responsabilidade do Produtor, regulação da inteligência artificial.

1. First remarks

Artificial Intelligence – AI – has been a hot topic amongst European policies in the recent years. Many are the legal instruments – from *soft law*[1] to the recently published (and long awaited) AI Act[2] – that foresee the regulation of this emerging technology.

The reason for the EU's investment in AI is the numerous advantages it brings to the internal market: innovation, competitivity, and several economic, environmental and social benefits[3].

Overall, the increased use of AI systems is a clear manifestation of the risk society[4] (Beck, 2000) in which we live in. Their main features – which increase from minimum/no-risk to high-risk systems – are their complexity, opacity (Burrel, 2016: 3-5) – the so-called "*black box effect*" (de Streel et al, 2020) –, connectivity and data-dependency.

The challenges AI brings to liability relate, mostly, to i) the proof of fault and ii) the proof of causal link. In the first case, due to the difficulty to determine the Human behavior relevant for the purposes of liability – and, therefore, excluding an autonomous personality of the AI systems. In the second, because the opacity of the system can make the task to identify how the system reached a decision tremendously hard.

Considering the risks associated with AI – of which the population is widely aware (Araujo, 2020: 611-623) –, a philosophy of risk management[5] was adopted in the AI Act, which classifies AI systems in the following terms: i) "unacceptable-risk"[6]; ii) "high-risk"[7]; iii) "limited-risk", and iv) "minimal/no-risk".

Acknowledging that, even though regulated, there will aways be damages caused by AI, the European Commission has dedicated some time and effort in crafting liability regimes for AI, after recognizing the existence of a *liability gap* (Santoni de Sio, Mecacci, 2021: 1057-1084; Königs, 2022: 24-36; Gunkel, 2020: 307-320), which is crucial to fill, since liability issues are one of the

1. *White Paper on Artificial Intelligence: a European approach to excellence and trust*, of 19th February 2020; Report from the Commission to Commission to the European Parliament, the Council and the European Economic and Social Committee Report on the safety and liability implications of Artificial Intelligence, the Internet of Things and robotics – COM(2020) 64 final; Expert Group on Liability and New Technologies – New Technologies Formation, "*Liability for Artificial Intelligence and other emerging technologies*" (2019).

2. Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13th June 2024 laying down harmonized rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act).

3. Recital (4) of the AI Act.

4. On the story of risk, see Bernstein (1996).

5. Defined by article 9 (2) of the AI Act as "a continuous iterative process planned and run throughout the entire lifecycle of a high-risk AI system, requiring regular systematic review and updating".

6. Chapter II of the AI Act.

7. Chapter III of the AI Act.

"top three barriers to the use of AI by European companies", as we can read in the explanatory memorandum.

This paper focuses the two recent Directive proposals of the European Commission: the Proposal for a Directive of the European Parliament and of the Council on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive), COM(2022) 496, final – also known as "AILD" – and the Proposal for a Directive of the European Parliament and of the Council on liability for defective products, COM(2022) 495 final – known as "PLD".

Our main goal is to understand if – and in what way – the goals set by the European Commission with both AILD and PLD can be accomplished, bearing in mind the sustainable growth of AI-enabled technologies.

2. The AILD

The AI Liability Directive emerges, at least on a first reading, as the first-ever regulation of non-contractual civil liability for AI in the European territory. In fact, its scope is unprecedented amongst European legislation so far, and so are its two most important rules – present in articles 3 and 4, as we shall explain ahead.

The European Commission emphasizes, with this initiative, the need to guarantee that "victims have the same level of protection as in cases not involving AI systems" in line with the principle of non-discrimination[8].

The final proposal does not go in line with the suggestions of the European Parliament in the Resolution of 20 October 2020 with recommendations to the Commission on a civil liability regime for artificial intelligence (2020/2014(INL)) and the *Expert Group on Liability and New Technologies*' guidelines on the matter. In fact, a strict liability solution for high-risk systems was suggested, followed by a solution of fault-based liability for other AI-systems (where we can include the medium-risk and minimum/no-risk ones).

