Basis of Liability for Damage to Property Caused by Artificial Intelligence

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The article discusses the basis of liability that applies to damage to business items caused by artificial intelligence. The EU has now enacted the AI ACT and a revised product liability directive that clarifies that damage caused by artificial intelligence, AI software, is covered by the directive. Thus, the liability rule on "defect" in Section 2-1 of the Norwegian Product Liability Act will probably be continued for personal injuries. However, it is unclear what basis of liability applies outside the Product Liability Directive, including in the event of property damage that affects commercial activity. The EU's new directive on liability for damage caused by artificial intelligence is a minimum directive, which leaves it to the national legal systems to determine the basis for liability. The article discusses how Norwegian law should relate to this legal situation. The author argues that non-statutory strict liability should be taken as a basis, despite the fact that recent doctrinal theory has claimed the opposite position. The proposal for an AUI liability directive was withdrawn in February 2025. What will happen further is unclear, but the question of basis of liability discussed in the article remains, however, the same.

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1. Introduction

In this article, I will discuss the basis of liability that applies when artificial intelligence is a causal factor for product damage to things used in business.

The invention of artificial intelligence is a phenomenon that bears comparison with history's greatest advances in civilization. The phenomenon is on a par with the invention of the wheel, the art of printing, electricity, the automobile and the relatively modern phenomenon of the internet.

Artificial intelligence does not have a completely clear definition. This has created certain challenges for the EU's efforts to regulate the phenomenon.[1] Article 3 (1) of the Artificial Intelligence Act (AI ACT) provides for the following broad definition:

"'AI system' is a machine-based system designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments."[2]

In the context of tort law, artificial intelligence is defined as "algorithms that simulate or surpass human cognition".[3]

For the purposes of this article, it is sufficient to point out the following core characteristics of artificial intelligence, i.e. "AI systems":

Artificial intelligence can:

- Think itself
- Learn itself
- Making decisions itself
- Follow a very complex and lengthy instruction

The fact that artificial intelligence can make decisions itself, without any human impact, means that AI systems *alone* can cause damage relevant to tort law. This is a different situation than where humans control activity with the help of artificial intelligence. It is the independent cause of damage that is the subject of the article. The question is what basis of liability should apply to the manufacturer of software that causes such damage.

Several authors within recent Norwegian doctrinal literature have argued that the non-statutory objective liability should not be maintained for products that cause damage to property in commercial activity.[4] This is partly justified by the consideration of harmonization with the law of other European countries. It is further claimed that the element of technical failure has lost its argumentative weight in the assessment of imposing non-statutory strict li-

1 This has been a challenge to the EU lawmakers. In European Parliament Research Service (EPRS) "Briefing, EU Legislation in progress, PE 698.792 – July 2023" the problem is addressed thus: "No single definition of artificial intelligence is accepted by the scientific community and the term 'AI' is often used as a 'blanket term' for various computer applications based on different techniques, which exhibit capabilities commonly and currently associated with human intelligence."

2 In Annex I, reference is made to three categories of AI. Annex I reads as follows: "Artificial techniques and approaches referred to in art. 3:

(a)Machine learning approaches, including supervised, unsupervised and reinforcement learning, using a wide variety of methods including deep learning;

(b)Logic- and knowledge-based approaches, including knowledge representation, inductive (logic) programming, knowledge bases, inference and deductive engines, (symbolic) reasoning and expert systems;

(c)Statistical approaches, Bayesian estimation, search and optimization methods."

3 Cf. Anne Marie Frøseth, "Erstatningsansvar for brukere av kunstig intelligens" [Liability for damages for users of artificial intelligence], *Tidsskrift for erstatningsrett, forsikringsrett og trygderett* 2023, s. 7–63. The article contains a detailed review of the development of the EU's regulation of users of artificial intelligence's liability for damage caused by such software.

4 Trine-Lise Wilhelmsen, "Ulovfastet produktansvar for tingsskades i næringsrelation", *Journal of Tort Law, Insurance Law and National Insurance Law*, 2020, pp. 165–197.

ability.[5] The views break with the historical view that things that cause harm can trigger liability on objective grounds.[6]

The phenomenon of artificial intelligence (AI) makes it necessary for the research community to rethink the above-mentioned positions. The reasoning behind the perceptions has not taken into account the phenomenon of artificial intelligence or assessed the consequences of the EU's regulation of the phenomenon.

An example may be suitable to illustrate the problem, so that the reader can have a concrete reference in the ambush: Suppose a drone transports a heavy object from A to B. The drone is equipped with software based on artificial intelligence. The drone's journey is determined by AI decisions. The drone drops the heavy load on a greenhouse causing property damage and operating losses amounting to 200 000 NOK. Is the basis of liability in such a case fault or non-statutory strict liability?

In this article, I will discuss whether non-statutory strict liability should be applied for this type of damage, in light of the phenomenon of artificial intelligence and in light of the framework that EU and EEA law sets for Norwegian tort law.

2. EU law's regulation of AI systems

Artificial intelligence – AI systems – makes decisions and learns in a way that has always been reserved for humans.[7] For this reason, decisions, intellectual property, artwork and damage can be produced without a human will being involved. This has fascinating potential, for better or worse.[8] A suggested term for this aspect of AI is to call the non-human-controlled action or decision "emergence".[9] An important aspect of this new feature is that it is opaque (in many contexts referred to as "opaque"), which has led to a comparison of AI systems' processes to a "black box". Data is entered into the AI system ("the black box"), and something else comes out: an "output". The causal relationships between input and output are in a "black box", which is not transparent.[10] As Anne Marie Frøseth puts it: "[T]he processes of the algorithms cannot simply be predicted, explained, and controlled."[11] This has consequences for what is possible to prove, which in turn is important for building up an effective liability regulation (more on this in point 2 below).

An indication of *the scope* of application of AI is given in a new book on AI and liability. Eugenia Dacoronia describes the impact area as follows:

"Cities with smart home technology, such as in-house robots to assist with daily living, homes that use sensor-based AI to check occupants' health, autonomous cars, such as see-through driverless boxes roaming through cities, delivering people, packages, pizza, etc., all of which are scenarios of science fiction films, are getting prepared."[12]

The description gives an indication, but of course cannot be perceived as exhaustive, cf., among other things, my drone example in the introduction. A central and exciting part of the course we have in front of us is that it is developing rapidly, and new AI inventions are constantly taking place with new areas of application.

