

# NEW PRODUCT LIABILITY IN THE AGE OF AI: MODERNISATION UNDER A CONSERVATIVE VEIL

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# New product liability in the Age of AI: Modernisation under a Conservative Veil

GODEFROY DE BOISCUILLÉ\*

*This article examines the reform of the European Product Liability Directive in the age of AI. The reform succeeds in bringing AI within the reach of product liability law. However, the proposed regime remains only partially adapted to the evidentiary and economic realities of the digital age. The modernisation effort is significant but ultimately incomplete. What emerges is not a new liability regime but an updated version of an old one. Broader in scope, yet still limited in its ability to ensure effective compensation for victims. The reform thus reflects a form of conservative modernisation. Innovative but restrained in spirit. It extends the reach of product liability to the digital environment while preserving the traditional architecture of the regime. By examining this ambivalence, the article aims to show both the strength and the fragility of the new framework.*

## Introductory Remarks

Digital technologies are now pervasive. As their deployment expands, the number of situations in which they may cause harm is bound to increase. Artificial intelligence is already embedded in a growing number of critical products as autonomous vehicles, medical devices, financial systems, conversational agents and facial recognition tools. The industrial revolution introduced new risks for consumers. The digital transformation of the economy now creates new forms of harm.

The European Regulation on Artificial Intelligence (AI Act)<sup>1</sup> does not solve the question of which civil liability regime applies in cases of damage caused by an artificial intelligence system (hereinafter “AI” system). Its purpose is to prevent harm, not to provide compensation for it. The Commission’s Work Programme announced the withdrawal of the proposal on AI civil liability<sup>2</sup>. Consequently, no clear liability regime currently exists for harm caused by AI systems. The new Directive on liability for defective products<sup>3</sup> may provide a possible framework for addressing such harm.

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<sup>1</sup> Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence (OJ L, 2024/1689; hereinafter ‘Regulation (UE) 2024/1689’ (AI Act).

<sup>2</sup> Commission Work Programme 2025, COM(2025) 45 final, Annex IV (Withdrawals). – COM, Withdrawal of Commission Proposals, OJ 2025 C/2025/5423, 6 October 2025.

<sup>3</sup> Directive (EU) 2024/2853 of the European Parliament and of the Council of 23 October 2024 on liability for defective products and repealing Council Directive 85/374/EEC (OJ L, 2024/2853; hereinafter ‘Directive (EU) 2024/2853’ or ‘Product Liability Directive’). – J. Knetsch, “La nouvelle responsabilité du fait des produits défectueux : état des lieux et analyse critique”, JCP G 2025, doctr. 125.

The reform of European product liability law marks one of the most significant updates of private law. The original product liability framework was built for a world of tangible goods, linear supply chains and relatively stable products. The rise of software-driven products and AI systems has exposed its limits. The new Product Liability Directive appears as an ambitious effort to ensure that strict liability remains effective in a market environment marked by dematerialised products, opaque technologies and increasingly interconnected products and services.

Reviving the special regime introduced in 1985 while adapting it to intangible products offers a corrective to the inadequacies of national regimes in the digital economy<sup>4</sup>. The Directive has undergone a rejuvenation to reflect contemporary realities. It may significantly enhance the effectiveness of the right to compensation for consumers harmed by AI. The reform appears to pursue the restoration of a balance that had gradually eroded under the 1985 framework, which was long perceived as disproportionately favoring industrial interests to the detriment of consumer protection. The reform is therefore a modernization of the existing framework. It broadens the scope of what constitutes a product; enlarges the circle of potentially liable parties; eases the burden of proof; and extends the limitation periods. Nonetheless, this welcome reform raises a number of important challenges.

Yet the reform should not be read solely as a disruptive legislative moment. The new regime also reveals a marked continuity with the conceptual architecture of classical product liability law. The core logic remains that of a defect-based strict liability regime centred on product safety. The reform modernises the scope of liability more than it transforms its underlying rationale. The regime continues to operate through familiar categories such as defect, damage, causation, producer, and exoneration. In that sense, the Directive does not inaugurate a new liability paradigm for the digital economy. Rather, it extends an existing paradigm while preserving its basic equilibrium.

This tension between modernization and conservatism is clear. The new Directive may be understood as a form of controlled modernization. It constitutes a legislative response designed to acknowledge the specific features of digital technologies without abandoning the traditional structure of the 1985 Product Liability Directive. Such an approach is politically understandable, doctrinally interesting and legally open to question. It avoids the uncertainties that would accompany the creation of a fully autonomous liability regime for AI. However, this conservative posture raises an important question: does the reform truly address the challenges involved in compensating victims of AI-related harm?

The reform is therefore a compromise text. Innovative in scope, but restrained in spirit. By examining this ambivalence, the article aims to show both the strength and the fragility of the new framework. Its strength lies in its capacity to integrate digital realities without dismantling the coherence of product liability law. Its fragility lies in its continued reliance on inherited legal categories which may only partially capture the normative challenges posed by AI systems.

The new Directive on product liability is a commendable attempt to address the technological transformations of the internal market by offering a regime suited to the challenges posed by AI-related harm. In this respect, the modernization (I) of the product liability regime is a timely

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<sup>4</sup> G. de Boiscuillé, “La responsabilité du fait des produits défectueux appliquée à l’intelligence artificielle : le choix de la raison”, *Arch. phil. droit* 66 (2025), pp. 329-355.

response to the challenges posed by harm caused by artificial intelligence. Nevertheless, this modernization appears incomplete. As a result, the veil of conservatism (II) inherited from the 1985 Directive remains visible, particularly in light of the numerous evidentiary obstacles that may hinder the effectiveness of victims' claims for compensation.

## **I- The Modernization**

The 1985 Directive has been reformed to better achieve its original objective, namely the protection of consumers. The reform improves the compensation of damage caused by AI systems in the digital economy. The broadening of the scope of application (A) and the alleviation of the burden of proof (B) facilitate compensation for injured parties.

### **A) The Broadening of the Scope of Application**

#### **1) The Concept of “Product”**

Pursuant to article 4 of the Product Liability Directive, product “*means all movables, even if integrated into, or inter-connected with, another movable or an immovable; it includes electricity, digital manufacturing files, raw materials and software*”<sup>5</sup>. Under the original regime of Directive 85/374/EEC<sup>6</sup>, the concept of “product” was traditionally limited to tangible movable goods. Electricity was the single admitted explicit exception<sup>7</sup>.

