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An Appraisal of the Proposal for a Directive on Liability for Defective Products

Some Considerations on the Liability of the Software or Artificial Intelligence System Developer

I. Introduction

On 28 September 2022, the European Commission published the Proposal for a Directive on liability for defective products¹ with the intention of replacing the long-standing Directive 85/374/EEC. The proposed Directive is therefore the basic document that will be discussed in the European Parliament and the Council and which, within the next two years, may result in the adoption of a new Directive on this matter. Given the current wording, I expect that the text of the Proposal for a Directive will be subject to significant modifications during the legislative procedure.

Without going into other new issues included in the Proposal for a Directive, I can say that the adopted text follows guidelines that were already established by the European legislator when Directive (EU) 2019/771 on certain aspects concerning contracts for the sale of goods was adopted: the unitary understanding of goods, and the concentration of liability, on the producer of the good, albeit with some nuances that will be addressed throughout the article.

This short contribution focuses on the proposed rules for liability of online AI system and software developers. That enquiry is important for two reasons. First, the Proposal for a Directive broadens the group of parties who may be classed as the producer, including the software programmer and the AI system developer. Therefore, pursuant to this approach, Art. 7 of the Proposal for a Directive recognises that the victim of damage caused by a defective product can take action against the producer of the component (see Recital no. 40 of the Proposal for a Directive) and not against the producer of the good as a whole, if the damage is attributable to the software or the artificial intelligence system and if the victim is able to identify it.

Second, this short contribution deals with free and open-source software and algorithms supplied outside the course of a commercial activity. The proposed Directive (Recital 13) chooses to exclude from its scope damage caused by such software or algorithms when they are not supplied in the course of a commercial activity. However, where they are supplied in exchange for a price or for data in the course of a commercial activity, they will fall within the scope of the proposed Directive. In order to prevent the former from falling outside the scope of the future Directive, it is proposed that they should be considered as refurbished goods. Remanufactured goods undergo preparation or modification to restore its performance or functionality within the intended use, range of performance and maintenance originally conceived at the design stage, or to meet applicable technical standards or regulatory requirements, with the result of mak-

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1 Commission, 'Proposal for a Directive of the European Parliament and of the Council on Liability for Defective Products', COM (2022) 495 final 2022/0302 (COD).

ing a fully functional product. Therefore, to the extent that open-source software are freely accessible can alter the properties of a product, such software could fall within the scope of the forthcoming directive if it is embedded in a product.

II. Related Products, Components and Services

1. The Concept of Product. The Artificial Intelligence and Software Can be Considered as Products?

The main reason why it is necessary to adopt a new directive in this area is the need to adapt the new regulation to the complex nature of the products that have irrupted onto the market: the so-called goods with digital elements that can include AI systems. The distinctive feature of goods of this type is that, on the one hand, we can distinguish between tangible movable goods (hardware) and, on the other hand, digital elements (content and services).² Moreover, in the digital era not all products are tangible, as digital products or services (operating systems, computer programs, applications or AI systems) have been introduced onto the market which are not necessarily incorporated within a tangible movable good but which can be downloaded and subsequently incorporated into products, outside of the producer's control (Recital 12 of the Proposal for a Directive).

The problems of classifying goods of this type as a product as defined by the still current Directive 85/374/EEC are well known.³ This is why the proposed Directive aims to close the existing doctrinal debate and include software and digital services and content within the scope of application of the future regulation. In this regard, Art. 4.1) of the proposed Directive defines the concept of product as follows: *“all movables, even if integrated into another movable or into an immovable. ‘Product’ includes electricity, digital manufacturing files and software”*.

The definition of ‘product’ in the proposed Directive is based on the definition contained in Directive 85/374/EEC. The core element of the new definition of product is the fact that it is movable and may be integrated within another movable or immovable good. Up until this point, the definition in the proposed Directive contains nothing new. However, the definition then introduces two new concepts that did not exist in the definition of product given by Directive 85/374/EEC, in addition to electricity: digital manufacturing files or copies (Recital 14 of the Proposal for a Directive) and software.

