Towards a New Regime of Civil Liability for AI Systems: Comment on the European Commission’s Proposals

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To cite this article:
Introduction

On September 28th, 2022, the European Commission released two proposals, the aim of which is to regulate civil liability in relation to AI-enabled systems, drawing from the Commission’s White Paper\(^1\) considerations on the use of such systems: a revised version of the Defective Product Liability Directive (PLD)\(^2\) and a Directive that adapts non-contractual civil liability rules to Artificial Intelligence (AI Liability Directive)\(^3\). The combination of these proposals with that of April 21st, 2021, Laying Down Harmonized Rules On Artificial Intelligence (AI Act)\(^4\), will result in the national liability frameworks being adapted to the digital age, the circular economy and global value chains.

The AI Act draft, which is currently being discussed in the European Parliament and the Council, has marked the EU’s first step towards reducing the risks associated with the use of high-risk AI systems. While the AI Act intends to ensure the safety of AI systems put on the single market\(^5\), the new liability framework proposed by the Commission intends to protect individuals, once a risk materializes, by facilitating their access to compensation. This reflects the ‘holistic approach’\(^6\) followed by the European Commission concerning the regulation of Artificial Intelligence.

Liability is a key issue for companies, in terms of legal certainty, and individuals, in terms of facilitating compensation\(^7\). The Commission launched a public consultation with a broad range of stakeholders on the new civil liability regime for AI-driven systems to be adopted\(^8\). The

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\(^7\) Some authors even claim that one of the solutions would be to provide AI softwares with legal personality. See PAPAKONSTANTINOUD (V.), DE HERT (P.), “Refusing to award legal personality to AI: Why the European Parliament got it wrong”, European Law Blog/AI-Regulation.com, November, 26th 2020, available at: https://ai-regulation.com/refusing-to-award-legal-personality-to-ai-why-the-european-parliament-got-it-wrong/.

respondents discussed several issues such as the need for legal certainty and proper redress for injured persons. The debate on the AI liability regime also took place during the public consultation, so the Commission had to take a stand as to whether a fault-based or a strict liability regime should be adopted, for damages caused by an AI-enabled system. On this specific topic, some Big Tech companies expressed their opposition to the adoption of a strict liability regime. For instance, Google claimed that “a strict liability regime is unnecessary and ill-suited to the properties of software and AI systems, and would have a profound chilling effect on innovation and digitization in Europe, disproportionately impacting European SMEs”.

The issue of civil liability in relation to the use of AI systems is critical, since the “opacity” of AI-systems could “make it in practice very difficult or even impossible to trace back specific harmful actions of AI-systems to specific human input or to decisions in the design”. The whole purpose of this new framework will therefore be to ensure that individuals that have suffered harm or injury attributable to an AI system are protected as equally as those who have suffered harm due to other means.

As identified by the Commission’s Report on AI Liability, the absence of a harmonised legal framework on AI liability risks undercompensation for damages caused by an AI system in some cases. Besides, a lack of harmonisation may also lead to ‘law shopping’ practices. The two initiatives should therefore be applied to different legal situations. The proposal for a revised PLD aims to adapt the current legal framework on the strict liability of manufacturers of defective products (from smart technology to pharmaceuticals). The AI Liability Directive

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should facilitate existing compensation schemes for victims of AI-related damages, through targeted harmonisation of national rules on fault-based liability, as long as this does not overlap with claims under the PLD.

The Commission's proposals must now be examined by the European Parliament and the Council, the EU’s two co-legislators. If, at the end of the legislative process, the Council and the Parliament agree on a common text, EU Member States will have 12 and 24 months respectively after the entry into force of the revised PLD and the AI Liability Directive to transpose the minimum requirements laid down by the Directives, each Member State being free to decide how to transpose directives into national laws. This therefore raises questions as to how successful EU Member States will be in terms of complying with the new liability regime and how effectively they will implement these directives.

We will firstly look at the legal regime involved in both AI Liability Directive and revised Defective Product Liability Directive (I), before examining a series of questions raised by such legal frameworks (II).

I. The new legal regime envisioned by the Commission’s proposals

The two proposals released by the European Commission contain some legal innovations that merit examination and explanation. We will first introduce the main takeaways from the AI Liability Directive (A) before investigating the Defective Product Liability Directive revision further (B).