The list provided in Article 4(1) adds other sorts of incorporeal products in addition of electricity. The definition of “product” in Article 4 is structured around a general category supplemented by explicit inclusions. The Directive first defines a product broadly as “*all movables*” even where integrated into another movable or immovable. The definition of “product” remains anchored in the traditional notion of movable goods. As a rule, tangible movables fall within the scope of the Directive. The reform nevertheless clarifies that certain intangible goods such as electricity, digital manufacturing files, raw materials and software must also be treated as products. The list provided in Article 4(1) sheds light on a fundamental question: under what conditions can an intangible asset qualify as a product? The enumeration is explicit. Only those expressly mentioned by the Directive fall within the scope of the regime. Data, for instance, are not included and therefore cannot be regarded as products within the meaning of the directive even though they may play an essential functional role in the operation of digital goods.

The Directive clarifies also the status of software which had long occupied a particularly uncertain position under the product liability regime<sup>8</sup>. Recital 13 of the directive clarifies that

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<sup>5</sup> Directive (EU) 2024/2853.

<sup>6</sup> Council Directive 85/374/EEC of 25 July 1985 on the approximation of the laws, regulations and administrative provisions concerning liability for defective products (OJ 1985, L 210, p. 29; hereinafter ‘Directive 85/374/EEC ‘1985 Directive’).

<sup>7</sup> The legislator expressly included it in the Directive because of the significant industrial risks associated with its distribution. It therefore remained the only clearly recognised incorporeal product under the original framework.

<sup>8</sup> Two interpretations emerged. A strict reading, which prevailed in much of the doctrine, considered that software as such could not qualify as a product because it lacks material form, particularly when distributed through downloads or cloud services. A more pragmatic approach developed in judicial practice. When software was embedded in a physical device, liability was attached to the tangible object incorporating the software. In this reasoning, the product was not the software itself but the physical item containing it. For instance, in the case of a pacemaker controlled by software, the pacemaker constituted the product. The same logic applied to industrial

software must now be understood in a broad and harmonised sense. The concept encompasses operating systems, firmware, computer programs, applications and AI systems. An AI system may itself constitute a product. Either as an autonomous system or as a component integrated into a device, such as an AI model embedded in a surgical robot or a computer-vision system used in an autonomous vehicle. Also, Article 7(2)(c) explicitly refers to AI in the context of assessing product defects, requiring consideration of “*the effect on the product of any ability to continue to learn or acquire new features after it is placed on the market or put into service*”. This clearly refers to AI systems, especially when read in conjunction with the AI Act which defines AI by reference to its capacity to learn and evolve autonomously<sup>9</sup>. Accordingly, the Directive encompasses both AI integrated into physical devices (e.g., autonomous vehicles, medical robots) which may be considered product components, and stand-alone AI software even when delivered independently of a physical medium. This results in a broader range of defective products that may be invoked by consumers, thereby strengthening their right to compensation.

Article 2(2) provides for one exception. The new Product Liability Directive does not apply to free and open-source software developed or supplied outside the course of a commercial activity. The Directive does not exempt open-source software as such. It excludes only free and open-source software developed or supplied outside the course of a commercial activity. Accordingly, where such software becomes part of a market-based product or service, the product liability regime may apply. In particular, if non-commercial open-source software is incorporated by a manufacturer into a commercialised product, liability may attach to that manufacturer. This approach is normatively coherent insofar as it places the risk on the operator that actually markets the product.

Furthermore, the Directive extends liability for defective products to related services considered as components “*of the product into which they are integrated or with which they are interconnected where they are within the control of the manufacturer of that product*” (recital 17 of the Directive). This provision addresses criticisms levelled against the former Directive whose classical product/service distinction had become inadequate for certain types of connected objects. The new Directive moves beyond this binary distinction. It adopts criteria more attuned to the digital context. It expressly expands the scope of liability to include related digital services. However, this extension is subject to four conditions: (i) it does not apply to services *per se*, but only to related services; (ii) the related service must be a component of the product; (iii) the service must be essential, in that the product cannot perform one of its functions without it; and (iv) the service must be under the manufacturer’s control. This framework anticipates numerous everyday connected services that fall within the Directive’s scope, such as smartwatches linked to health-monitoring services (e.g., health applications collecting biometric data and providing recommendations); smart thermostats connected to mobile apps; telemedicine software embedded in AI-powered medical devices; cloud-based software incorporated into autonomous vehicle systems; or AI-powered voice assistant services integrated into physical products, etc.<sup>10</sup>.

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machines. The machine was treated as the product, even though the defect might originate in the software. This approach allowed courts to bypass the exclusion of intangible goods, but it remained conceptually fragile.

<sup>9</sup> Namely machine learning algorithms.

<sup>10</sup> Another relevant example will be the Amazon Echo device, which integrates a voice assistant service based on artificial intelligence. This product combines three interrelated elements: a tangible good (the physical speaker), an integrated digital service (*Alexa*, the voice assistant provided by Amazon), and an AI system.<sup>10</sup> Consequently, the integrated digital service *Alexa* may be regarded as an essential component of the Amazon Echo product and thus fall within the scope of the Directive. A defect in the *Alexa* service (e.g., incorrect response, security flaw)

In sum, the extension of the Directive's scope enables the inclusion of a wider range of products giving rise to liability, notably by covering intangible goods. At the same time, this broadening seeks to unify the manufacturer's liability for all functional components of a single product, including related digital services under its control.

## 2) The Players

The new Directive keeps the manufacturer at the centre of the regime while ensuring that a liable person within the Union can be identified where the manufacturer is outside the EU. In that respect, it partly converges with the AI Act. The notion of provider under the AI Act largely overlaps with the notion of manufacturer under the new Product Liability Directive. In many cases, an AI Act provider will also qualify as a manufacturer or quasi-manufacturer under the Product Liability Directive, especially in relation to software and AI systems.

Many actors were already covered under the previous directive, including the producer<sup>11</sup>, the manufacturer of a component, the quasi-manufacturer (who affixes their brand), the EU importer, and, subsidiarily, the distributor if the producer remains unidentified. The new Directive adds four additional liable parties: (i) the fulfilment service provider, (ii) the provider of an online platform, (iii) the authorised representative of the manufacturer, and (iv) any operator who substantially modifies a product or software after it has been placed on the market.