In my opinion, the definition of product included in the Proposal for a Directive is confusing because, together with movables, the definition includes certain types of good that are intangible. It would have been desirable for the definition to include, firstly, movables, regardless of whether or not they contain digital elements, and, secondly, the digital elements themselves (digital content and services), highlighting the need for these to be integrated within or interconnected with tangible movable goods in a way that, without them, the product could not perform its functions. Furthermore, in order to build a coherent system that is aligned with the Directives on non-conformity of goods and digital content or services, i.e. the twin directives (EU) 2019/770 and 2019/771, instead of referring to “software”, I believe it would be

2 See Art. 2.1) and 2) Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services [2019] OJ L136/1 (hereinafter, DCD).

3 Expert Group on Liability and New Technologies – New Technologies Formation, ‘Liability for Artificial Intelligence and other Emerging Digital Technologies’ (European Union 2019).

desirable for reference to be made to digital services, and for these to be defined by reference to the provisions of Directive (EU) 2019/770. In this way, the use of the same concepts would make the European legislation on contractual and non-contractual liability more coherent.⁴

From the literal wording of Recital 12 of the Proposal for a Directive on liability for defective products, it is also clear that the AI system or algorithm is considered to be software and, consequently, a product. Therefore, the European legislator ends one of the most important debates⁵ generated by Directive 85/374/EEC, which made no reference to this issue, and the reform is therefore welcome. It is clear from Recital 12 of the Proposal for a Directive on liability for defective products that the European Commission has in mind software that may be initially integrated within products, or separate software that is subsequently integrated into the product. In other words, according to Recital 12 of the Proposal for a Directive, software and AI systems may be included within the scope of the proposed Directive depending on whether they are integrated into or interconnected with products.

Recital 15 of the Proposal for a Directive refers to digital services. We have already stated that the Proposal for a Directive does not provide a definition of digital services and we have taken the view that the future Directive should refer to digital content or services by reference to the provisions of Art. 2 DCD. According to the provisions of Recital 15 of the Proposal for a Directive, in the case of digital services, the criterion of integration in or interconnection with tangible products is essential in order to apply the provisions of the Proposal for a Directive to this type of product. Although Recital 15 of the proposed Directive states that it should not apply to digital services as such, it is necessary to extend its effects to digital services when they are integrated in or interconnected with products in such a way that without them, the product would not be able to perform its functions. Therefore, in my opinion, the criterion of the integration or interconnection of software and digital services with products is decisive for the Proposal for a Directive to be applicable to damage caused by intangible products.

2. Is Software Digital Content or a Digital Service?

Next, the Proposal for a Directive incorporates the definition of a digital manufacturing file. This concept is explained in Recital 14 of the Proposal for a Directive. It is clear from its wording that the European legislator is referring to files containing the information necessary to produce a tangible good by means of a device such as a 3D printer. As mentioned in the previous section, in my opinion, with regard to software, it would have been more appropriate to define the concept of product by reference to the provisions of Art. 2(1) and (2) of Directive (EU) 2019/770, which define what should be understood by digital content or service. Likewise, the inclusion of the digital manufacturing files for a movable good within the concept of product (Recital 14 of the Proposal for a Directive) leads us to think that perhaps the European legislator also intends digital content to be considered as products, given the difficulties in differentiating between the concepts of “digital content” and “digital service”.⁶ Therefore, if

⁴ In the same regard, see Ch Wendehorst, ‘Safety and Liability Related Aspects of Software’ (European Commission 2021).

⁵ For all, see K Chagal-Feferkorn, ‘Am I an Algorithm or a Product? When Products Liability Should Apply to Algorithmic Decision-Makers’ (2019) 30 Stanford Law & Policy Review 61.

⁶ L Mischau, ‘The Concept of Digital Content and Digital Services in European Contract Law’ (2022) 11 EUCML 1.

the legislator's intention was to consider digital content as a product, in my opinion it would be appropriate to revise the current definition of product in the Proposal for a Directive to include digital content, by reference to the provisions of Art. 2.1 Directive (EU) 2019/770.

3. Is Software a Product, a Component or a Related Service?

The Proposal for a Directive on liability for defective products then introduces two new definitions for components and related services. Furthermore, in order to understand both concepts, we must again refer to the provisions of Recital 15 of the Proposal for a Directive, which refers to digital services as components and related services.

I regard the consideration of digital services as related components or services to be consistent with the premise of the Proposal for a Directive, which takes the definition of a product as defined by Directive 85/374/EEC in the sense that it recognises the characteristics of mobility and tangibility as fundamental elements of the definition. However, this premise is at odds with the will to adapt product liability legislation to the new market situation in which goods with digital elements have a growing presence. The importance of software is now much greater than when Directive 85/374/EEC was adopted, and I therefore believe that the consideration of software as a related component or service should be abandoned in order to bring the text into line with the new reality⁷ and avoid interpreting components as an accessory to the product as a whole, rather than viewing them as integral part of the product in its entirety.