A) EU AI Liability Directive takeaways

The purpose of the directive is to lay down some rules in order to harmonise the liability regime in the event of damage caused by an AI system, to provide economic operators with legal certainty. To this end, the European commission clearly states in the impact assessment which preceded the directive proposal’s publication that “(t)his initiative addresses the abovementioned obstacles by harmonising targeted aspects of MS’ (Member states) existing civil liability rules applicable to AI-systems, in order to improve the conditions for the functioning of the internal market in AI-enabled products and services”16.

In terms of the material scope of the directive, it provides rules concerning non-contractual civil liability and it therefore excludes criminal liability from its scope17. The provisions apply to AI systems providers, operators and users.

As mentioned previously, one of the concerns that was met by this proposal is to enable victims of damages caused by an AI-driven system to seek redress more easily. Article 3 of the proposal

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17 See article 1 of the draft AI Liability Directive, available at: https://ec.europa.eu/info/sites/default/files/1_1_197605_prop_dir_ai_en.pdf
provides that National Courts be empowered to ask AI High-risk systems’ providers or users to release information about the specification of the system that they are providing or using, in the event of a claimant complaining of having suffered damage as the result of the deployment of an AI system. This provision is aimed at countering the ‘black box’ effect\(^\text{18}\), and the opacity of AI systems, which make tort claims very difficult to complete.

When a defendant fails (or refuses) to comply with a court order to release information, they are presumed to have failed to comply with their duty of care, which in turn facilitates the claimant’s ability to seek compensation, although this assumption is rebuttable.

However, this ‘disclosure of information’ obligation is not absolute since National Courts’ requests must be justified by the necessity and proportionality of such information to support the claim. Moreover, companies can preserve their trade secrets from disclosure. This means that under this proposal companies interests are taken into account.

One of the main innovations of this text lies in the liability regime that it provides for. Indeed one of the main issues was to know whether the Commission would adopt in its proposal a fault-based liability approach or a strict liability regime.\(^\text{19}\)

This debate is critical when it comes to the right of a victim to get compensation for a harm caused by an AI-driven system. Indeed, a strict liability regime is more favourable to victims than a fault-based liability regime since claimants do not have to prove that a fault has been committed by the service provider or AI user. As the European commission puts it, when a strict liability regime is applied, “for that person to be found liable, the victim has only to prove that the risk stemming from the sphere of the liable person materialised”\(^\text{20}\). Furthermore, this topic was at the very core of the public consultation that the European Commission launched before releasing the PLD and the AI liability directive proposals. As a matter of fact, EU citizens and consumer organisations were much more in favour of strict liability than businesses, which preferred fault-based liability. The survey published by the European commission on this topic reads as follows:

“NGOs, academic/research institutions, consumer organisations and EU citizens strongly supported either full or minimum harmonisation of strict liability in cases of AI-

\(^{18}\) See for instance, RUDIN (C.), RADIN (J.), “Why Are We Using Black Box Models in AI When We Don’t Need To? A Lesson From an Explainable AI Competition”, 2019, Harvard Data Science Review, 1(2). https://doi.org/10.1162/99608f92.5a8a3a3d


enabled products or services that may pose serious injury risks to the public. (...) Business stakeholders do not favour the harmonisation of strict liability”

Overall, the proposal reflects what we consider to be a ‘balanced’ approach. Indeed, the directive implements a fault-based liability regime as detailed in the explanatory memorandum, according to which the directive “applies to non-contractual civil law claims for damages caused by an AI system, where such claims are brought under fault-based liability regimes”

However, article 4 introduces a presumption of causality between the fault and the harm suffered by the claimant, in certain cases, which makes any tort claim much more simple for the victim.

In this respect article 4 lists three scenarios which would trigger this presumption of causality. First, when the claimant can prove that a fault has been committed, i.e. when the AI service provider or user does not comply with their duty of care, the causality link between the fault and the harm suffered is presumed. Second, the causality link is presumed when it is assumed to be reasonably likely, with regard to the specific circumstances of the case, that the fault generated the output of the AI system or did not generate an output thereof. The causality link is eventually presumed when the victim can prove that the output generated by the system (or the absence of an output) has given rise to the damage.

This presumption of causality represents real progress in terms of people’s right to redress. Since AI systems are opaque and lack transparency, claimants may find themselves in a helpless situation when they suffer harm as a result of an AI system malfunction, since it is very difficult to prove that a specific output caused the damage or, conversely, that the failure of the system to produce an output caused the damage. As a result of this legal innovation, the link between the AI system malfunction and the final harm is presumed.