The EU has implemented a large apparatus to regulate AI, which has so far resulted in proposals for one regulation and two directives, the latter given in September 2022.[13] The regulation was adopted in March 2024 (more on this below). The rules are to some extent integrated, so that the Regulation's definitions of AI determine the material scope of the AI Directive.[14] The regulation proposes that AI systems should be grouped into three categories, depending on how great a risk of harm the systems generate. The EU regulation distinguishes between AI systems that have such a high risk that they are not allowed at all, high-risk systems with limited risk and systems with moderate risk.[15] In terms of tort law, the interest is primarily related to high-risk AI systems.[16] It is these systems that have the greatest potential for damage, and which it is therefore most important to regulate. The systems have been

5 Viggo Hagstrøm and Are Stenvik, *Erstatningsrett* [Tort law], 2nd edition, Oslo 2019, p. 275.

6 See Tore Sandvik, "Ansvar for skadevoldende egenskaper" [Liability for damaging properties], Norwegian Insurance Association's publications no. 49, Oslo 1964, pp. 8–10.

7 Gerhard Wagner emphasizes as "the central feature": "Autonomous digital systems make their own "decisions" in real time, in the factual circumstances then present, rather than executing a deterministic script written earlier, before the system was put into circulation." Se Gerhard Wagner, "Liability Rules for the Digital Age – Aiming for the Brussels Effect", *Journal of European tort Law* 2022, s. 191–243, on p. 193.

8 A key task at the forefront of data science research is to incorporate human morals and values into AI systems, see Brian Christian, *The alignment problem (How Can Artificial Intelligence Learn Human Values*), London 2020.

9 Samson Esayas, "The Important Role of Emergence in Conceptualizing the Challenges of New Technologies to Private Law", *European Review of Private Law* 2023, s. 1–44; on tort law, see especially pp. 24–34.

10 See concerning this, e.g. "Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on artificial intelligence (Artificial Intelligence Act) and amending certain union legislative acts", p. 2.

11 See Frøseth 2023, p. 12.

12 Eugenia Dacoronia, "Burden of proof -How to handle a possible need for facilitating the victim´s burden of proof for AI damage?", in Sebastian Lohsse, Reiner Schultze & Dirk Staudenmayer (Eds.), *Liability for AI*, Baden Baden, Germany, 2023, s. 201–2013, on p. 201.

13 "Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts, COM (2021) (206)" (hereinafter AI ACT), "Proposal for a Directive of the European Parliament and of the Council on liability for defective products COM (2022) 495 final". An informative review of these and their significance for Norwegian tort law is provided by Anne Marie Frøseth and Magne Strandberg in the article "Mot et skifte i EUs tilnærming til erstatningsretten" [Towards a shift in the EU's approach to tort law], *Tidsskrift for erstatningsrett, forsikringsrett og trygderett* 2022, pp. 131–136.

14 Cf. the enlightening description of this integration in Frøseth 2023, e.g. pp. 38–40.

15 See, for example, the presentation of "a risk-based approach to regulation" in Lucilla Sioli, "A European strategy for Artificial Intelligence", CEPS Webinar 23 April 2021. In the proposal for a regulation, the different degrees of risk are regulated in Article 5 (prohibited AI systems), Articles 6–29 (high-risk AI systems).

16 AI ACT art. 6.

sought to be defined in more detail in an appendix to the regulation.[17] However, relatively broad categories are used.[18]

The new Product Liability Directive will ensure that AI systems are covered by the Directive and will thus safeguard personal injuries. The general objectified liability related to "defect" ("safety defect", cf. section 2-1 of the current Product Liability Act) will be continued here. The inclusion of AI systems in the Product Liability Directive is an important step forward with great legal significance.[19]

There has also been proposed a separate directive on liability for AI, the AI Liability Directive (hereinafter AILD).[20] This directive was meant to work alongside the Product Liability Directive, but the proposal has as of February 2025 been withdrawn, since the Commission saw no prospects of reaching agreement on the content and wording of the directive as it stood. It is therefore open what will happen on the area of which the directive was supposed to cover. In view of the fact that the proposal merely prescribed presumption rules regarding causation and rules on the burden of proof, the directive proposal was not decisive as to the problems addressed in this article. The question of which basis of liability to be applied under Norwegian law was untouched by the directive proposal, since this question was left to the member states.[21] Hence, for the purpose of this translated article, the elaborations made are relevant to the current legal situation. Since there still is a possibility that the AI liability may be proposed once more, albeit with changes, the "legal landscape" surrounding such a proposal is still relevant.

This article was originally published in May 2024, a point in time when the AILD proposal was still on the table. Even though this no longer is the case, the references to the AILD proposal are of interest, since the article mainly is about the parts that never was meant to be covered by AILD. The judgements as to what is the law in these areas is fully valid. Hence the references to the AILD proposal are kept within in order to show the relations between possible sources of law.

A possible new AI Liability directive may extend further and cover damage cases that are not covered by the Product Liability Directive.[22] This applies, among other things, to property damage caused to businesses, which is the subject of this article. The proposal for a new AILD is a minimum directive, which raises special questions for national legal systems, including Norwegian law (more on this in section 3 below).

In order to draw conclusions about the liability regulation, it is important to be aware that the EU's handling of liability regulation of AI has significant market and geopolitical implications. A short version is as follows:

The EU wants to be a world leader in AI technology. The EU considers the US and China to be its main competitors. In this connection, the Commission is concerned that competitors enjoy the advantage of having a "single market", while Europe consists of a number of nations, each with its own legal system. In particular, the Commission has pointed out that the uncertainty associated with how AI liability will be regulated in the various nation states is likely to create a chilling effect for innovators. For this reason, the European Commission, the European Parliament and the Council have initially wanted to harmonize the tort law regulation of AI systems. In line with this, the EU wants to build an "ecosystem of trust" to ensure that private capital is invested in AI and that innovation happens.[23]

The desire to harmonize is a change of direction in the EU's approach to tort law, which until now has been largely left to national regulation.[24] For the purpose of harmonization, Article 114 of the Treaty on the Functioning of the European Union has been applied. In the discussion about harmonizing tort law, the focus has been on the choice of basis of liability.

The EU wants an AI regime that puts humans at the center. A related objective is to ensure that the injured party is provided with the same level of protection as in the case of injuries caused by humans in a conventional manner.[25] Furthermore, there is a desire for the people to have confidence in AI and be prepared to take advantage of the opportunities that follow from the new technology.[26] It is desirable that both the market, consumers and innovators have confidence that there is a predictable regulation of liability. In this way, the markets will have a large turnover, and innovation will take place.