This expansion is welcome as it remedies a weakness in cross-border e-commerce. The new Directive does not simply add four new liable parties but refines the circle of potentially liable operators through different techniques. The authorised representative and the fulfilment service provider primarily function as EU-based fallback defendants where the manufacturer is not established in the Union. Online platforms are not a separate category of liable persons but may be liable when acting as an economic operator, notably in a role similar to a distributor. By contrast, an operator that substantially modifies a product or software is treated more radically since the modified product may be regarded as a new product and the modifier as a manufacturer. In this situation, the mechanism goes beyond a mere territorial fallback designed to ensure that a liable person exists within the Union. It redefines the point at which an actor intervening after the initial placing on the market becomes responsible for the risk of defect. This constitutes a significant innovation. It is particularly suited to digital and connected products that may be refurbished, updated, or enhanced through software after their initial marketing.

More generally, providing liability relays or functional substitutes designed to ensure that a solvent defendant can be identified within the Union is particularly welcome. Consumers are often uncertain as to the appropriate party against whom to initiate proceedings. One of the central issues in modern product liability law concerns the identification of a defendant against whom an effective claim may be brought when the original producer is unknown. This problem reflects a broader shift in the centre of gravity of private international law and civil procedure. The core difficulty is no longer confined to determining jurisdiction or the applicable law but increasingly lies in securing the procedural effectiveness of the right to compensation where the defendant cannot be found.

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may be assimilated to a product defect, thereby entitling victims to compensation under the defective product liability regime.

<sup>11</sup> Understood as the manufacturer of the finished product.

It is worth noting that the difficulties raised by an unidentified or unreachable defendant are not unique to product liability. They have already arisen in other forms of litigation involving digital environments. English courts confronted with cryptocurrency theft have developed pragmatic procedural tools to address situations in which the perpetrator cannot be readily identified. In particular, claimants may bring proceedings against “persons unknown” and obtain disclosure orders or freezing injunctions directed at intermediaries such as cryptocurrency exchanges. In *Ion Science Ltd v Persons Unknown*<sup>12</sup>, for example, the High Court authorised disclosure orders against exchanges, including *Binance*, allowing the claimant to trace misappropriated crypto-assets and identify the individuals controlling the relevant wallets. These mechanisms illustrate a broader procedural logic. When the primary wrongdoer cannot be located, courts rely on intermediaries operating within the digital ecosystem as gateways through which victims may recover assets or identify the responsible party.

A comparable rationale underlies the recent reform on defective products. Faced with the possibility that the manufacturer may be unknown, located outside the Union, or otherwise unreachable, the Directive expands the circle of potentially liable actors. In both contexts, the legal system seeks to safeguard the effectiveness of the right to compensation by mobilising intermediaries as functional substitutes for an unidentified defendant. The response of the new Product Liability Directive is to broaden the range of potentially liable persons. The absence of an accessible contact point in cases of damage caused by online purchases undermines the effectiveness of the right to compensation. A common scenario is as follows: the consumer purchases a defective product via an online marketplace (e.g., Amazon) from a manufacturer established outside the EU, such as in China. The product is sold by a company that does not affix its name to the product. The manufacturer is untraceable. The platform claims to act merely as an intermediary. No importer is designated. The consumer is left without a clear defendant. Domestic courts are faced with the absence of an identifiable responsible party, despite the existence of harm. A comparable factual situation arose in the United States in the case *Bolger v. Amazon*<sup>13</sup>.

The new Directive thus grants injured consumers multiple avenues to identify a liable party. Article 8 of the new Directive establishes a “*cascade of liability*”. It offers injured parties a multitude of potential defendants to secure their right to compensation. As in the AI Act, the ranking of liable actors depends on their role in the manufacture and placement on the market of the product. One may thus infer that the manufacturer integrating an AI system into a connected product will be the primary liable party *vis-à-vis* the victim<sup>14</sup>. That party may then seek recourse against other actors in the supply chain<sup>15</sup>.

But how could this work in practice? If no company presents itself as the manufacturer or importer, the consumer may take action against the fulfilment service provider established

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<sup>12</sup> England and Wales High Court, Queen’s Bench Division, Commercial Court, *Ion Science Ltd and Duncan Johns v. Persons Unknown, Binance Holdings Limited, Payward Limited and Mirriam Corp LP* (Unreported), 28 January 2022

<sup>13</sup> California Court of Appeal, 2020, *Bolger v Amazon.com, LLC*, 267 Cal. Rptr. 3d 601, 617.

In this case, the plaintiff, Angela Bolger, had purchased a defective product, a laptop battery sold by a third-party vendor on Amazon Marketplace, but stored and shipped by Amazon through its Fulfillment by Amazon (FBA) service. The battery exploded, causing severe burns to the buyer. The Chinese manufacturer was neither identified nor reachable. The court held that Amazon could be held liable for the harm caused by the defective product, even though it was not the formal seller, due to its substantial involvement in the product’s distribution.

<sup>14</sup> Directive (EU) 2024/2853, art. 8(2).

<sup>15</sup> Directive (EU) 2024/2853, art 14.

within the EU. In other words, if a company has stored, packaged, or shipped the product within the EU, it may be held liable as a fulfilment service provider. For instance, if a Chinese seller uses Amazon's warehouses in Europe, Amazon would act as a fulfilment service provider and may incur liability for the defective product. Another possible scenario involves a company that does not handle shipment but sells its products through a European website via a marketplace platform. In the case of a defective autonomous robot sold on Amazon, if the platform goes beyond a neutral intermediary role and actively participates in the product's marketing, it may be qualified as a distributor, a quasi-manufacturer, or a fulfilment service provider when involved in logistics.

Ultimately, this broadening of the range of liable parties addresses three key shortcomings in the digital age: (i) the risk that non-EU suppliers go unpunished while selling defective products online to EU consumers; (ii) the lack of access to legal redress due to the difficulty of identifying responsible parties; and (iii) the alleged neutrality of platforms that might in fact be considered *de facto* distributors due to their involvement with the products sold.

Yet the reform does not operate solely on the side of identifying a defendant. It also seeks to facilitate victims' claims by partially alleviating the burden of proof imposed on consumers injured by a defective product.