The EU liability directive also complements the AI Act draft. Indeed, according to the AI act providers of High-Risk AI systems are subject to a series of provisions. They must implement certain risk management systems in order to ensure that their systems are reliable, for instance putting in place cybersecurity measures, or ensuring that there is human oversight. On the other hand, the AI act also provides that users must use the AI system in accordance with its instructions. Violating these AI Act provisions constitutes non-compliance with a duty of care under the EU liability directive and therefore AI providers or users can be held accountable under the new AI liability directive.

B) Key points about the EU’s Defective Products Liability Directive

22 See explanatory memorandum, p. 11, available at: https://ec.europa.eu/info/sites/default/files/1_1_197605_prop_dir_ai_en.pdf
23 See article 4 of the draft AI Liability Directive, available at: https://ec.europa.eu/info/sites/default/files/1_1_197605_prop_dir_ai_en.pdf
24 Ibidem
The Proposal for a Directive on liability for defective products would replace the current Product Liability Directive (PLD) (Directive 85/374/EEC), which provides a European legal framework for strict liability by compensating individuals who suffer physical injury or damage to property due to defective products. The Directive already regulates a vast range of products, from medicines to AI-enabled products. However, as explained below, the Commission considered that rules laid down by the directive regarding AI needed to be updated to take into account the fast evolution of technological products. Any natural person who suffers physical damage caused by a defective product, whether or not negligence or a fault took place, has the right to be compensated by the producer by proving the product was defective.

Since the adoption of the Directive in 1985, society has changed, and so has the way products are produced, commercialised, and distributed. In 2018, following an evaluation requested by the Commission, a number of shortcomings were found in the directive. First, it was considered unclear how the PLD framework would apply to new technological products such as smart devices and autonomous vehicles. Second, it was considered that the burden of proof could be an obstacle for injured individuals in complex cases such as those involving products equipped with ‘smart’ technology or AI-enabled systems. Third, the ability to make compensation claims was found to be excessively limited since the cost of the damage has to amount to at least €500.

Even though the PLD currently applies to AI-enabled products, it is not “well adapted to dealing with them”, hence the need to adapt the rules to ensure that people have a chance to get compensation from producers of emerging technological products such as software producers.

The proposal seeks to “continue to ensure the functioning of the internal market, free movement of goods and undistorted competition between market operators”, and to “continue to ensure a high level of protection of consumers’ health and property”. In particular, the initiative aims to ensure that liability rules protect individuals against risks and harm caused by emerging digital products, assure liability whether the manufacturer is located in the EU or not, ease the burden of proof and ensure legal certainty. Regarding the burden of proof, as far as the current PLD is concerned, the injured person has to provide proof of the harm that they have suffered, the defectiveness of the product, and the causality link between the two. The Commission intends to help injured consumers increase their chances of achieving a successful claim by easing the burden of proof, or sharing the burden of proof with the manufacturers, in complex cases. However, the directive will not universally reverse the burden of proof, to avoid

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hampering innovation. Furthermore, regarding legal certainty, the proposal aims to clarify the type of products and businesses that will be covered by strict liability, whether the product is tangible or digital.

The proposal on liability for defective products contains key modifications aimed at adapting the PLD to the current digital and circular economy.

One of the main modifications proposed is the concept of “product”. The directive aims to provide legal certainty by clarifying that software is considered a product. This definition clarifies that manufacturers of AI or AI-enabled systems, and software (such as operating systems, applications, and firmware) are liable under the provisions of the directive. The Commission explains this proposition by noting that software “is capable of being placed on the market as a standalone product and may subsequently be integrated into other products as a component, and is capable of causing damage through its execution”. For example, a defective application could cause a device’s battery system to overheat or explode, creating a physical injury to someone or causing property damage. However, to avoid hampering innovation, the Commission clarifies that the Directive shall not apply to free and open-source software “developed or supplied outside the course of a commercial activity” (not exchanged for financial gain or personal data).

Additionally, the proposal considers “digital manufacturing files” to be products; this means digital information “necessary to produce a tangible item by enabling the automated control of machinery or tools, such as drills, mills and 3D printers”. Given that non-tangible goods are recognised as products and that data are acknowledged as being important, the Proposal recognises that an individual may claim for a material loss if the defective product causes the loss or corruption of data. The addition of non-tangible goods as products is particularly interesting since some Member States have limited the notion of “product” in their liability frameworks to material goods.