The conflicting interests have led to the launch of various proposals for the formulation of the basis for liability on the way to the final adoption of the legal acts. In 2019, an expert group appointed by the Commission put forward a proposal that "high risk AI systems" should be regulated with strict liability and compulsory liability insurance.[27] Inspired by the aforementioned expert group's proposal, the European Parliament invited the Commission in 2020

17 AI ACT Annex III to the Regulation.

18 Eight broad categories are listed. On example is category 2: "High risk AI-systems pursuant to Article 6 (2) are the AI systems listed in any of the following areas: […] Management and operation of critical infrastructure: a) AI systems intended to be used as safety components in the management and operation of road traffic and the supply of water, gas, heating and electricity."

19 "Proposal for a Directive of the European Parliament and of the Council on Liability for defective products COM(2022) 495 final", Article 4 (1). The importance of this is highlighted in Gerhard Wagner, "Liability Rules for the Digital Age – Aiming for the Brussels Effect", *Journal of European tort Law* 2022, pp. 191–243, pp. 201–202, and in Frøseth and Strandberg 2022, p. 134.

20 "Proposal for a Directive of the European Parliament and of the Council on Liability for Artificial Intelligence, directive COM (2022) 496 final 28.09.2022".

21 Cf. the preamble, recital 14.

22 See the relationship between the Product Liability Directive and AILD, Gerhard Wagner, "Liability Rules for the Digital Age", 2022, pp. 228–232

23 See "White Paper on Artificial Intelligence. A European approach to excellence and trust", 2020, pp. 9–25.

24 Cf. the observation made in Anne Marie Frøseth and Magne Strandberg 2022, pp. 130–135. On the influence of EEA law on national tort law, see, for example, Hagstrøm and Stenvik 2019, pp. 39–51.

25 This objective has been expressed, among other things, in the preamble to AILD, paragraphs 4 and 5.

26 AILD's preamble, paragraph 5, mentions "public and consumer confidence".

27 Expert Group on Liability and New Technologies – "New Technologies Formation, Liability for Artificial Intelligence and Other Emerging Digital Technologies" (2019).

to come up with such a regulatory framework for high-risk systems.[28] At the same time, the European Parliament launched a proposal for a regulation with liability rules based on strict liability.[29] In a later resolution, the invitation to the Commission was nuanced so that it would apply to strict liability for high-risk systems, while for other AI systems it would be operated with a fault-based regime.[30] The Commission conducted hearings and surveys covering the views of the technology industry. The consultation round brought to light a fear that a harmonized, but strict, liability regime would slow down innovation. They therefore ended up with a liability model based on fault, where the regulation of liability was in reality left to the national legal systems. However, the approach is supplemented by a duty of disclosure for the alleged offender in combination with a presumption of liability.[31] If the offender fails to comply with the opposing party's or the court's order to provide documentation of how AI works and how various specification requirements have been complied with, the result is that it is presumed that there is fault (lack of care) in relation to AILD.[32]

The only thing that is fully harmonized in AILD, which is a minimum directive, is a presumption of causation within the requirements for a causal relationship between responsible human error and the AI system's "output".[33] However, the presumption of causation only applies when the injured party can prove that it is probable that there is a causal link between a human error and the AI system's "output", cf. Article 4 second paragraph (b) of the AILD. There is then no reality in Norwegian law in the presumption of causation, and it will not have any real significance in Norwegian tort law. The presumption may nevertheless play a certain role in jurisdictions with higher standards of proof, such as in the German legal system. But here too, harmonization is not expected to have a major impact.[34]

Artificial intelligence is often associated with "General Pretrained Transformers", such as ChatGPT 3.5 and 4.0, also referred to as "Large Language Models". Such AI systems are also relevant to tort law issues, and the systems will fall under EU regulation, albeit in such a way that not all such systems will necessarily be covered by the strictest liability, which is reserved for "high-risk" systems. The preliminary definitions, which appeared in the proposal for the EU regulation, did not specifically mention AI models of the type ChatGPT. In legal theory, however, it was argued that such AI systems should be included under the strictest regulation.[35] Throughout the autumn of 2023 and the following winter, much of the remaining disagreement between the EU institutions was related to how to determine which "foundation models" qualify for a high-risk system.

Certain disagreements arose in connection with the last "trilogue-meetings" (meetings between representatives of the European Parliament, the Council and the Commission) in November 2023. The three parties in the trilogy meetings nevertheless reached political agreement on all significant points just before Christmas 2023. After some turbulence in the run-up, the parties involved agreed at the turn of the year, and AI ACT has now been adopted. There is therefore every reason now to discuss the Norwegian legal situation after a probable adoption of the legal acts. For product damage that affects things in the industry, it is unlikely that the EU regulation will have a decisive impact, because it is supposed to be a minimum directive. It is therefore important to establish the basis of responsibility that applies in this area. In this connection, the question is whether fault liability or non-statutory strict liability should apply.

3. A brief outline of the basis of liability for non-statutory strict liability

In Norwegian law, non-statutory strict liability was developed in the latter half of the 1800s. In the face of the harmful effects of the Industrial Revolution, the fault norm was "stretched" to such an extent that the reality became an objective liability, which was recognized first in theory and then in case law at Rt. 1905 p. 715 *Water Pipeline*.[36] Traditionally, the Supreme Court, using the form of liability, has operated with three criteria related to the risk that justifies the liability. This risk is only eligible if it is "constant", "typical" and "extraordinary". The criteria "constantly" and "typically" are linked to the operation or facility that has caused damage. The extraordinary aspect is related to the fact that the risk to the injured party appears to be out of the ordinary and outside of what the injured party should bear. In various judgments, the Norwegian Supreme Court has supplemented the three criteria with a more comprehensive assessment, which it has become common to rationalize by referring to various considerations, such as the "pulverization consideration" and the "interest consideration".[37] Legal theory has made various attempts to create a consistent system of Supreme

28 See the European Parliament's Resolution 2020/2014(INL) of October 2020.

29 A detailed review and discussion of Parliament's proposals is made in Frøseth 2023, pp. 18–23.

30 See European Parliament Resolution 2022/2266(INL) of May 2022. For a detailed review of the European Parliament's views on the responsibility model and the Commission's proposals, see Frøseth 2023.

31 See AILD preamble, paragraphs 18–21 and Article 3 of the Directive.

32 See AILD Article 3 no. 5.

33 See AILD article 4.

34 Gerhard Wagner comments thus: "This is certainly not nothing, but also not much", se Wagner 2022, p. 242.

35 Se Helmut Heiss, "Navigating the European Liability Landscape of Artificial Intelligence: New Proposals and Chat GPT", *Transatlantic Antitrust and IPR Developments*, Issue 1/2023, s. 19–25, on p. 24.