When it comes to subject matter and scope, article 1 sums it up: the AILD lays down common rules on i) the disclosure of evidence on high-risk AI systems to enable a claimant to substantiate a non-contractual fault-based civil liability claim for damages and ii) the burden of proof in the case of non-contractual fault-based liability law claims brought before national courts for damages caused by and AI system (articles 3 and 4, respectively).

From this reading, we can already confirm the targeted approach made by the European Commission, as stated in Reasoning 10 of the Proposal, "to ensure proportionality[9]". In this same Reasoning, the European Commission emphasizes this instrument "should not harmonize general aspects of civil liability which are regulated in different ways by national civil liability rules".

8. Article 21 of the European Charter of Fundamental Rights.

9. The principle of proportionality is enshrined in article 5 (4) of the Treaty of the European Union, in the following terms: "(u)nder the principle of proportionality, the content and form of Union action shall not exceed what is necessary to achieve the objectives of the Treaties. The institutions of the Union shall apply the principle of proportionality as laid down in the Protocol on the application of the principles of subsidiarity and proportionality".

To ensure coherence with the recently approved AI Act, article 2 mimics the definitions of "AI system", "high-risk AI system", "provider" and "user". The most relevant definitions, for the purposes of the present analysis, are the "claim for damages", understood as a "non-contractual fault-based civil law claim for compensation of the damage caused by and output of an AI system or the failure of such a system to produce an output where such an output should have been produced", as well as the "duty of care", being it "a required standard of conduct, set by national or Union law, in order to avoid damage to legal interests recognized at national or Union law level, including life, physical integrity, property and the protection of fundamental rights".

This duty of care is a relevant element of the proposal, demonstrating that the EU adopted a true risk management solution to AI policies, considering the damages this disruptive technology can bring to the functioning of the internal market. This approach goes in line with the principles of prevention and precaution (de Smedt, Vos, 2022: 163-186; Cameron, Abouchar, 1991: 1-28), present in article 191 (2) of the Treaty on the Functioning of the European Union and born in the Rio Declaration on Environment and Development of 1992. Although the source of this principle lies within the scope of Environmental Law, it aims to respond to risk situations. For this reason, it must be applicable on the cases of technological risk, for the same reasons.

One of the most interesting aspects of the proposal lies on the considerations made by the stakeholders, citizens, academics and consumer organizations regarding the solution. On the one hand, most businesses considered "disproportionate" solutions of strict liability, which were "strongly supported", on the other hand, by EU citizens, consumer organizations and academic institutions. These actors also considered adequate measures regarding the burden of proof and mandatory insurance. A complete shift of the burden of proof was considered inadequate for businesses, even though some small and medium enterprises supported the harmonization of the easing of this burden.

Which solution prevailed? This is what we will unveil in the following lines.

2.1. Disclosure of evidence

In article 3, we find the reference to the disclosure of evidence and rebuttable presumption of non-compliance, in the following terms: "Member States shall ensure that national courts are empowered, either upon the request of a potential claimant who has previously asked a provider, a person subject to the obligations of a provider pursuant to Article 24 (or 28) of the AI Act or a user to disclose relevant evidence at its disposal about a specific high-risk AI system that is suspected of having caused damage, but was refused, or a claimant, to order the disclosure of such evidence from those persons. In support of that request, the potential claimant must present facts and evidence sufficient to support the plausibility of a claim for damages" – article 3(1).