## **B) Alleviating the Burden of Proof**

In order to exercise their right to compensation, consumers must prove the damage suffered, the defectiveness of the AI system, and the causal link between the two. The burden of proof is a crucial issue in damage caused by AI systems. Identifying the source of the malfunction is complicated by the difficulty of tracing the AI's decision-making process often likened to a "black box". The technical opacity of AI systems could allow manufacturers to evade liability. Nonetheless, the AI Act requirement that manufacturers establish technical documentation to monitor AI performance before and after placing it on the market. It may help victims obtain crucial evidence to demonstrate defectiveness.

This possibility is reinforced by the Directive's provisions aimed at improving access to evidence. The Product Liability Directive allows claimants to request a court order compelling the defendant to disclose relevant evidence in their possession<sup>16</sup>. The reform thus enshrines a form of compelled disclosure. The threshold for obtaining such an order is framed in terms of the claim's plausibility which arguably sets a relatively permissive standard. To avoid the excesses associated with American-style discovery and large-scale document production, courts may require that disclosed evidence be presented in an "easily accessible and comprehensible" form. However, Member States must ensure that "*disclosure of evidence (...) is limited to what is necessary and proportionate*"<sup>17</sup>. The Directive thus strengthens the judge's role in access to evidence. It remains uncertain how strictly national courts will assess victims' requests. Much will depend on how they apply the principle of proportionality when balancing the effectiveness of compensation against the protection of confidential information and trade secrets. In that respect, the Directive reflects a broader tension between protecting consumers and safeguarding business interests. It seeks to improve consumer redress without abandoning the traditionally cautious European approach to evidentiary disclosure.

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<sup>16</sup> Directive (EU) 2024/2853, art.10(2(a)).

<sup>17</sup> Directive (EU) 2024/2853, art. 9(3).

Another particularly acute difficulty in the age of artificial intelligence lies in proving defectiveness. Article 10 of the Directive seeks to alleviate this burden by strengthening the role of presumptions. This is a significant improvement since victims of AI-related harm often face profound informational asymmetries and technical opacity. The presumptions may therefore operate as an important corrective mechanism. Defectiveness may be presumed in several circumstances: (i) when the defendant refuses to disclose the evidence<sup>18</sup>; (ii) when the product fails to comply with a mandatory standard<sup>19</sup>, potentially allowing the claimant to rely on the AI Act to show the manufacturer's breach of one of its many compliance obligations<sup>20</sup>; (iii) when the product clearly malfunctions during reasonably foreseeable use or under normal circumstances<sup>21</sup>; and (iv) when "*the claimant faces excessive difficulties, particularly due to technical or scientific complexity, and it is probable that a defect, a causal link, or both exist*"<sup>22</sup>. This final presumption could be especially helpful for victims of defective AI systems. Yet its practical reach should not be overstated. These presumptions do not eliminate evidentiary difficulties so much as displace them. Claimants may still face substantial obstacles in establishing the conditions for their application.

## II- The Conservative Veil

The conservative undertone of the reform remains apparent. Firstly in the persistence of evidentiary obstacles (A) that will undermine the effectiveness of compensation claims, and secondly in the uncertainty surrounding the concurrent application of EU product liability rules and domestic liability regimes (B).

### A) Persistence of evidentiary obstacles

#### 1) Proof of the Defect

A product is considered defective when it does not provide the safety which a person is entitled to expect. This broad definition may benefit victims of AI systems. It relies on a flexible formula that affords judges considerable discretion. Nevertheless, the new Directive leaves unresolved the longstanding debate over the proper characterization of a safety defect.

Indeed, an important debate concerns the relationship between the notion of defect and safety requirements. On the one hand, the text defines a defective product as one that does not "*provide the safety that a person is entitled to expect or that is required under Union or national law*"<sup>23</sup>. Safety thus appears to constitute the substantive criterion of defectiveness itself. On the other hand, the text provides that defectiveness is presumed in certain conditions<sup>24</sup>. An ambiguity therefore remains. Is the breach of a safety rule sufficient in itself to establish defectiveness?

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<sup>18</sup> Directive (EU) 2024/2853, art.10(2)(a).

<sup>19</sup> Directive (EU) 2024/2853, art.10(2)(b).

<sup>20</sup> Regulation (UE) 2024/1689, for the manufacturer's obligations in the case of qualified high-risk AI systems (Annexes II and III of the regulation).

<sup>21</sup> Directive (EU) 2024/2853, art.10(2)(c).

<sup>22</sup> Directive (EU) 2024/2853, art.10(4)(a).

<sup>23</sup> Directive (EU) 2024/2853, art. 7(1).

<sup>24</sup> Directive (EU) 2024/2853, art. 10: "*The defectiveness of the product shall be presumed where any of the following conditions are met: (a) the defendant fails to disclose relevant evidence pursuant to Article 9(1); (b) the claimant demonstrates that the product does not comply with mandatory product safety requirements laid down in Union or national law that are intended to protect against the risk of the damage suffered by the injured person; or (c) the claimant demonstrates that the damage was caused by an obvious malfunction of the product during reasonably foreseeable use or under ordinary circumstances*".

Or does it merely constitute an evidentiary indication giving rise to a presumption of defectiveness? The difficulty is far from theoretical. A practical example may be drawn from autonomous or highly automated vehicles. Suppose that an accident occurs because the driving system misreads its environment and reacts too late. The claimant may seek to show that the vehicle failed to comply with mandatory safety requirements stemming from Union law. But what follows from such non-compliance? One interpretation would be that the breach itself establishes defectiveness since the product does not meet the level of safety legally required. Another more cautious interpretation would be that such non-compliance merely gives rise to a presumption of defectiveness which the producer remains free to rebut by showing the product nevertheless provided the level of safety that persons were legitimately entitled to expect. The example thus highlights a fundamental hesitation in the text. Do safety requirements amount to a substantive criterion of defectiveness, or merely to an evidentiary tool designed to facilitate its proof? The Directive does not entirely dispel this ambiguity.

Also, another doctrinal debates risk continuing to emerge. What indeed if proving the defect will amount to proving fault<sup>25</sup>. In that case, the evidentiary burden of the defect may shift toward proving negligence. Demonstrating that the product failed to meet safety expectations may effectively become an assessment of the manufacturer's conduct in designing the AI system. The malfunction of artificial intelligence could lead to an evaluation of whether the manufacturer selected an appropriate algorithm or correctly labelled the data used to generate predictions. This risk is all the more pronounced because the EU AI Act sets forth a list of obligations for manufacturers, thereby establishing a *de facto* standard of behaviour reminiscent of the *bonus pater familias* in Roman law. One might fear that product liability will not remain a no fault-based liability regime as the victim's burden of proving defectiveness ultimately requires assessing the AI developer's behaviour against regulatory and societal expectations. Nevertheless, one could object that the Directive allows the victim to benefit from a presumption of defectiveness. The burden of proof is thus reversed in favour of the claimant. The manufacturer must then demonstrate the absence of a defect. But even there, this proof effectively requires a justification based on reasonable conduct. The risk is blurring the line with fault-based liability. In this way, presumptions enhance the regime's effectiveness while also exposing the ambiguities of so-called objective liability.