III. Liable economic operators

1. The Liability of the Producer. General Ideas

The Proposal for a Directive on liability for defective products states that its legal regime shall be applicable regardless of the provisions of the Proposal for a Regulation on Artificial Intelligence.⁸ Therefore, I can deduce that the European legislator wishes to regulate this area in its entirety without reference to other European Union rules.

Article 7 of the Proposal for a Directive on liability for defective products establishes the parties liable for damage caused by defective products. From its literal wording, we can ascertain the premises on which the provision is based. Firstly, the Proposal for a Directive concentrates liability for damage on the producer, in the same way as Directive 85/374/EEC. Next, the provision stresses that when the damage is caused by a defective component, the producer is liable for such damage. This is a provision which has no clear precedent in Directive 85/374/EEC⁹ and which is undoubtedly consistent with the consideration of the supplier of the software or AI system as the producer (Recital 12 of the Proposed for a Directive).

Following the same scheme as Directive 85/374/EEC, Article 11 of the Proposal for a Directive establishes the joint and several liability of the liable economic operators. The joint

⁷ M Navarro-Michel, 'Vehículos automatizados y responsabilidad por producto defectuoso' (2020) 7 Revista de Derecho civil 5.

⁸ European Commission, 'Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain union legislative acts' COM (2021) 206 final 2021/0106 (COD).

⁹ Art. 3 of Directive 85/374/EEC also considers the manufacturer of a component part to be a producer, but does not state that they are responsible as in the Proposal for a Directive under consideration.

and several liability of the actors involved is intended to make it easier for the victim to make a liability claim, as they know that by bringing a claim against any liable economic operator as per Art. 7 of the Proposal for a Directive, they will not incur in any procedural irregularities (the requirement of passive joint litigation or lack of passive legitimation) and that, if the other requirements are met (proof of damage, product defect and causal link between the two), their claim will be successful.

2. The Concept of Producer. Hardware Manufacturer vs Software Manufacturer

A new feature of the Proposed for a Directive (Recital 12 *in fine*) is the fact that it assigns the status of manufacturer to the software or AI system developer, who is known as the software manufacturer, as opposed to the manufacturer of the tangible movable product in which the software can be integrated, the so-called hardware manufacturer. Legal doctrine had called for the scope of subjects considered as manufacturers to be widened¹⁰, in line with the approach of considering software as a product in the light of the future directive to be adopted on this matter.

Article 3 of Directive 85/374/EEC already considered the manufacturer of a component or an integrated part as a producer, but the Proposal for a Directive has clarified that the software or AI system developer is a producer, given that, as a software manufacturer, they were outside the scope of application of Directive 85/374/EEC. This is a welcome clarification and, therefore, by virtue of the principle of joint and several liability still enshrined in Art. 11 of the Proposal for a Directive, given the impossibility of determining which producer is liable for the damage caused, the victim may bring their claim against the software or AI system developer under the future directive to be adopted on this matter.

3. The Joint and Several Liability of the AI System Developer and the Producer of the Good

As noted above, the Proposal for a Directive merely states in Recital 12 that the concept of producer includes the developer of the software and of the AI system integrated in the product. However, the articles of the proposed Directive make no reference to the producer of the software beyond the provision in the second paragraph of Art. 7.1, according to which the manufacturer of a component is liable for the damage caused.

The fact that the software or AI system developer is considered as a producer means they are included in the group of subjects to whom the Proposal for a Directive on liability for defective products, following the scheme of Directive 85/374/EEC, allocates liability. In other words, for the European legislator, to the extent that the software and the algorithm are generally interconnected with or integrated into a product, it means that the developer of the software and the algorithm could have intervened in the manufacturing process of the good. I consider the fact of the integration or interconnection of the software to be highly relevant, since regardless of the contractual relationship between the hardware manufacturer and the software manufacturer, the par-

10 S Navas Navarro, 'Robot Machines and Civil Liability' in M Ebers and S Navas Navarro (eds), *Algorithms and Law* (Cambridge University Press 2020); H Eidenmüller, 'The Rise of Robots and the Law of Humans' in H Eidenmüller and G Wagner (eds), *Law by Algorithm* (Mohr Siebeck 2021); G Wagner, 'Robot Liability' in H Eidenmüller and G Wagner (eds), *Law by Algorithm* (Mohr Siebeck 2021).

ties who manufactured the finished product will be jointly and severally liable towards the victim.