36 On this development, see Nils Nygaard, *Skade og ansvar* [Damage and Liability], 6th ed., Bergen 2007, pp. 253–254 with references.

37 See, for example, Hagstrøm and Stenvik 2019, pp. 212–228 (the consideration of interest, the consideration of pulverization, the consideration of concrete reasonableness), and Kjelland, *Erstatningsrett – en lærebok* [Tort law – a textbook], 3rd edition, Oslo 2024, pp. 160–166 (the element of interest, the element of contraception, the element of pulverization, the specific reasonableness).

Court judgments.[38] It does not come easily, as each individual case is characterized by its own uniqueness. The Supreme Court argues from the views it finds have the best reasons for them, on a case-by-case basis, within the framework indicated above.

A somewhat understated aspect of the form of liability is the fact that the form of liability began as a strict norm of fault, cf. above. This means that all elements of fault that apply in a specific case will *strengthen* the basis for liability, cf. for example judgments on so-called irresponsible arrangements.[39] Other judgments, which have been placed under the general non-statutory objective liability, may also contain elements of fault.[40] The form of liability, non-statutory strict liability, nevertheless has its greatest theoretical and practical interest in cases where such elements cannot be demonstrated.

For the purposes of this article, it is not necessary to provide a complete representation of the form of liability beyond the outline above. In the following, I will confine myself to highlighting some aspects of the theory of responsibility that are particularly relevant to artificial intelligence. This will be discussed in more detail in section 4 below.

4. Basis of liability outside the scope of the Product Liability Directive

4.1 Introduction

The modernization of the Product Liability Directive is of great practical importance for Norwegian law. As mentioned, the Product Liability Directive is a total harmonization directive, and so is the proposed amendment.[41] This means that no other liability rules can be introduced in national law than those that follow from the Directive. The amendment will make it clear that many AI-generated products will be regulated by the objectified rule of "safety deficiency". In this context, it is particularly important that it is now clarified that the revised Product Liability Directive covers software used in AI systems.[42] These regulations will probably become the dominant one in terms of personal injuries. Here, too, causal presumptions are used.

Article 9(1) clarifies that the burden of proof for all compensation terms lies with the injured party. Paragraph 2 of the provision then introduces a presumption of liability if the alleged tortfeasor has not provided relevant evidence, including product descriptions, in accordance with the duty of disclosure pursuant to Article 8(1). This affects Norwegian law because, according to current non-statutory Norwegian tort law, such a conclusion would not simply be drawn.[43] The revision of the Product Liability Directive is an article topic in itself and cannot be pursued in this work.

The regulation of damage that *is not* covered by the Product Liability Directive has been left to Norwegian law, but in such a way that AILD applies as a minimum directive. The fact that AILD is a minimum directive allows for the possibility of retaining non-statutory strict liability in Norwegian law. This is explicitly stated in paragraph 14 of the Directive's preamble. It will thus not be contrary to EU law and Norway's obligations under the EEA Agreement to retain a form of liability that is well incorporated in national tort law.

As regards *who* may be affected by such liability, the provision in Article 2, third paragraph of the AILD is broad through its reference to the revised proposal for Article 4, eleventh paragraph of the Product Liability Directive. The use of the word "provider" leads to the distributor, importer, or a third party, including private users, being covered by Article 28 of the AI Act.[44]

In relation to the question of non-statutory strict liability, the subject question must still be linked to the qualified risk in question. Only those who have a sufficient connection to the constant, typical and extraordinary risk in question can be affected by non-statutory strict liability. An owner of a tortious object may thus be liable depending on the circumstances, while it typically takes more for a tenant to become liable. A minimum directive will not interfere with this regulation.

An important area for AILD's catchment area, with the corresponding Norwegian freedom of regulation, is damage to things that are used in business. An example is, as mentioned in the introduction (point 1), drone transport with unintentional dropping of cargo onto greenhouses. The *basis of liability* to be applied for this type of damage has recently been subjected to a thorough legal analysis by Professor Trine-Lise Wilhelmsen.[45] Her article does not specifically deal with problems related to AI. The topic is touched upon briefly and not discussed separately.[46] It may be fruitful to reflect on the views expressed in the article in light of the phenomenon of artificial intelligence and developments in EU law.

The question discussed below is clarified as to whether there is a basis for non-statutory strict liability when AI systems cause damage to things used in business activities.

38 See also Nygaard 2007 pp. 253–283, Fredrik Stang, *Erstatningsansvar* [Liability in torts], Christiania 1927, pp. 255–276, J. Øvergaard, *Norsk Erstatningsret*t [Norwegian tort law] , Oslo 1951, pp. 139–159, Peter Lødrup, *Lærebok i erstatningsrett* [Textbook on tort law], 4th edition, Oslo 1999, pp. 247–279, Trine-Lise Wilhelmsen and Birgitte Hagland, *Om erstatningsrett* [On tort law], Oslo 2017, pp. 218–234, Kjelland 2024, pp. 133–167, Hagstrøm and Stenvik 2019 pp. 174–228.

39 See, inter alia, Rt-1948-1111, Rt-1970-1192 and Rt-1991-1303, cf. also Nygaard 2007 pp. 275–279.

40 See, for example, Rt-1969-109 on p. 112, where the basis for imposing responsibility for the breakdown of a hoisting crane (technical failure) on a hoist crane owner was strengthened with contraceptive considerations in the intersection against fault: "He is also the one who, through careful use, supervision and maintenance, has the greatest opportunity to prevent a crane from being weakened with the consequence that damage can be caused by a load that the crane is supposed to withstand."

41 See the proposal for a revised Product Liability Directive COM (2022) Article 3.

42 See the proposal for a revised Product Liability Directive COM (2022) Article 4 (1).

43 See, for a similar consideration, Frøseth and Strandberg 2022, pp. 131–136.

44 See Frøseth 2023, p. 2.

45 Trine-Lise Wilhelmsen, "Ulovfestet produktansvar for tingsskader i næringsforhold" [Uncodified product liability for property damage in business conditions], *Tidsskrift for erstatningsrett, forsikringsrett og trygderett* 2020, pp. 165–197.