Another innovative modification proposed by the Commission is the manufacturers’ obligation to provide software security and updates to avoid cybersecurity vulnerabilities, even after the product has been placed on the market. Article 6 of the proposal explains that “[a] product shall be considered defective when it does not provide the safety which the public at large is entitled to expect, taking all circumstances into account, including the following: (…) (f) product safety requirements, including safety-relevant cybersecurity requirements.” Additionally, Article 10 notes that: “an economic operator shall not be exempted from liability, where the defectiveness of the product is due to any of the following,

28 Ibidem
29 Ibidem
30 Ibidem
31 Ibidem.
provided that it is within the manufacturer’s control: (a) a related service; (b) software, including software updates or upgrades; or (c) the lack of software updates or upgrades necessary to maintain safety.”

With this modifications, manufacturers could be held liable for changes made to the products once they have been placed on the market, if these changes were triggered by software updates or machine learning. On this topic, the results of the public consultation showed a broad consensus among respondents that “a product should be considered defective if it has cybersecurity vulnerabilities. 70% of respondents in the public consultation were in favour of the possibility of holding manufacturers liable for failing to provide software security updates necessary to tackle such vulnerabilities.”

In addition, in response to the changing market, the Commission proposes establishing a means by which individuals may be compensated for damage or material loss in relation to products produced outside the European Union. In order to achieve this, the Commission intends to hold the importer of the defective product and the authorised representative liable, or, in the event that these economic operators are absent, the service provider could be held liable. Furthermore, keen as it is to adapt to the changing market, the Commission explained that online platforms would be held liable when they act as manufacturer, importer or distributor of a defective product. When these digital services act as mere intermediaries between traders and consumers, they are covered by a conditional liability exemption provided by the Digital Services Act. However, if an online platform “presents the product or otherwise enables the specific transaction” and “fails to promptly identify a relevant economic operator based in the Union”, it can be held liable.

Furthermore, because of the technical or scientific complexity of AI systems, claimants may encounter difficulties trying to prove their claims. Therefore, under certain conditions, the burden of proof might be alleviated for the injured person.

Finally, regarding the more general liability rules, the proposal seeks to eliminate the financial ceiling for compensation that the PLD currently sets at 500 €, in order to address current limitations.

The modifications proposed with regard to the PLD would provide European customers with a better chance of achieving a successful claim and being compensated for damage or material loss suffered as a result of a defective ‘smart’ product.

II. Questions raised by the new legal framework

32 Ibidem.
33 Ibidem.
The two EU Commission’s proposals aim to dispel legal uncertainties concerning who should be attributed responsibility for a harm caused by an AI-driven system. However, both the AI Liability Directive (A) and the Defective Product Liability Directive (B) still contain certain elements that merit clarification.

A) The legal difficulties posed by the AI Liability Directive

The AI liability directive and more broadly the new rules proposed by the European Commission are designed to offer a comprehensive framework that will harmonise liability rules on a European scale. However, one wonders whether this new framework will expel all of the difficulties associated with who should be attributed responsibility in relation to the use of AI systems and under what circumstances.

The main objective of the Commission is to harmonise liability rules within the EU, to provide a degree of legal certainty and to ensure that people who have suffered damages due to the deployment of AI systems are afforded an actual remedy. At the same time, article 1 of the proposal provides that “Member States may adopt or maintain national rules that are more favourable for claimants to substantiate a non-contractual civil law claim for damages caused by an AI system, provided such rules are compatible with Union law.” Furthermore, recital 14 of the directive states that “national laws could, for example, maintain reversals of the burden of proof under national fault-based regimes, or national no-fault liability (referred to as ‘strict liability’) regimes of which there are already a large variety in national laws, possibly applying to damage caused by AI systems.” It is difficult to assess whether a directive is the most appropriate instrument to achieve the ambitious purpose of harmonising liability rules on a European scale. Indeed, if member states maintain a strict liability regime in relation to certain cases, this would not permit the purpose of the directive to be achieved, which is to provide economic operators with legal certainty.

In a similar vein, the directive does not directly specify which of the damages will be compensated. Recital 22 in particular provides that “this Directive does not harmonise the conditions related to the damage, for instance what damages are compensable.” Although the Commission made it very clear that the purpose of this directive is to only harmonise Member States’ liability rules to a small degree, the discrepancies between Member States in terms of the various definitions of the “damage” concept can be a source of problems. As a matter of fact, in certain States, people will potentially be able to invoke the directive as a means of claiming compensation due to a psychological harm caused by an AI system, while in other States such harms would not be eligible for compensation.