The presumptions introduced by the Directive should, in principle, be welcomed. A conceptual difficulty arises when the defect-based structure of product liability is applied to AI systems. The traditional model presupposes that harm results from an identifiable safety defect in the product. Yet many AI-related harms do not stem from a clear malfunction. They may arise from the statistical nature of machine learning. In such situations, the product may function exactly as intended while still generating harmful outcomes. The difficulty therefore lies not merely in proving the defect but in identifying one at all. The reform attempts to address these challenges through evidentiary facilitations such as presumptions. But the presumptions provided by Article 10(3) and 10(4) of the Directive remain unfortunately imperfect. Article 10(3) states that "*The causal link between the defectiveness of the product and the damage shall be presumed where it has been established that the product is defective and that the damage caused is of a kind typically consistent with the defect in question*".

A literal interpretation of this provision does not permit to conclude that defectiveness itself is presumed. The article requires the claimant to first establish the product's defectiveness in order to benefit from a presumption of causation. One might even question whether the provision

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<sup>25</sup> E. Rajneri, "La notion de défectuosité du produit dans les jurisprudences des pays européens, Revue internationale de droit comparé", Vol. 67 N°1, 2015, pp. 185-205.

implicitly requires proof that the product contributed to the damage. It must be indeed established not only that the product was defective, but also that the damage was of a kind generally compatible with the defect alleged. What is a damage generally compatible with the defect? In simple cases, the logic is readily intelligible. For instance, if the braking system of an autonomous vehicle fails and the vehicle causes a collision because it cannot stop, the damage clearly corresponds to the type of risk that such a defect made foreseeable. In more complex scenarios, the formula becomes much less operational. A more difficult example would be an autonomous vehicle affected by a defect in its navigation software, causing it to stop at an inappropriate location rather than at the intended destination. If the passenger is then injured after leaving the vehicle in that unsafe environment, it is far less clear whether the damage is of a kind generally compatible with the defect in question. The defect is software-based. The harm is indirect. The occurrence of the damage depends in part on an external intervening circumstance. In such a case, the compatibility between the type of defect and the type of damage becomes genuinely contestable. Moreover, this standard of proof on the compatibility between the defect and the damage introduces an irreducible degree of subjectivity. What emerges is a form of subjectivisation of product liability. The presumption does not entirely dispense the victim from the burden of demonstration, since it remains dependent on a minimum showing of a connection between the alleged defect and the observed damage. In this respect, the mechanism verges on aporia. The presumption designed to ease proof already presupposes a prior causal inference in order to be triggered.

Furthermore, the presumption of causation introduced by Article 10(3) remains conditional upon the prior establishment of defectiveness. In other words, the Directive does not allow courts to presume causation in the absence of a demonstrated defect. The evidentiary structure therefore remains sequential: defectiveness must first be established either directly or through the presumptions laid down in Article 10(2) before the causal link between the defect and the damage may be presumed. This architecture confirms that the reform does not fundamentally alter the traditional logic of European product liability. Although the Directive introduces certain evidentiary facilitations, the defect of the product remains the central organizing concept of the regime. In that respect, the reform acknowledges the evidentiary difficulties associated with complex digital technologies while preserving the conceptual framework inherited from the 1985 Directive. This structural continuity supports the view that the reform operates under a markedly conservative logic.

Moreover, Article 10(4) further provides that “*where the claimant faces excessive difficulties in proving defectiveness due to the technical complexity of the product, it shall be sufficient to show that it is probable that the product is defective or that there is a causal link between the defectiveness of the product and the damage, or both*”. At first glance, one might think that the technical complexity of embedded AI systems will facilitate the presumption of defectiveness. A literal reading suggests a semi-presumption of defectiveness. The claimant need not prove defectiveness with certainty but must still establish its probability. Moreover, it is reasonable to infer that Article 10(4) reflects a preference for the theory of adequate causation due to its similarity with the language of the draft AI Liability Directive<sup>26</sup>. That proposal also conditions presumptions of damage on proof that the AI system’s defect was the probable cause of the harm<sup>27</sup>. This raises the question of whether Article 10(4) represents a straightforward application of the theory of adequate causation.

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<sup>26</sup> Proposal for a Directive on non-contractual civil liability for artificial intelligence, 28 September 2022, COM(2022) 496 final.

<sup>27</sup> Proposal for a Directive on non-contractual civil liability for artificial intelligence, 28 September 2022, COM(2022) 496 final, paragraph 25: “*Such a presumption should only apply when it can be considered reasonably*

If so, the choice of causation model is significant. If the new Product Liability Directive genuinely aims to adapt to the digital economy, the theory of equivalence of conditions would be more appropriate. The numerous possible causes of AI malfunction<sup>28</sup> combined with algorithmic opacity, suggest that victims should be allowed to invoke all concurrent causes of harm, not just the most probable one. Otherwise, a serious issue may arise: does a preference for adequate causation risk creating an excessively high barrier to exercising the right to compensation, thereby undermining the principle of effectiveness in EU law?

Beyond these evidentiary hurdles associated with triggering the presumption, the development risk defence has survived the new Product Liability Directive, adding an additional layer of difficulty in cases involving harm caused by artificial intelligence.

## 2) The recoverable damage

The scope of recoverable damage constitutes another point of fragility in the regime. The framework remains restrictive. It mainly covers personal injury and damage to property used for private purposes, while excluding damage to the defective product itself<sup>29</sup> and to property used exclusively for professional purposes<sup>30</sup>. Above all, pure economic loss remains, in principle, outside the scope of the regime. This limitation is problematic. Defective products may cause harm that is less visible in physical terms but substantial in economic terms such as prolonged unavailability of the product, loss of value, business interruption, loss of clientele, lost profits, or the failure of associated services.