46 Wilhelmsen 2020, p. 177; See the statement on technical failure of "autonomous systems".

4.2 Wilhelmsen's main point of view: fault liability for property damage

Wilhelmsen has argued that for product damage that affects things used in business, "strict fault liability" should be assumed.[47] As I understand Wilhelmsen, her main point of view is that the criteria "constantly and typically" today are in most cases "consumed by the requirement for extraordinary risk", and that strict liability can no longer be justified by "technical failure". Furthermore, it has been argued that a balancing of interests leads to the non-statutory objective liability being replaced by a strict fault norm. In the following, I discuss these views and the supporting arguments for the possible maintenance of non-statutory strict liability.

It should be mentioned at the outset that Anne Marie Frøseth, in her discussion of a related problem, seems to be in favour of the application of non-statutory strict liability in relation to the special phenomenon of AI and its harmful properties.[48] She conducts a thorough discussion of how the various conditions for imposing non-statutory strict liability can be applied to damage caused by artificial intelligence. Trond Solvang has also taken a similar stand.[49]

4.3 The view that "extraordinary risk" consumes the criteria "constantly" and "typically"

Wilhelmsen's presentation can be perceived as support for the fact that it is the criterion "extraordinary risk" that should justify non-statutory strict liability, while the other conditions "constant" and "typical" risk are not qualifying factors or conditions.

In that case, the legal basis for such a conclusion appears to me to be somewhat modest. For a long time, there have been three conditions – or at least heavy lines of argument – for non-statutory strict liability. All theorists have taken this as a basis – after thorough discussions.[50] What the discussion has been about is whether these are to be regarded as *factors* for imposing liability, or *conditions* for the same. Here, the theory has divided.[51] Nils Nygaard is the one who has gone furthest in spelling out *the conditions* for establishing "non-statutory strict liability".

If my understanding of Wilhelmsen's discussion is correct, it is argued that a recognized rule of common law has been changed. I cannot see that any legal basis has been referred to for this, other than HR-2019-52-A *Spinning*. In this judgment, the Norwegian Supreme Court found that the breakdown of the seat of a spinning bike in a gym, resulting in moderate personal injury, was not covered by non-statutory strict liability. It is correct that *Spinning*'s result is based on the consideration that there was no extraordinary risk. There is also a statement in paragraph 35 of the judgment that "[i]n recent Supreme Court case-law, the question of whether the risk is extraordinary has been particularly central". In my view, however, it cannot be inferred from this statement that the non-statutory objective liability should no longer rest on the considerations that have justified "constantly" and "typically" being a relevant criterion. If one is to move in such a direction, it must preferably be based on evidence in a judgment where liability is imposed solely on the basis of extraordinary risk, without addressing the other criteria. Overall, it is logically objectionable to build a new liability model on an acquittal verdict. It is a fact that the rule on non-statutory strict liability has been created in a different time and under social conditions that have changed, and many will believe that the rule must be adapted to the new time. But this must be done with respect for the long lines of development, including in particular the rational basis for the extreme solution of imposing liability without blame.

Spinning goes quite far in disregarding the legal basis for liability that lies in the fact that an injury is the result of a constant and typical risk for the business. The decisive view in *Spinning* seems to be that the nature and degree of the risk were all in all too small, cf. the following key point in paragraph 43 of the judgment:

"Minor to moderate injuries due to exercise and leisure activities are common and part of the general risk associated with these areas of life. Other areas of daily life also offer many very common risk factors, which are greater in nature, scope and frequency than the risk associated with the use of the spinning bike in this case."

The focus is rather one-sided on the question of whether the risk is extraordinary. From this point of view, the Supreme Court compares the risk in the case with various forms of risk one is otherwise exposed to in daily life. The reasoning may seem alluring, but it is a crossroads of thought that it leads to the injured party having limited protection with regard to moderate injuries. It can be asked whether it is timewise, and whether it is a sensible solution where artificial intelligence can be a key causal factor for damage to a large range of areas of life. It must be taken into account that artificial intelligence can be used in the production of digital components in machines, instruments and engines used in various types of commercial activities, such as factories, transport, service activities or agricultural activities. Within these areas, it does not appear obvious that moderate damage caused by an AI system with a "black box" should not be protected also in the case of moderate damage.

It has not previously been claimed that moderate injuries are not protected by the non-statutory strict liability. In previous theory and practice, the extraordinary has been linked to the risk itself, not to the size of the damage. At the same time, it is correct that the size of the damage potential is relevant, cf. e.g. Rt. 1983 p. 1052

47 Wilhelmsen 2020, pp. 196–197.

48 Cf. Frøseth 2023 p. 58: "[...] new form of qualified risk that falls naturally within the protected area of the non-statutory objective liability", cf. also the summary on p. 60.

49 Trond Solvang, "Men, machine, and culpa: or finding a path toward strict liability", i Henrik Ringbom, Erik Røsæg and Trond Solvang (eds.), *Autonomous ships and the law*, pp. 98–124, on pp. 116–117.

50 See the references above in note 5.

51 See an overview presented in Kjelland 2024, pp. 139–141.

Gol bygg.[52] As in the case of fault assessments, the assessment of liability must be based on an overall assessment of the magnitude of the damage capacity, i.e. the product of the risk of damage and the size of the damage in question.[53] The question of whether there is an extraordinary risk is nevertheless based on an overall assessment that also includes other elements.[54] In theory, it has been highlighted that the core of the extraordinary lies in the unexpected for the injured party.[55]

With the Supreme Court's approach in *Spinning*, the fact that the injured party has to endure an injury that in the course of time will force its way out, is obscured.[56] The constant element of risk is otherwise justified by liability, but this element is underplayed in the judgment. In legal theory, the judgment has been criticized for having taken the comparison with the risk of daily life too far.[57]

We must remember that this is a very important rule in principle, as it replaces the otherwise applicable fault rule. For a business, a reduction of crucial criteria from three to one, even if it may be unintentional, will in reality be quite intrusive in an unfavourable way. Although much can be said about the content of "constantly" and "typically" and the legal weakness of these criteria, it is undeniable that they constitute assessment topics that provide a certain threshold for imposing strict liability without support in law. If you operate with only one loose criterion, this can lead to a trader being unexpectedly held liable in a case where nothing reprehensible can be pointed out. This is an expansion of the area of strict liability, as the criteria "constantly" and "typically" are almost interpreted away. Such a turn requires thorough legal policy considerations, and I would for my part warn against such an understanding. For the sake of legal certainty for the alleged offender, a high threshold for imposing such liability should also apply.