Another possible grey zone concerns the effectiveness of the directive. One of the main objectives of this proposal is to combat undercompensation of injured persons, where an AI system is involved. However, the responsibility still lies with the AI user or provider in terms of the fault committed, so it can be difficult for an injured person to bring evidence of the fault. It is true that the directive also provides for the disclosure of information but it is not clear whether Member States’ Courts will have the technical capacity to take into account such technical specifications.

One also wonders whether the fault-based liability regime will succeed in simplifying victims’ claims for an appropriate remedy, even if one takes into account that the directive provides for a presumption of causality in certain cases. For instance, according to the Commission, a fault can be proven by citing non-compliance with a duty of care. However, AI systems can be so complex that even when a user complies with their duty of care, damage can still be caused to people. In such a scenario it is not clear who will be held liable for the damages, and under what grounds.

### B) Legal uncertainties as regards the Defective Product Liability Directive

While the proposal defines “damage” as “material losses resulting from: (…) (a) death or personal injury, including medically recognised harm to psychological health”, it does not provide sufficient legal certainty to enable understanding of the extent to which non-material damage would be compensated. On this subject, the public consultation showed that amongst citizens, consumer associations, NGOs and research institutions, “there was a clear support for EU rules prescribing the compensability of pure economic loss (e.g. loss of profit), loss of or damage to data (not covered by the GDPR) and immaterial harm (like pain and suffering, reputational damage or psychological harm).” On the other hand, business stakeholders were opposed to these rules, especially those concerning immaterial harm. This opposition to rules around immaterial damages was also exposed in a public letter sent to the Commission by a coalition of start-ups, SMEs, and technology companies on August 24, 2022. In the letter the stakeholders recommended to the Commission that it does not include immaterial damages, arguing that this could create legal uncertainty and that, “due to the complex liability caused by non-material damages, the industry could suffer from a “chilling effect on innovation”.

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Furthermore, in an annex of the Impact Assessment, the Commission notes that one of the matters that needs clarification during the revision of the PLD is the definition of psychological damage as compensable damage.\textsuperscript{41}

Another point that seems problematic is the “later-defect” defence afforded to the manufacturer. This means that the economic operator would not be liable if the defectiveness of the product is revealed once the product is placed on the market. While such a measure would have been relevant for non AI-enabled devices, in the current digital economy it seems problematic to leave an open door for manufacturers to escape liability when in many cases they retain certain control over the product. As is explained in the Impact Assessment, “this logic no longer reflects the reality of products in the digital age. Producers of such products often retain control of them after they are put into circulation, either by providing updates, delivering new functionalities through upgrades, or supplying digital services in the form of continuous updates in order to make, say, an autonomous vehicle or smart domestic appliance function. Software updates themselves can be defective, and have been identified by the EU Agency for Cybersecurity as the main causes of non-malicious security threats to IT systems and applications”.\textsuperscript{42}

**Conclusion:**

The new rules proposed by the European Commission intend to strike a balance between enabling EU citizens and customers to seek redress when they suffer harm due to the use of an AI system, and fostering innovation by creating legal certainty. This is to be achieved by creating a harmonised, fault-based liability regime that can be applied when an individual suffers damage because of the deployment of an AI system. Furthermore, consumers will benefit from a presumption of causality in terms of proving that there is a link between the fault committed by the AI provider or user and the damage suffered, which can in turn facilitate potential claims. This measure is accompanied by a Defective Product Liability Directive revision which proposes including software and non-material goods as products in the scope of the directive.

These rules constitute a tangible step forward for European regulation of AI, and provides stakeholders, including economic operators, with more clear legal frameworks. This will allow for there to be safer products on the market, which will increase European citizens’ trust in AI. However, as mentioned in the main part of the article, a few grey areas need to be clarified.


But there is no doubt that upcoming discussions in the European Parliament and the Council will provide clarification on how these two proposals will be applied in practice.

These statements are attributable only to the author, and their publication here does not necessarily reflect the view of the other members of the AI-Regulation Chair or any partner organizations.

This work has been partially supported by MIAI @ Grenoble Alpes, (ANR-19-P3IA-0003)