2.2. Rebuttable presumption of a causal link in case of fault

Article 4 of the Proposal establishes a rebuttable presumption of a causal link in the case of fault. The three cumulative conditions for this presumption to function are the following: i) the claimant has demonstrated or the court has presumed pursuant to article 3 (5), the fault if the defendant, or of a

person for whose behaviour the defendant is responsible, consisting in the non-compliance with a duty of care laid down in Union or national law directly intended to protect against the damage that occurred; ii) it can be considered reasonably likely, based on the circumstances of the case, that the fault has influenced the output produced by the AI system or the failure of the AI system to produce an output; and iii) the claimant has demonstrated that the output produced by the AI system or the failure of the AI system to produce an output gave rise to the damage.

3. The PLD

In an effort to harmonize PLD's "decades-old definitions and concepts to products in the modern digital economy and circular economy" and "create legal certainty and achieve a more equal level of consumer protection across the EU", the European Commission, in COM(2022) 495 final, drafted a set of changes to Directive 85/374/EEC, which lays down common rules on the liability of economic operators for damage suffered by natural persons caused by defective products (article 1). This last mention must be highlighted: the PLD compensates only natural people who suffer physical injury or damage to property due to defective products – meaning that non-material injuries are excluded. This conclusion is confirmed by article 4 (6), which defines "*damage*" as a material loss resulting from i) death of personal injury, including medically recognized harm to psychological health (now added); ii) harm or destruction of any property, with few exceptions, and iii) loss or corruption of data that is not used exclusively for professional purposes.

The European legislator maintained the 1985 solution: a strict liability – without proof of fault.

The innovation starts, roughly, in article 4(1), since this proposal aims to apply to electricity, digital manufacturing files and software. One may note the definition of product, in the same provision: "all movables, even if integrated into another movable or into an immovable". A "digital manufacturing file" is considered "a digital version or a digital template of a movable".

After a few more relevant definitions, we find, in articles 5 to 10, the specific provisions on liability for defective products.

In order to be considered defective, a product must obey to, at least, one of the conditions present in article 6 (1) – cybersecurity requirements were added in paragraph (f). According to article 6 (2), also now added, a product shall not be considered defective for the sole reason that a better product, including updates or upgrades to a product, is already or subsequently placed on the market or put into service.

The list of potential liable economic operators is wide, as we can confirm in article 7: the manufacturer of a defective product (1); the importer of the product and the authorised representative of the manufacturer (2); the fulfilment service provider (3); each distributor of the product (5) and any provider of an online platform that allows consumers to conclude distance contracts with traders and that is not a manufacturer, importer or distributor (6), both in the presence of the two conditions present in (5).

Articles 8 and 9, regarding disclosure of evidence and burden of proof, closely follow the solutions proposed in the AILD.

3.1. Disclosure of evidence

Article 8 determines that "Member states shall ensure that national courts are empowered, upon request of an injured person claiming compensation for damage caused by a defective product ("the claimant") who has presented facts and evidence sufficient to support the plausibility of the claim for compensation, to order the defendant to disclose relevant evidence that is at its disposal" (1). This disclosure of evidence must attain to what is "necessary and proportionate" to support the claim – article 8 (2); it is the national court's obligation to consider these criteria fulfilled, in line with the legitimate interests of the parties, including third parties, in the terms of article 8 (3). Special measures are present in article 8 (4) when it comes to the disclosure of (alleged) trade secret information.

3.2. Burden of proof

Article 9 (1) determines that the claimant must prove i) the defectiveness of the product (which is presumed when any of the conditions of article 9 (2) are met); ii) the damage suffered; and iii) the causal link between both. This causal link is presumed, with regard to article 9 (3), where it has been established that the product is defective and the damage caused is of a kind typically consistent with the defect in question. A presumption of defect, of causal link, or of both, is present on article 9 (4), in the cases where a national court judges that the claimant faces excessive difficulties, due to technical or scientific complexity, to prove those requisites, whereby the claimant must demonstrate evidence that i) the product contributes to the damage and ii) it is likely that the product was defective or that its defectiveness is a likely cause of damage, or both. All these presumptions, according to article 9 (5), are rebuttable for the defendant.