It seems as if Wilhelmsen's point is to point out that there must be a high threshold for concluding that there is a sufficiently extraordinary risk so that liability can be imposed. Wilhelmsen's discussion concludes with the following summary:

"There are good reasons to maintain the requirement that the risk must be extraordinary, as developed in the Spinning judgment, even though the judgment applies to a different liability situation than product liability. A reduction of the risk requirement to 'the safety that a user in the business sector could reasonably expect' would be contrary to the guidelines that can be derived from the scope of application of the Product Liability Act, and contrary to the consideration of equal competition through international liability rules. Nor do the consumer considerations on which the Act is based apply to commercial matters."[58]

I understand this as a recommendation that it should only be relevant to impose non-statutory strict liability if the damage is extensive and results from a high risk, both in terms of damage capacity and frequency. This will not be incompatible with the current case law. I am more skeptical about emphasizing "guidelines that can be derived from the Product Liability Act's area of responsibility". In general, a law implementing a total harmonization directive cannot have an impact outside its scope (more on this in section 4.5 below).

Wilhelmsen points out that if there is an extraordinary risk, the producer must also be considered to be liable "following a balancing of interests", cf. the next point.

4.4 Perceptions of the "interest argument"

Later in the discussion, Wilhelmsen makes the following statement:

"The fact that product liability does not include damage to things in business conditions also indicates that the consideration of interest here is less obvious. The manufacturer's interest in producing and selling the product is the same, but here this must be weighed against the professional buyer's interest in its use. The product is used in business activities where the user's goal is also to make money from the operation. It is not a given that the manufacturer's interest in a risk context should be given greater weight than the user's."[59]

A little later in the presentation, this line is completed as follows:

"Based on this, the consideration of interest does not provide any clear argument that the manufacturer should bear the risk of damage to things in the course of business unless it is a qualified risk."[60]

Arguing that the injured party has an interest in using the product is new compared to the traditional, common argument for non-statutory strict liability.

In my opinion, it may be unfortunate to perceive the "element of interest" or a "risk assessment" as a free assessment in an almost flat structure, where the interests of the injured party and the offender are weighed against each other on the basis of discretionary criteria. With such a method, it is completely lost sight of that the non-statutory objective liability is about the extreme result of establishing liability for the offender despite the fact that there is no fault. Such a result may be justified by the fact that the offender in his own interest imposes a constant, typical and extraordinary risk on his surroundings.

The question of whether the injured party has an interest in using the item that creates the risk has less weight in this assessment. To the extent that the activity justifying the liability takes place in the interest of the injured party, this is a peculiarity of the case that may need to be subject to a special assessment *after* it has been

52 See judgment p. 1056. The case concerned an explosion in a dynamite warehouse, and the reason for the extraordinary risk was as follows: "[T]he damage capacity of the explosion referred to is as far as can be understood."

53 See, for example, Hagstrøm and Stenvik 2019, pp. 188–191.

54 Cf. Nygaard 2007 pp. 266–272.

55 See Nygaard 2007 p. 297.

56 Cf. Nygaard 2007, pp. 262–263, and the criterion mentioned in Rt-1948-719 on p. 720; "in the course of time, experience has to reckon with".

57 See Tom Sørum, "Ekstraordinær risiko ved etablering av ulovfestet objektivt ansvar" [Extraordinary risk as an element in establishing uncodified strict liability], *Tidsskrift for erstatningsrett, forsikringsrett og trygderett* 2020, pp. 3–6.

58 Wilhelmsen 2020, p. 189.

59 Se Wilhelmsen 2020, p. 189.

60 Se Wilhelmsen 2020, p. 190.

concluded that there are sufficient grounds for liability on other grounds.[61] If one treats the two "interests" as equal in this context, there is an understanding of the basis of responsibility that is not in accordance with the legal basis for the liability. For the same reason, I am a bit skeptical about presenting the argument regarding the non-statutory objective liability as a form of scale of the interest in which a measure has been implemented.[62] With such a presentation, the question of constant, typical and extraordinary risk associated with commercial operations as the core of the basis of liability is almost abandoned. A nuanced and, in my opinion, correct presentation of how the injured party's interest comes into play is given in Nygaard's and Hagstrøm & Stenvik's presentations.[63]

The origin of what is called "interest consideration" in Norwegian, more recent theory, is related to the legal maxim of Roman law "*cuius commodum esse debet eius periculum est*".[64] In common law, this view is closely linked to the so-called profit consideration: that those who benefit from a dangerous activity must also bear the costs of it.[65] This legal sentence is supported by both economic doctrines and common sense. On the basis of general principles of tort law, product liability lies at the core of what may be a "dangerous business", as a justification for liability without fault.

On this basis, it is not natural to interfere with the injured party's interest in using the item. The fact that an injured party has an interest in using a product is in the nature of the case. That is why the injured party has bought the thing. A person who buys an item or uses an item must have the protection of the legal system if he or she is injured by the item through no fault of his own. Depriving the injured party of this protection with reference to his interest in using the thing is, in my opinion, difficult to defend both rationally and morally. The consideration does not have a foothold in established customary law or in individual judgments.

It is possible that the view is influenced by a consideration that it may sometimes be more obvious for the injured party to insure himself than for the offender. However, we are not facing a situation where it is natural to argue in this way. We must remember that the premise is that the damage is due to a failure of a thing that the offender has produced for his own profit. Allowing the buyer to bear the costs of insurance for such injuries would be contrary to very basic legal economic doctrines. Then the cost of the products will not be internalized in the production costs, which leads to the manufacturers becoming "free riders" who can cause damage without covering the costs. This is contrary to legal economic theory, which in this case briefly supports the idea that a potential tortfeasor is motivated to avoid harm.[66] In Norwegian theory, this is called "economic contraception".[67]

4.5 Perceptions of "technical failure" as a factor for responsibility

Non-statutory strict liability has been developed to provide liability when an accidental injured party is affected by a continuous, typical and extraordinary operation or activity in the interest of a business operator. The fact that harm occurs as a result of a cause that neither involves any human nor can be traced back to a human action already places artificial intelligence-caused harm at the core area of the basis for liability. This observation is not only made by a Norwegian theorist but is shared by the members of the academic expert group the commission used to investigate the issue related to AI. It is appropriate to quote Christiane Wendehorst's formulation here:

> *"The further extension of strict liability may therefore be justified for AI applications because the 'autonomy' and 'opacity' of AI may give rise to exactly the kind of difficulties strict liability is designed to overcome."*[68]

On this basis, it is quite natural to look to Norwegian doctrine's focus on technical failure as a basis for imposing non-statutory strict liability.