In my view, the joint and several liability of the producers will apply when the tangible movable good and the AI system are presented to the victim as a whole because the two components are bundled products.¹¹ It would be quite another case if the software were subsequently installed by the victim or by another producer outside the control of the original producer. Therefore, to the extent that the damage is caused by a good that includes an AI system or algorithm, both the hardware manufacturer and the software manufacturer will be liable for the damage caused. Hence, in the case of goods with integrated or interconnected AI systems, in order for the claim to be successful it is irrelevant whether the damage is attributed to the hardware manufacturer or the algorithm developer, since they will be jointly and severally liable¹².

However, despite the recognition of the joint and several liability of the producers, some problematic cases may arise: what happens if the software manufacturer is not part of the same organisation as the hardware manufacturer? Is it then a third party? Does it lose its third-party status if the software or AI system is integrated in or interconnected with the movable good? What if the software or AI system is available as a free internet download?

4. Can the Software or Algorithm Developer be a Third Party?

Traditionally, the concept of third party has been explained in terms of the subject belonging to the same organisation as the producer. Thus, the third party is not included within the scope of the producer, but their intervention, together with the defect affecting the product, aggravates the damage suffered by the victim. Currently, the software or AI system developer may belong to the same organisation as the producer, but this does not necessarily have to be the case. There is no doubt that if they are part of the producer's organisation, they cannot be considered a third party, nor could we be dealing with a case of vicarious civil liability.¹³

However, for the purposes of answering the questions raised, it would be useful, in my opinion, if during the legislative procedure a definition of finished product could be included in the Proposal for a Directive.¹⁴ Such a definition is not included in Directive 85/374/EEC either, despite the fact that this concept appears in various provisions. For example, Article 3 of Directive 85/374/EEC defines the concept of producer by referring to the concept of finished product. However, the reference to a finished product has disappeared from the text of the Proposal for a Directive.

A finished product is one that is placed on the market without requiring further modifications and without updates being able to alter this status. To the extent that the finished and globally conceived product incorporates, on the one

¹¹ Wagner (n 10).

¹² Navas (n 10). M2 M communications allow the robot to inform the user or victim of defects. In addition, access to the black box of such products can facilitate the victim's burden of proof. This may facilitate the identification of the liable party.

¹³ U Pagallo, *The Laws of Robots. Crimes, Contracts and Torts* (Springer 2013). W Barfield 'Liability for autonomous and artificially intelligent robots' (2018) 9 Paladyn, Journal of Behavioral Robotics 1.

¹⁴ A definition can be found in a Proposal for a Directive *de lege ferenda*. European Law Institute, 'ELI Draft of a Revised Product Liability Directive Draft Legislative Proposal of the European Law Institute' <<https://www.europeanlawinstitute.eu/projects-publications/current-projects/current-projects/pld/>> (accessed 31 August 2023).

hand, the movable good and, on the other hand, the software or the AI system, in my view the software or AI system developer could not be considered a third party, given that without the software or the AI system the good would not be capable of performing its functions (Recital 15 of the Proposal for a Directive). Vis-à-vis the victim, what matters is the concept of the product in its entirety, irrespective of the contractual relationship between the hardware manufacturer and the software manufacturer. This conclusion is supported by the provisions of Recital 40 of the Proposal for a Directive, which establishes that when several economic operators are liable for the same damage, the victim may claim liability from both the producer of the good and the producer of the component, and that both are directly and jointly and severally liable.

However, in those cases where the product has been placed on the market as a finished product, and it is the victim or a third party outside the organisation that produced the original product and outside its control¹⁵ who installed software or an AI system in the product, then, in this case, it must be considered a third party for the purposes of exonerating the liability of the original producer of the product (Art. 10.2 of the Proposal for a Directive). In this case, the software or AI system developer is not part of the producer's organisation, nor is the system initially integrated in or interconnected with the product. Moreover, the change made to the product by installing the software or the algorithm takes place afterwards, after the product has been placed on the market as a finished product.

According to the text of Directive 85/374/EEC, the claim against the third party had to be processed according to the civil law rules of the Member States, since the liable party was not a producer. Now, in light of Art. 7 of the Proposed for a Directive, the software developer could be considered as a producer of a refurbished product if the movable good has been made available on the market as a finished product and the software has been added at a later stage, outside the control of the original producer. In this way, the victim's claim for compensation could be processed in accordance with the future European directive in this area.