Summing up, with regard to the burden of proof, the injured person must prove i) the injury; ii) the defect of the product; and iii) the causal link between the two – article 9 (1).

The European Commission justifies the absence of a rule of inversion of the burden of proof with the exposure of producers to significantly high risks and the disincentive for innovation, amongst the rise of products' prices and the reduced access to innovative products. The institution considers that the option is justified, since the burden will now be shared in a fairer way between the parties, increasing the chances of a successful claim and favoring the application of article 47 of the European Charter of Fundamental Rights[10].

10. With the heading "(r)ight to an effective remedy and to a fair trial", the norm states that "(e)veryone whose rights and freedoms guaranteed by the law of the Union are violated has the right to an effective remedy before a tribunal in compliance with the conditions laid down in this Article. Everyone is entitled to a fair public hearing within a reasonable time by an independent and impartial tribunal previously established by law. Everyone shall have the possibility of being advised, defended and represented. Legal aid shall be made available to those who lack sufficient resources in so far as such aid is necessary to ensure effective access to justice".

4. Critical notes on the two proposals

4.1. General aspects

Both the AILD and the PLD overlap that they address non-contractual liability and share a similar structure. The AILD, however, adopts a fault-based approach, while the PLD follows a strict liability solution. The two instruments also diverge in the sense that the AILD is applicable to fault-based civil law claims, and the PLD gravitates towards the concept of "defective product".

On a first note, we wonder if such rules regarding the liability towards software and other digital technologies should have been covered by the proposed Machinery Regulation[11] and the recently approved General Product Safety Regulation[12].

When it comes to the first, Annex I includes, as a high-risk machinery product, software ensuring safety functions, including AI systems, as well as machinery embedding AI systems ensuring safety functions (24 and 25). The definition of safety component – therefore, product – was clarified, now including, precisely, software.

Regarding the EU General Product Safety Regulation, it aims to reinforce and harmonize the rules for guaranteeing the safety of products placed onto the EU market. If – as we will discover below – software (including AI-enabled software) is now considered product, one wonders if its scope will not coincide with the PLD.

This could have been a more systematic way to treat these subjects, while avoiding lack of clarity and issues regarding the understanding of software as a product.

4.2. The PLD

In the explanatory memorandum, the European Commission recognizes the need, within this legislative initiative, to achieve an "appropriate balance" of interests of producers and consumers. Also, it is declared that the proposal will facilitate compensations.

Were the goals achieved? Let's find out.

4.2.1. Software shouldn't be considered a product for the purposes of the PLD

Our first commentary concerns the definition of software now as a product: this inclusion, and the correlative application of the regime, is far from uncontroversial (Alheit, 2001: 188-209; Howells, et al, 2017: 183-195).

Bearing in mind the non-material nature of the software, its inclusion was incompatible, obviously, with the original definition of product laid down in

11. COM(2021) 202 final.

12. Regulation (EU) 2023/988, that replaces Directive 2001/95/EC and Directive 87/357/EEC, related to Food Imitating Products, and amends Regulation (EU) 1025/2012 and Directive 2020/1828, pertaining to standardization and consumer protection.

the PLD. Software, however, is unequivocally attached to a physical device – a machinery, in the sense of the above-mentioned proposed Machinery Regulation – which is, undoubtedly, a product in the sense of the PLD.

The inclusion of rules on software defects either in the Machinery Regulation or in the General Product Safety Regulation would have been a more coherent and logical approach to the subject, while maintaining the merits of the PLD. This regulation would, therefore, keep its traditional subject matter and scope. Its inclusion in a historic Directive such as the PLD, with its sedimented concepts and broadened application, does not seem to contribute to the study and development of AI liability as a whole, as well as creating unnecessary problems and questionings in the PLD.