Two possible avenues of mitigation may nevertheless be envisaged. The first consists in adopting a consequentialist approach by linking economic losses to an initial personal injury or material damage. Patrimonial losses would then be compensated not as such but as consequential losses flowing from a primary compensable harm. The second consists in interpreting strictly the exclusion relating to property used “exclusively” for professional purposes since, in practice, few assets are devoted to an exclusively professional use. These solutions, however, remain indirect.

This limitation is open to serious criticism. If product liability is genuinely intended to protect victims, why protection should be confined to certain categories of harm? Also the exclusion of pure economic loss and damage to property used exclusively for professional purposes reflects a conception of product-related harm that corresponds more closely to the industrial risks of the 1980s than to the economic realities of contemporary markets. In practice, this restriction often forces victims to rely on alternative legal bases. The paradox is that a directive

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*likely, from the circumstances in which the damage occurred, that such fault has influenced the output produced by the AI system or the failure of the AI system to produce an output that gave rise to the damage”.*

<sup>28</sup> Errors in data selection or labelling, use of unrepresentative data, poor algorithmic design, human bias, and so forth.

<sup>29</sup> J. Knetsch, “La responsabilité du fait des produits défectueux ne vise pas les dommages causés au produit lui-même”, Note sous Civ. 1, 14 octobre 2015, n° 14-13.847, *Rev. contrats*, 2016, pp. 228-230.

<sup>30</sup> Directive (EU) 2024/2853, art. 6(1): “*The right to compensation pursuant to Article 5 shall apply in respect of only the following types of damage: (a) death or personal injury, including medically recognised damage to psychological health; (b) damage to, or destruction of, any property, except: (i) the defective product itself; (ii) a product damaged by a defective component that is integrated into, or inter-connected with, that product by the manufacturer of that product or within that manufacturer’s control; (iii) property used exclusively for professional purposes; (c) destruction or corruption of data that are not used for professional purposes”.*

adopted on the basis of Article 114 TFEU<sup>31</sup> may, in practice, contribute to fragmenting the system of remedies and thus undermine the harmonising function of European product liability law.

### 3) The Development Risk

The development risk defence also raises significant concerns. It has been retained among the defences available to producers. To benefit from it, the producer must prove that the state of scientific and technical knowledge at the time when the producer put the product into circulation was not such as to enable the existence of the defect to be discovered<sup>32</sup>. Although the European product liability regime is conceived as a system of full harmonisation, it still leaves Member States the possibility to maintain or exclude this ground for exoneration<sup>33</sup>. Long of limited practical relevance<sup>34</sup>, the defence may nevertheless regain particular importance in relation to artificial intelligence.

In the context of machine-learning algorithms, continuous adaptation and a certain degree of functional unpredictability may be intrinsic to the technology. There is therefore a genuine risk that this defence will be invoked more frequently. If interpreted broadly, it could significantly weaken the compensatory function of the regime by offering producers an easy avenue for exoneration grounded in the technological uncertainty inherent in AI systems. Unpredictability generated by AI systems could encourage producers to argue that the state of scientific and technical knowledge at the time the product was placed on the market did not make it possible to detect the defect. Such a development would be problematic for victims. In practice, it also risks reintroducing a logic akin to fault-based liability since courts would be required to assess the conduct of the producer in light of a standard of diligence or of the level of knowledge reasonably accessible at the time. Yet the very purpose of the product liability regime was precisely to move away from an assessment of the producer's fault. The development risk defence, by contrast, implicitly reintroduces a normative evaluation of the producer's conduct.

Beyond the development risk defence, the Directive also retains the statute of limitations defence.

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<sup>31</sup> The harmonisation of national laws or, more precisely, the “approximation of laws” is addressed in Articles 114 to 118 TFEU, which appear in Chapter 3 of Title VII of Part Three of the Treaty. – See. C. Blumann, L. Dubouis, N. Rubio, “Sect. 1: L’harmonisation des législations nationales”, *Droit matériel de l’Union européenne*, 2024, LGDJ.

<sup>32</sup> Directive (EU) 2024/2853, art. 11(1)(e): “An economic operator as referred to in Article 8 shall not be liable for damage caused by a defective product if that economic operator proves any of the following: (...) that the objective state of scientific and technical knowledge at the time the product was placed on the market or put into service or during the period in which the product was within the manufacturer’s control was not such that the defectiveness could be discovered”.

<sup>33</sup> Directive (EU) 2024/2853, art. 18.

<sup>34</sup> J.-S. Borghetti, “Taking EU Product Liability Law Seriously: How Can the Product Liability Directive Effectively Contribute to Consumer Protection?”, 1 French Journal of Public Policy, 15 September 2023, p. 38: In theory, the defence based on the unknowable defect is far from straightforward, and “courts tend to find that the risk which ultimately caused the damage could have been known at the time the product was placed on the market”.

<sup>34</sup> Y. Le Cun, *Quand la machine apprend*, Odile Jacob, 2019.

#### 4) The Limitation Periods

The temporal framework of the new Directive illustrates once again the ambivalent nature of the reform, oscillating between modernisation and conservatism. On the one hand, the Directive preserves the traditional architecture of product liability by maintaining the three-year limitation period<sup>35</sup> and the ten-year longstop period<sup>36</sup>. It reaffirms the objective of limiting the temporal exposure of producers. The rationale behind this approach lies in the need to ensure legal certainty and to prevent manufacturers from facing indefinite liability for products that may remain in circulation for decades. The regime stabilises the conditions under which products are developed, marketed, and insured. It also support the functioning of the internal market. Time limits protect producers by avoiding rules that could discourage innovation and undermine the free movement of goods.

On the other hand, limitation periods introduces a significant innovation by extending the longstop period to twenty-five years in cases of latent bodily injury. This adjustment acknowledges the reality of long-term harms. It concerns personal injury with symptoms appearing slowly. Diseases may only manifest many years after exposure. For instance, if a medical robot introduces a substance into a patient's body leading to a serious illness fifteen years later, the patient would still be able to bring a claim under the new Directive. Also, uncertainty remains regarding the starting point of the three-year limitation period. Does this starting point begins when the damage first becomes apparent or only once the victim's condition has stabilised and the full extent of the harm is known? This issue has in fact been referred to the Court of Justice<sup>37</sup>.