5. Open-source AI Systems: a Possible Case of a Refurbished Product?

As mentioned above, the software and the algorithm do not necessarily have to be integrated in or interconnected with a tangible movable good, but can be installed once the item has been placed on the market. A typical scenario would be Open-Source Software (OSS)¹⁶. The European Parliament's Special Committee on Artificial Intelligence in a Digital Age (AIDA¹⁷) recently published a study¹⁸ on the challenges and

¹⁵ It is also notable that the Proposal for a Directive does not pay more consideration to refurbished goods. We only find a reference in Recital 29, which establishes that a new product is a new product if it is substantially modified when it is outside the producer's control.

¹⁶ E J Walsh and A J Tibbetts, 'Reassessing the Benefits and Risks of Open Source Software' (2010) *Intellectual Property & Technology Law Journal* 1.

¹⁷ AIDA stands for Artificial Intelligence in a Digital Era.

¹⁸ A Theben et al, *Challenges and limits of an open source approach to Artificial Intelligence* (Policy Department for Economic, Scientific and Quality of Life Policies 2021). Artificial intelligence systems of this type of software are based on machine-learning. To the extent that the algorithm has to work with user data, there is a risk that some organisations or individuals may misappropriate the information for illicit or illegitimate purposes that are not covered by the licence. The report also points to the need to determine the liability resulting from decisions of the algorithm that cause harm to users.

limits of AI systems which highlights some of the problems related to such software.

In light of the text of the Proposal for a Directive on liability for defective products, I wonder how this type of product should be treated. Under the pretext of not hampering innovation, Recital 13 assumes that the future Directive does not apply to open-source software that can be downloaded free of charge from the internet, provided that it is developed or supplied outside of a commercial activity. However, the Proposal for a Directive states that these products do fall within the scope of the Directive when they are provided for a fee or when the user's personal data is provided to the software developer for purposes other than improving the security, compatibility or interoperability of the software. The Proposal for a Directive therefore equates the performance of a commercial activity with the provision of software products when these are provided in exchange for payment or personal data (Recital 13 of the Proposal for a Directive). Recital 13 of the Proposal for a Directive reminds us of Recital 24 of the DCD: payment for the software or AI system can be made in exchange for a price or the provision of personal data when these are provided for a purpose other than improving the security, compatibility or interoperability of the software, which implies, in the latter case, the onerous nature of the non-monetary consideration paid by the purchaser of the product.¹⁹

We fail to understand why the Proposal for a Directive gives privileged treatment to open-source software or AI systems that can be downloaded free of charge when they are developed or supplied outside the course of a commercial activity. Directive 85/374/EEC applies to damage caused by defective products, but the applicability of the Directive is not dependent on the end user of the product having paid a consideration or the product having been manufactured in the course of trade or business.²⁰

In my opinion, there is no justifiable reason for such favourable treatment of certain software or AI system developers. In the case of open-source software that can be downloaded free of charge from the internet, even though the provider or developer is not acting within the course of a commercial activity, it is still placing on the market a product that could cause damage to third parties. The developer or provider of such software or algorithms does not produce the product as such, but their software or algorithm can be downloaded by anyone, even though it has been developed free of charge and outside the scope of a commercial activity. The future directive should therefore apply to all movable, tangible and intangible goods such as services and digital content, regardless of whether the products were produced using industrial, artisanal or artistic methods.²¹

¹⁹ On the issues related to the consideration of personal data as consideration in relation to the DCD and Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data (GDPR), see J A C Parrilla, 'Los datos personales como contraprestación en la reforma del TRLGDCU y las tensiones normativas entre la economía de los datos y la interpretación garantista del RGPD' (2021) *Diario La Ley* 82; S Cámara Lapuente, 'Resolución contractual y destino de los datos y contenidos generados por los usuarios de servicios digitales' in E Arroyo Amayuelas and S Cámara Lapuente (eds), *El derecho privado en el nuevo paradigma digital* (Marcial Pons 2020).

²⁰ P Machnikowski (eds), *European Product Liability. An Analysis of the State of the Art in the Era of New Technologies* (Intersentia 2016). Although there is a doctrinal controversy around this issue, the Court of Justice has already ruled on this question in Case C-203/99, *Veefald vs Arhus Amtskommune*.

²¹ *Supra*.