This conclusion is supported by the observation that physical damages to citizens are not, by far, the only type of injuries related to the use of AI. Even though autonomous vehicles – such as self-driving cars – are widely talked about by scholars (Schellekens, 2015: 506-517; Lohmann, 2016: 335-340; Boeglin, n/d: 172-203) on this matter, most of the damages caused by AI are not physical: they relate to situations such as the loss of privacy, limitations on freedom of expression, violations of the principle of human dignity, and various discriminations (gender, access to employment, among others) (Daelman, 2021: 123-149).

The reduction of liability, in article 12 (2), if we are to be consistent/coherent with the definition of software as a product, seems reasonable, in the sense that the misuse of the technology by the citizen – through non-compliance with user rules – justifies this reduction. On the other hand, this reduction needs to be followed by information and communication (Van de Poel, Fahlquist, 2013: 107-143; Recchia, 1999) duties on the software provider's side, in the terms of the AI Act, meaning that the lack of compliance with this duty by the providers shall not lead to the reduction of liability; in fact, such behaviour should consist of a separate cause of liability.

Let's not forget that the AI Act demands tests before a system enters into function[13], to ensure the safety and security of any product that enters the internal market. We believe a similar result – the one that the European Commission intends to achieve – could be, in fact, achieved with eventually stricter rules on security and safety of the AI-enabled software; these rules could benefit all by being included in the cybersecurity-related regulations.

It seems to us that this proposal fails on i) qualifying software as a product, and, as we'll show next, ii) disproportionately burdening the claimant.

4.2.2. A far too demanding burden

We believe it is disproportional to demand, from the natural person, the proof of the defect and of the causal link. As we will explain in the next subtopic, a rebuttable presumption of causality should exist in all cases, without the need to prove any conditions.

A relevant mention is, from our point of view, needed: with the inclusion of intelligent software in the concept of product, how will the citizen prove the defect? Let's see: the citizen detects an abnormal result, that gives rise to an injury. The citizen can definitely prove this result; but how will it prove the defect of the software itself? The defect is intrinsically linked to the

13 Article 10 (1) of the AI Act.

properties of the software and the citizen has no access to it. Following this idea, since "the concept of defect refers to the properties of the product, not to its behavior" (Borges, 2023: 4), while focusing on the defect of the software as a product, the European legislator forgets that the abnormal behaviour – that causes the damage – might not derive, necessarily, from a defect in the product, but of the *emergent behavior* (Calo, 2015: 513-563) that characterizes AI. And it seems to us that this is the possible outcome of most liability claims.

With regard to the defect of the product, it is undoubtedly the manufacturer's responsibility to ensure the perfection of the product – namely, a product with such technical complexity such as an AI-enabled software. Given that, in most cases, the citizens will not be able to individualize the specific defect – because it concerns an intrinsic characteristic of the product –, we believe the solution of article 4 is rather disproportionate, and will not facilitate claims, surely. The manufacturer should bear the burden of proving that the product shows no defect whatsoever.

a. A rebbutable presumption of causality

Following the last few considerations, we believe a causality rebuttable presumption should always exist in these cases and should function regardless of any mandatory previous condition. The opacity of the AI-enabled software is one of the biggest obstacles natural persons will face when confronted with a claim for damages. For that reason, a rebuttable presumption of causality could balance the manufacturer-consumer interests. Again, the manufacturer is in far better conditions to rebut this presumption that the citizen is to prove the causal link. The – natural – informational asymmetry and lack of knowledge on the functioning of each system seems not to allow other solutions.

b. Other notes

Last, but not least, the European Commission seems to have forgotten that legal persons also can be harmed through AI and that this extended scope of the PLD is the ideal ground to increase the range of subjects and situations to which the rules are applicable. Such distinction is not made – and rightly so – in the AILD. All in all, the proposed review of the PLD misses the target when it comes to AI-enabled software.