Furthermore, the extension is limited to bodily injury. Admittedly, the Directive's approach may appear justified as purely economic losses fall outside the scope of compensable damage and therefore cannot benefit from the extended limitation period. Yet this observation should not be overstated. The Directive does not exclude economic consequences that derive from a primary compensable harm. Any damage resulting from personal injury, psychological harm or property damage is covered by the regime<sup>38</sup>. Accordingly, where the harm consists of latent personal injury triggering the twenty-five-year longstop period, that extension logically applies to all losses flowing from that injury. Article 6 of the Directive expressly provides that compensation covers both material and non-material losses resulting from the primary damage. Consequently,

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<sup>35</sup> Article 16 of Directive (EU) 2024/2853 confirms that the claim must be brought within three years from the date on which the claimant knew or ought reasonably to have known of the damage, the defect, and the identity of the manufacturer or another liable party.

<sup>36</sup> The fixed ten-year longstop period starts from when the product was placed on the market or substantially modified.

<sup>37</sup> CA Rouen, ch. civ. et com., 25 Apr. 2024, RG No 23/03137; CJUE, Case C-338/24, LF v Sanofi Pasteur SA, request for a preliminary ruling from the Rouen Court of Appeal (France), 7 May 2024: “*Must Article 10 of Directive 85/374/EEC of 25 July 1985, which sets the starting point of the three-year limitation period as ‘the date on which the claimant became aware, or should reasonably have become aware, of the damage’, be interpreted as meaning that this period can begin to run only from the day on which the full extent of the damage is known, in particular when a date of consolidation has been established -defined as the moment from which the condition of the victim of bodily injury is no longer evolving - so that, in the case of a progressive pathology, the limitation period would begin to run not on the day the damage first appeared with certainty in connection with the defective product, regardless of its subsequent development, but only once the damage has fully stabilised?*”.

<sup>38</sup> Directive 2024/2853, art. 6(1)(b): “*damage to, or destruction of, any property, except: (i) the defective product itself; (ii) a product damaged by a defective component that is integrated into, or inter-connected with, that product by the manufacturer of that product or within that manufacturer’s control; (iii) property used exclusively for professional purposes*”. On this last point, it is worth noting that some member states, such as France, recognize compensation for damage caused to goods used in the course of business.

economic losses fall within the extended limitation period insofar as they derive from the bodily injury itself.

In short, the Directive accepts the long temporal horizon of bodily injury and the economic and immaterial losses that derive from. It refuses however to extend the same reasoning to other forms of latent harm, particularly pure economic loss. The Directive leaves aside economic losses that may emerge progressively. This raises the question of whether the ten-year longstop is compatible in the digital age. A latent algorithmic defect could cause massive economic damage over time. Technical complexity may delay defect discovery. In doing so, the reform partially adapts the regime while preserving the interests of producers. This selective adjustment once again illustrates a cautious modernisation operating within a fundamentally conservative conceptual framework. The decision to restrict the extension of the longstop period to bodily injury is therefore open to criticism. In the digital era, economic harm may emerge only progressively and may materialise well beyond the ten-year longstop period<sup>39</sup>. The temporal structure of product liability remains imperfectly calibrated to address the evolving nature of technological harm. More generally, victims suffering pure economic losses may be deprived of effective access to a court. Regardless of the legitimacy of such rules in protecting producers' interests within the internal market, the question of whether the ten-year longstop period for progressive damages complies with Article 47 of the Charter of Fundamental Rights of the European Union remains open<sup>40</sup>.

## **B) The concurrent application of EU product liability rules**

The Directive has been adopted on Article 114 TFEU to ensure the approximation of liability regimes across the 27 Member States. The objective is to prevent divergences between national rules that could fragment the internal market and create legal uncertainty for both producers and consumers. In this sense, the reform pursues the dual objective of strengthening consumer protection and preserving the proper functioning of the internal market by reducing regulatory fragmentation.

Common rules for Member States do not necessarily guarantee effective harmonisation of the internal market. The main reason lies in the fact that the 1985 Directive on defective products did not prevent the coexistence of competing national liability regimes. Article 2(4) states that *“this Directive shall not affect [...] any rights which an injured person may have under the rules of the law of contractual or non-contractual liability on grounds other than that of defect”*.

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<sup>39</sup> For instance, algorithmic credit-scoring systems used in consumer lending may incorporate biases or errors that remain undetected for extended periods. Individuals affected by such systems may progressively experience a deterioration of their financial opportunities through repeated credit refusals, higher interest rates, or restricted access to housing and consumer markets. In such circumstances, the economic consequences of the defect may become fully apparent only many years, potentially more than a decade, after the system was first placed on the market.

<sup>40</sup> A preliminary ruling has also been requested on this issue. A referral was introduced before the CJEU on 7 May 2024. CJUE, Case C-338/24, Sanofi Pasteur: Request for a preliminary ruling from the Cour d'appel de Rouen (France) lodged on 7 May 2024: *“Is Article 11 of Directive 85/374/EEC of 25 July 1985, according to which the rights conferred on the injured person under the Directive are extinguished upon the expiry of a ten-year period from the date on which the product that caused the damage was put into circulation, contrary to Article 47 of the Charter of Fundamental Rights of the European Union, in that it would deprive a victim suffering from progressive damage caused by a defective product of their right of access to a court?”*.

Regarding the cumulation of actions, the only point that is clearly established is that two actions resting on the same legal basis cannot be combined<sup>41</sup>. The injured party cannot therefore rely simultaneously on the defective product liability regime and on strict liability for things<sup>42</sup>. In that case, the harm results from a defect in a product, namely the thing. Accordingly, the harmonised product liability regime must apply. It cannot be circumvented by relying on a national regime of liability for things based on the same defect. This solution is consistent with case law affirming the full harmonisation effected by the Directive<sup>43</sup>.

Nevertheless, the defective product liability regime does not exclude the application of other systems of contractual or non-contractual liability based on different legal grounds, such as fault-based liability or the warranty against hidden defects<sup>44</sup>. The European text does not affect the rights that an injured party may derive from other liability regimes. In other words, the cumulative use of actions remains legally possible. Such cumulation is however only permissible for claims that do not amount to circumventing the special regime of defective product liability. Member States may neither maintain nor introduce national liability regimes that would be more favourable to victims within the field harmonised by the Directive. When the harm stems from a safety defect in the product, the refusal to allow an injured party to bypass the special regime through an action based on liability for things also applies to fault-based liability.