In recent times, Are Stenvik has claimed that the element of technical failure has "lost the ability to function as a special criterion and as a basis for establishing a separate category".[69] Wilhelmsen seems to continue this view by pointing out that the view of "technical failure" was not emphasized in Rt. 2006 p. 690 *Lillestrøm*, where non-statutory strict liability was based on other grounds, and HR-2019-52-A *Spinning*, where there was an acquittal.[70]

As Nils Nygaard has highlighted, the occurrence of technical failure has been a key basis for imposing non-statutory strict liability in a number of judgments, cf. Rt. 2016 p. 9, Rt. 1957 p. 1097, Rt. 1969 p. 109 and Rt. 1993 p. 1201.[71] The fact that in some cases other lines of argument have been chosen is not incompatible with the fact that the element is still an important part of the possible argument basis for non-statutory strict liability in Norwegian law. In view of the fact that *Lillestrøm* concerned the transport of explosive, liquid propane, it is completely understandable that the element of technical failure did not come to the fore, something that Wil-

61 This order in the assessments is quite clear in Nygaard's presentation, see Nygaard 2007 on p. 282, where he discusses Rt. 1983 p. 758 *Granat*, which concerns an act of assistance in the interests of the injured party.

62 See Kjelland 2024, p. 163.

63 Cf. Nygaard 2007 pp. 282–283, and Hagstrøm and Stenvik 2019 pp. 217–220.

64 See about this legal sentence in Bjarte Askeland, *Erstatningsrettslig identifikasjon* [Identification in tort law], Oslo 2002, pp. 54–55.

65 Se for example P.S. Atiyah, *Vicarious liability in tort law*, London 1967, pp. 17–18.

66 Se for example Kathryn Spier, "Manufacturer liability for Harms Caused by Consumers to Others", *American Economic Review*, Volume 95, pp. 1700–1724.

67 Cf. Nils Nygaard 2007, p. 20, cf. also p. 222 and p. 254. Cf. also Kjelland 2024, p. 33.

68 Christiane Wendehorst, "Strict Liability for AI and other Emerging Technologies", *Journal of European Tort Law* 2020, s. 150–180, on p. 160.

69 See Hagstrøm and Stenvik 2019, p. 225. The point of view was formulated a few years after Hagstrøm's death in 2013, which is why I find it most correct to attribute it to Stenvik alone.

70 Kjelland 2024, pp. 152–154, seems to believe that "technical failure" is consumed by the requirement for extraordinary risk, without commenting on Stenvik's view. In Trine-Lise Wilhelmsen and Birgitte Hagland 2017, pp. 218–235, the presentation on non-statutory strict liability does not contain any specific discussion of the element of technical failure.

71 See Nygaard 2007 pp. 272–275.

helmsen also mentions.[72] *Spinning's* message is primarily that minor injuries that are not the result of a high risk do not satisfy the requirements for extraordinary risk – technical failure or not. On this basis, I cannot quite see that there is a basis for drawing the conclusion that the element has been "abandoned in recent case law".[73] Knut Martin Tande has also questioned the basis for the theory's conclusions on this point, and he has been critical of the Supreme Court's tournament of technical failure in *Spinning*.[74] In addition, there are several works in the area of maritime law that advocate that there should be strict liability for technical failure when damage is caused by driverless ships.[75]

Recent legal theory has pointed out that technical failure has been "abandoned in recent case law". However, the rational basis for the older judgments could easily have a renaissance as a result of the very special properties of artificial intelligence. As explained above, artificial intelligence will represent a "black box", where no human can completely reconstruct what has happened, and where it is not possible to prove fault. However, it is the manufacturer of the product, the alleged tortfeasor, who has initially created the risk of injury, cf. what has been mentioned above about the phenomenon of "emergence".[76] Should the injured party have to endure this damage because he or she has bought and uses the item? This will not correspond well with the general and long lines of Norwegian tort law.

In my opinion, the phenomenon of artificial intelligence fits extremely well with the idea behind "technical failure" as a separate category within the requirement for "extraordinary risk". As Nygaard mentions in relation to the balancing of interests, "the failure itself will strongly speak for" responsibility.[77] Furthermore, it would be inconsistent to remove technical failure as a liability element in Norwegian law as long as Section 8 first paragraph (b) of the Motor Vehicle Liability Act and the Act relating to Amusement Facilities provide a statutory basis for such incidents to give rise to liability without fault.[78] When damage occurs as a result of artificial intelligence, it will easily also satisfy the requirements for constant and typical risk. In my opinion, we would be doing the Norwegian legal system a disservice if we excluded the possibility of non-statutory strict liability for artificial intelligence that represents technical failure.

4.6 Contraception and culpa

Towards the end of the article, Wilhelmsen provides a "summary", which includes the following passage:

"The premise for non-statutory strict product liability for damage to goods in the business seems to be that there is an extraordinary risk that could be reduced with effective security measures based on an objective cost-benefit assessment. However, if the manufacturer fails to invest in preventive measures despite the fact that this would cost less than the reduction that could be achieved in the risk, it can be argued that the manufacturer has been negligent. It then seems more natural to fall back on a strict assessment of fault according to the pattern of Danish law than to use the non-statutory objective liability."[79]

The basis for this presentation of the basis of liability seems to be largely the most recent judgment from the Supreme Court in this area, HR-2019-52-A *Spinning*. What Wilhelmsen discusses in the quote above is not so well in accordance with the long lines of the doctrine of responsibility. As the author mentions the preventive consideration, the discussion shifts towards fault liability, without taking into account the fact that we have for a long time included contraceptive considerations as a basis for imposing strict liability. As mentioned above, elements of fault and the possibility of preventing liability have at times strengthened the basis for imposing non-statutory strict liability.[80] Reference can be made here, for example, to Rt. 1970 p. 1171 *Epileptic,* Rt. 1991 p. 1303 *Floor hatch* and Rt. 2000 p. 388 *Psychiatric patient*. No one advocated replacing objective liability with fault after the aforementioned judgments were handed down. In light of these judgments, it does not appear to be very well founded that we should operate with fault liability just because preventive considerations can be included in the argumentation.