The broadening of the scope of liable actors is one of the merits we have to attribute to this proposal, although a slight restriction could have been more beneficial, considering that such broad application can compromise innovation. The coherence with the definitions of the AI Act – which is and will be, from now one, the "base-regime" for all legislative initiatives regarding AI – is also a positive point. Also, the rules regarding the disclosure of evidence seem appropriate, in general.

4.3. The AILD

Let's start by saying that the AILD promises a lot and delivers little: assuming a procedural nature, the proposal fails to deliver a proper (full) regime for AI liability, considering there are only two relevant rules – articles 3 and 4 – covering, as exposed, the disclosure of evidence and the burden of proof. In

fact, what we see before our eyes is not – as the title suggests – a *regime* for AI liability, but, as article 1 (1) determines, a set of common rules on the disclosure of evidence on high-risk AI systems and on the burden of proof in the case of non-contractual fault-based civil law claims brought by national courts for damages caused by an AI system.

4.3.1. Lack of a holistic view

From our understanding, the European legislator missed the opportunity to significantly organize AI liability, and chose to only focus on (procedural) regime details, not to mention that the solutions bring little benefit to injured natural persons, as we will detail on the following lines.

More: given the risk classifications now present in the AI Act, this proper regime could benefit from the use of the same classification. In other words, this *full* liability regime for AI in the EU should also cover liability for the use of medium-risk and minimum/no-risk systems, in order to truly harmonize and holistically approach the AI phenomenon as a heterogeneous reality. Rules on the type of damages covered and causes of exclusion of liability are also not present, surprisingly.

To sum up, we believe the European Commission could have been more ambitious when it comes to broadening the scope of the AILD.

4.3.2. A strict liability and a mandatory insurance for high-risk systems

From our point of view, policy option 2, referred by the European Commission, could have benefited more from this effort to regulate AI liability.

This suggestion results from a combination between the measures proposed in the final Communication – the disclosure of evidence and the ease of the burden of proof – with the harmonization of strict liability rules for AI use cases with a particular risk profile, coupled with a mandatory insurance.

Although this policy did not prevail, it is true that the European Commission assumed a staged approach, through an evaluation and targeted review: in a period of five years after the end of the transposition period, the institution is committed to review the application of the Directive, namely, evaluating the appropriateness of non-fault liability rules for claims against the operators of certain AI systems, as long as they are not already covered by other Union liability rules, and the need for insurance coverage – article 5(1) and (2). This means that this strict liability approach is merely a mirage in the current AI liability scenario, that may end up never applicable. Also, the reference to "other Union liability rules" includes, precisely, the PLD: a strict liability regulation.

The first commentary we believe is appropriate regards the scope of the Directive proposal.

AI is a vast, complex, and heterogeneous universe; while focusing only on fault-based liability, the European Commission forgot cases in which a strict, objective liability solution could have been more adequate. Not necessarily an approach based on the risk of the activity – and here we are making a

reference to article 11 of Portuguese Law 67/2007, of 31st December[14] –, but an approach that dismisses the proof of fault.

We believe that, with regard to high-risk systems – precisely the ones foreseen by the proposal – a no-fault solution would have been more adequate.

Let's see why.

With regard to the AI Act, an AI system is considered high-risk when the following conditions are met: i) "the AI system is intended to be used as a safety component of a product, or the AI system is itself a product, covered by the Union harmonization legislation listed in Annex I" and ii) "the product whose safety component pursuant to point (a) is the AI system, of the AI system itself as a product, is required to undergo a third-party conformity assessment, with a view to the placing on the market or the putting into service of that product pursuant to the Union harmonization legislation listed in Annex I" (points (a) and (b) of article 6 (1) of the AI Act). Article 6 (2) adds that AI systems referred to in Annex III are also to be considered high-risk.

The higher the risk, the less the control of the "human hand" behind the machine, which means a greater adequacy, in theory, of no-fault solutions. In fact, especially in *deep learning* systems – which assume a more expressive "*emergent behaviour*", – the correlations the system creates within the data inserted can easily escape human control, making the relevance of any established duty of care dilute.