However, a certain degree of uncertainty emerges at this point. One may nevertheless ask whether the risk of overlap is less significant where fault-based liability is invoked than in the case of strict liability for defective products. Two situations must be distinguished. First, the action based on fault rely on the same allegation as the action for defective product liability. In that case, the product failed to provide the level of safety that could legitimately be expected. The action cannot be used to neutralise the limits of the special regime. Cumulation is therefore excluded. Secondly, the action based on fault targets conduct that is distinct from the mere defect of the product such as a failure in the duty to inform, supervise, or update the product on the market. In such a situation, fault-based liability may be combined with the special regime governing defective products.

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<sup>41</sup> Judgment of 25 April 2002, González Sánchez, C-52/00, EU:C:2002:252, paragraph 4: “*the rules concerning contractual or non-contractual liability must be interpreted as meaning that the system of rules put in place by the Directive does not preclude the application of other systems of contractual or non-contractual liability based on other grounds*”. Conversely, it follows that two actions based on the same ground cannot be cumulated.

<sup>42</sup> In a judgment of 11 July 2018, the French Cour de cassation recalled that strict liability for things invoked after a product affected by a safety defect has been placed on the market rests on the same legal ground as an action for liability for defective products. – See Civ. 1<sup>re</sup>, 11 July 2018, n° 17-20.154, *D.* 2018. 1840, note J.-S. Borghetti ; *ibid.* 2019. 38, obs. P. Brun, O. Gout et C. Quézel-Ambrunaz ; *AJ contrat* 2018. 442, obs. C.-E. Bucher ; *RTD civ.* 2019. 121, obs. P. Jourdain.

<sup>43</sup> *Loc. cit.*, judgment of 25 April 2002, González Sánchez, C-52/00. The Court of Justice held that Article 13 of Council Directive 85/374/EEC concerning liability for defective products cannot be interpreted as giving the Member States the possibility of maintaining a general system of product liability different from that provided for in the Directive.

<sup>44</sup> *Loc. cit.*, paragraph 22: “*The reference in Article 13 of the Directive to the rights which an injured person may rely on under the rules of the law of contractual or non-contractual liability must be interpreted as meaning that the system of rules put in place by the Directive, which in Article 4 enables the victim to seek compensation where he proves damage, the defect in the product and the causal link between that defect and the damage, does not preclude the application of other systems of contractual or non-contractual liability based on other grounds, such as fault or a warranty in respect of latent defects*”. – J. Knetsch, « Quelle articulation entre responsabilité du fait des produits défectueux et garantie des vices cachés ? », Note sous Civ. 1, 19 avril 2023, n° 21-23.726, *Rev. contrats* 2023, n° 3, pp. 19-23

The theoretical uncertainty surrounding the interaction between the two regimes has important practical implications. First, it affects the procedural strategy of victims who may hesitate between bringing an action under the harmonised regime of defective product liability or relying on national fault-based liability. Secondly, it creates legal uncertainty for national courts when determining whether a fault-based claim merely complements the special regime or, on the contrary, circumvents it. Thirdly, it may influence the scope of recoverable damage since national fault-based regimes may in some cases allow compensation for losses that fall outside the scope of the Directive. Finally, this uncertainty risks undermining the harmonising function of European product liability law by encouraging divergent national solutions. For this reason, a preliminary reference has recently been made to the Court of Justice of the European Union concerning the possible cumulation between the defective product liability regime and fault-based liability. The referring court essentially asks whether Article 13 of Directive 85/374/EEC allows victims to rely on general fault-based liability against the producer when the alleged fault relates to the safety of the product<sup>45</sup>.

The fundamental uncertainty to solve is in fact the following: does proving the defect amount, in substance, to proving the fault? If so, the injured party will be deprived of the possibility of relying on a concurrent legal basis. This solution might have been acceptable if the defective product liability regime were perfectly suited to the types of harm arising in the digital age. Yet the numerous obstacles faced by claimants in practice give rise to a legitimate concern. It may therefore be preferable to favour the articulation between defective product liability and other national liability regimes rather than to restrict it where the former does not allow victims to obtain full compensation for their loss.

In our view, the uncertainty surrounding the interplay between overlapping liability regimes is regrettable. Liability for defective products in the digital age represents the choice of reason<sup>46</sup> but the regime remains capable of further improvement. This legislation benefits from considerable experience as the 1985 directive has been in force for several decades. Its scope of application has now finally been extended to intangible products. It is also based on a welcome balance that takes into account the position of producers so as not to undermine innovation. This article does not claim that product liability law is ill-suited to the digital age. Rather, it argues that the regime remains perfectible. Several aspects deserve reconsideration in the age of AI including the clarification of evidentiary presumptions, the scope of recoverable damage, the long-stop limitation period, and the available grounds for exoneration. Several adjustments could still be envisaged through a future revision or recast of the Directive. In the meantime, interpretative guidance from the CJUE could also contribute to clarifying certain aspects of the regime<sup>47</sup>. Otherwise, the attempt to modernise the regime while preserving its original architecture may ultimately reduce victims' chances of obtaining compensation and undermine the principle of effectiveness in EU law.

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<sup>45</sup> Case C-338/24, Sanofi Pasteur: Request for a preliminary ruling from the Cour d'appel de Rouen (France) lodged on 7 May 2024 – LF v Sanofi Pasteur SA.

<sup>46</sup> G. de Boiscuillé, *La responsabilité du fait des produits défectueux appliquée à l'intelligence artificielle : le choix de la raison*, Arch. phil. droit 66 (2025), p. 329-355.

<sup>47</sup> *Loc. cit.* Several issues may soon be clarified by the Court of Justice in response to preliminary questions recently referred by the Rouen Court of Appeal (France).

## **Conclusion**

The reform succeeds in bringing AI within the reach of product liability law. It does not, however, fully recalibrate that law for the evidentiary, temporal and economic realities of the digital age. The modernisation effort is significant but ultimately incomplete. What emerges is not a new liability paradigm, but an updated version of an old one, more inclusive in appearance, yet still selective in protection. In the end, one may wonder whether the reform primarily benefits producers rather than consumers. Admittedly, the choice of a liability regime always entails trade-offs. It necessarily reflects a preference both among the existing liability regimes and between the interests at stake, in particular between the protection of producers and that of consumers. The balance can never be perfect. It could, however, be improved by addressing a fundamental issue in an era characterised by the growing entanglement of European and national regimes. The challenge is twofold. It consists in correcting certain shortcomings of the Directive while ensuring better coordination with national liability regimes. This appears to be the path forward for victims to overcome some of the obstacles that still undermine the effectiveness of their actions for compensation.

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