As regards the status of the developer of an open-source software or algorithm as the producer, I consider the fact that the software or algorithm is integrated in the finished product to be relevant. In this case, according to the approach advocated in this article, the developer of the algorithm would have to be considered a producer because their product has been integrated into a tangible movable good and has been acquired by the user as a whole finished product. Likewise, I believe that they should also be considered a producer if it is the hardware manufacturer who integrates the open-source algorithm into the product or who tells the user that they must download the open-source software in order for the product to perform its functions. In my opinion, these cases do not pose too many problems, given that the product includes the open-source software when it is placed on the market.

More problematic would be those cases where the open-source software is installed by a third party, outside the control of the original producer, with the digital element causing substantial alterations to the good in terms of its functionality, security or interoperability. In my opinion, one interpretation that can be maintained in these cases is to refer to the field of refurbished goods. According to the Art. 2.18 of the Proposal for Ecodesign for Sustainable Products Regulation “refurbishment” means preparing or modifying an object that is waste or a product to restore its performance or functionality within the intended use, range of performance and maintenance originally conceived at the design stage, or to meet applicable technical standards or regulatory requirements, with the result of making a fully functional product.²² Following the approach suggested for these goods, after the installation of the open-source software by a third party, the product would be considered as new for the purposes of the legislation on defective products, and the third party who has installed the software outside the control of the original producer, would be liable as the producer (Recital 29 and Art. 7.4 of the Proposal for a Directive). Therefore, considering the case of refurbished goods, these cases would not fall outside the scope of application of the future directive and, therefore, the victims’ claims for compensation would not have to be dealt with in accordance with the domestic law of the Member States.

The option to consider open-source software as a refurbished product and its developer as a producer assumes that it would be possible to identify the developer within the European Union. However, this would not necessarily be the case, and it may be that the supplier or developer of such software or algorithm is established in a state outside the European Union. In this case, the victim could bring their claim against the importer of the product, although there may be no importer based in the European Union either, as the product is downloaded directly from the internet. Faced with this problem, various solutions have been proposed by legal doctrine, such as Market Share Liability²³ and the obligation to have a liable economic operator established in the EU so that the software or algorithm can be placed on the European market, in line with Regulation (EU) 2019/1020 of the European

²² E Bracquené et al., ‘Repairability criteria for energy related products. Study in the BeNeLux context to evaluate the options to extend the product life time. Final Report’, <https://www.benelux.int/files/7915/2896/0920/FINAL_Report_Benelux.pdf> (accessed 31 August 2023). Legal doctrine has defined refurbishment as the process through which a used or defective good reacquires the properties and characteristics of a new good through sorting, sorting, inspection, disassembly, cleaning, reprocessing and assembly procedures.

²³ Navas (n 10).

Parliament and of the Council of 20 June 2019 on market surveillance and compliance of products²⁴.

IV. Conclusions

The Proposal for a Directive on liability for defective products envisages software and algorithms as products. However, instead of using the term “software”, I advocate reformulating the concept of “product” used in the Proposal for a Directive in the light of Directives (EU) 2019/770 and 2019/771 to harmonise the law on contractual liability and lack of product compliance with the law on non-contractual liability for defective products.

Although the Proposal for a Directive refers to software as a related component or service, I understand that this concept should not be understood as an accessory to the product conceived as a whole, but as an integral part of the product that makes up the whole.

The software or algorithm developer or supplier may have the status of a third party, understood as a person outside the product manufacturer’s organisation and outside their control, depending on their relationship with the finished product that is placed on the market. If the software or algorithm is integrated in or interconnected with a tangible movable good (bundled product), then they may not be considered a third party, given that the software or algorithm is necessary for the product to perform its functions and is acquired by the end users as a finished product that includes both the hardware and the digital component. However, the software developer or supplier shall not have third-party status when the product has been placed on the market as a finished product without including the digital component and is subsequently installed by a third party or by the user.

The European legislator has decided to leave open-source software that is acquired free of charge on the internet outside the scope of the Proposal for a Directive, a choice I do not agree with. We advocate considering the developer or supplier of such software as a producer of a refurbished product when the product is altered in terms of its functionality, security or interoperability through the installation of the software. In this way, the claim for compensation against the developer or supplier of this type of software would not fall outside the scope of application of the future directive and, therefore, the victim’s claim for compensation could be pursued on the basis of product liability law. ■

²⁴ Wenderhorst (n 4).