These ideas could either result in i) a regime in which the mere proof of the damage leads to the compensation – a route even more objective than the one taken on the PLD – or of ii) a regime in which the damage and the proof of causality (that could – or better, should – be presumed) are the only conditions for triggering the liability.

On both cases, a compensation fund would be a balanced solution between the risk of the AI system and the injury. This solution seems not only appropriate, but desirable. Recognizing – as it has already been done – the tendency for AI systems to cause damages, as a result of the technological error(s) that may occur, the creation of a specific fund to cover such liability cases can be an interesting way to foster competitivity and innovation, balancing the burdens that, from our perspective, should lay on the manufacturers. And, of course, the EU should participate actively in the financing of such a fund (Antunes, 2024: 170), because of its leadership role in regulating AI.

We believe, furthermore, that only special and abnormal injuries should be covered by such a mechanism, in order to – proportionally, from our view – restrain the damages. Let's not forget that a strict liability solution will most likely result in various liability claims and could, most definitely, compromise innovation and technological development.

With regard to low-risk or minimum-risk systems, on the terminology of the EU, we find no solution(s) on this proposal, incomprehensively. The European legislator forgot that a presumably high number of systems still to

14. This law approved the non-contractual liability of the State and other public entities for damages resulting from the administrative – articles 7 to 11 –, judicial – articles 12 to 14 – and legislative – article 15 – activity.

come into existence will most likely be included in one of these two categories, meaning it left several situations unregulated, unfortunately.

On this matter, we believe a fault-based solution would be adequate, with the operator having to rebut i) a rebuttable presumption of guilt, resulting of a ii) duty of care, derived from the AI Act; accompanied of a iii) presumption of causality, also rebuttable. This solution seems adequate, given the fact that on low or minimum-risk AI systems, given the less complex machine learning system, it is possible for a Human to have greater control of the output of the machine.

On a final note, it is interesting to see that the options made in the AILD proposal follow, with minor exceptions, the preferences of the businesses, jeopardizing the citizens', academics' and consumer organisations' view, targeting, precisely, a strict approach, which does not go in line with the referred "appropriate balance of interests between manufacturers and consumers across the EU".

5. Concluding remarks

Given the recent publication of the AI Act, we believe the two proposals in analysis in the present article will be, again, subject to the European Commission's attention in the following months or years.

To avoid discrepancies between Member-States's eventual internal regulations, as well as the lack of protection of EU citizens affected by this type of system, a quick action is needed. This conclusion is aggravated by the fact that, currently, the vast majority of the Member-States do not have a specific liability regulation for AI, which means that, in the absence of a European regulation – be it a Directive, be it a Regulation –, different and even opposite solutions for the same problem(s) will likely emerge.

The PLD, overall, misses the target: AI-enabled software shouldn't, from our point of view, be considered as a product in the sense of the Directive. The European Commission's approach shows, perhaps, an unawareness regarding the fact that most damages result from the functioning of the software, not from the intrinsic properties of this "product".

When it comes to the AILD, a (rebuttable) presumption of guilt should have been established. Considering the difficulties for the natural persons to prove this requirement before a high-risk system, we believe the principle of proportionality requires this solution. This same principle claims a causal link rebuttable presumption, for the same reason. The proposal, overall, lacks the ambition to treat AI liability as a whole, full regime, which would definitely guarantee the harmonization sought. Let's, once again, recall that we are talking about a Directive, not a Regulation – the flexibility for each Member-State, is, therefore, guaranteed.

It is true that, in both cases, the proof of fault and causal link can be extremely difficult; however, the rules regarding the disclosure of evidence seem appropriate to solve this problem and ensure victims their compensations.

With the recent approval of the AI – and although the AILD proposal was drafted before the first AI Act draft –, we are curious to witness what will happen to both proposals, specially the AILD. To us, it seems that a revision is most definitely needed.

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