When the reasoning is seen in light of the problems associated with AI systems and their "black box", the rationality becomes even more difficult to defend. It may be mentioned here that the members of the expert group have in various contexts pointed out the weaknesses of applying fault liability in relation to high-risk AI systems:

72 Wilhelmsen 2020, p. 180.

73 Hagstrøm and Stenvik 2019, p. 225.

74 See Knut Martin Tande, "Skadelidtes aksept av risiko som rettslig kriterium i lys av Høyesteretts argumentasjon i HR-2018-403-A (Ridedom II)" [The injured party's acceptance of risk as a legal criterion in light of the Supreme Court's argumentation in HR-2018-403-A (Ridedom II)], *Tidsskrift for erstatningsrett, forsikringsrett og trygderett* 2019, pp. 187–215, on pp. 209–210. The criticism of Stenvik's point of view in footnote 62.

75 See an interesting discussion of technical failure as causal liability in Arne Moss Westgård, "Objektivt rederansvar for teknisk svikt. Fra dampskip til autonome fartøyer" [Objective shipowner liability for technical failure. From Steamships to Autonomous Vessels], *MarIus*, 527, 2020, pp. 92–96. I also refer to his view on "modified version of liability for technical failure" on p. 99. See also Trond Erik Solvang in several works, primarily Trond Erik Solvang, "Man, Machine, and culpa, Or finding a path toward strict liability", *Autonomous ships and the law*, Routledge London and New York, 2021, on pp. 117–118. Others have also asserted the same view, see e.g. Ida Wangsfjord, *Ansvar for autonome skip* [Responsibility for autonomous ships, master's thesis], University of Tromsø 2023, on p. 45.

76 See point 2 above and the reference to Esayah 2023.

77 Nygaard 2007 p. 283.

78 Lov om fornøyelsesinnretninger (tivoliloven) av 22. mai 2017 nr. 30 [The Act relating to Amusement Facilities (the Tivoli Act)] Section 13, which must be read in light of the fact that the legal basis for liability continues Section 4 of the Tivoli Act of 1991. In the preparatory works for this provision, reference is made to the non-statutory strict liability, and that the liability insurance must cover "accidents", cf. Ot.prp. no. 49 (1990–1991) pp. 16 and 17.

79 Wilhelmsen 2020 p. 196.

80 cf. Rt-1969-109.

"The most obvious shortcoming of fault liability in an age of AI-driven technologies, however, is the requirement of (at least historically) human conduct in the first place, i.e. the basis of comparison between what is right or wrong. If the flaw at stake is no longer some wrongdoing by a human actor, but rather a malfunction of an algorithm as such, the whole core idea of fault liability no longer seems applicable. If there was no flawed human conduct at least somewhere along the chain of causation leading to the malfunction (such as errors in programming the algorithm, or the interference of some hacker), there seems to be no room left to maneuver in this historic foundation of the law of delict."[81]

If product damage to things in the industry caused by AI systems is only to be regulated by fault, the injured party will be in a difficult position.

The point can be illustrated by using the drone example mentioned in the introduction: A drone controlled by AI systems inadvertently drops a heavy object on a greenhouse. The drone's activity has thus been decided during what in theory has been called "emergence".[82]

If the injured party is now required to prove fault, he will face the very problem that has justified the expert group's proposal for strict liability. The real cause of damage lies in a "black box", which is mostly characterized by the fact that no human being of flesh and blood can understand what has happened. There are many people who have been involved in producing and programming the processes in the "black box". However, it is virtually impossible for the injured party to prove that any of these have been at fault. Should the injured party still not receive compensation, because we are introducing fault liability without being forced to do so where we have previously had non-statutory strict liability?

A change in the doctrine of liability to the detriment of the injured party in such a radical way as is proposed here should generally be better justified than through the argumentation that can be based on a single acquittal judgment.

4.7 Competition considerations

Finally, Wilhelmsen mentions "competition considerations that form the basis of the Product Liability Directive, and which speak against a special Norwegian non-statutory strict liability for such damages".[83] This view has not been elaborated but probably refers to the previous discussion we have had in Norwegian law about non-statutory strict liability. The premise that non-statutory objective liability is "uniquely Norwegian" is probably somewhat debatable, and should perhaps preferably be modified in light of, for example, the review conducted by the Expert Group on Liability and New Technologies; see the group's report under the heading "Strict liability".[84]

In the aforementioned discussion, Are Stenvik has argued that it is strange to have a stricter responsibility outside the directive than within the directive. Stenvik's argument reads as follows:

"For the sake of good order, it should be clarified that the Directive would not have formally prevented the application of the non-statutory objective liability in the smoking case, since any liability here would be linked to products that had been placed on the market before the entry into force of the Directive. Nevertheless, it seems fairly clear that the current legal situation should have been taken into account, i.e. the legal situation for damage caused as a result of safety deficiencies in products, including tobacco, sold after the entry into force of the Directive. For such damages, liability issues must be assessed solely on the basis of the rules of the Directive and the Product Liability Act.

Although the previous legal position can in principle be maintained outside the scope of the Directive, there is also a general need for harmonization here. With the expansion of tort law, and the raising of the level of compensation, tort law has become a more important part of the business sector's framework conditions. Variations in liability rules between member states can distort competition and should be avoided. Admittedly, complete harmonization is not yet possible here, precisely because there is no uniform legal position outside the scope of the Directive. What can be stated, however, is that the Norwegian liability structure, based on the responsibility for dangerous companies, is unique, and that the responsibility in almost all other countries is based on forms of guilt. Moreover, it would undeniably seem somewhat strange to maintain stricter liability rules outside the scope of the Directive, where the need for protection is presumably less. Overall, therefore, there appear to be weighty, and to some extent compelling, reasons to abandon the court-created objective liability construction in the area of product damage."[85]

This argument seemed convincing when it came. Nevertheless, there is reason to revise this approach in light of developments in artificial intelligence. A claim that non-statutory objective liability does not apply to product damage is not obviously correct. On the contrary, the fact that AI has the characteristics of the systems may speak in favour of applying non-statutory strict liability to the phenomenon.[86] It is an activity in the producer's interest, where mistakes can occur unexpectedly, and where it is difficult to trace the error back to any human activity. The system of providing data, duty of disclosure and presentation of evidence may help the injured party to some extent. But we cannot rule out that an incident occurs despite the fact that all specifications have been given, and no fault can be detected on the part of the manufacturer. In such a situation, should the injured party bear the loss themselves? In my opinion, all the arguments that originally spoke in favour of strict liability speak in favour of applying it in such cases. It is of considerable interest that the Expert Group on New Technologies recommends

81 Bernhard A Koch, «Liability for Emerging Digital Technologies: An Overview», *Journal of European Tort Law* 2020, s. 115–136, på s. 126.

82 Jf. Esayas, cf. footnote 8 above.

83 Wilhelmsen 2020, s. 197.

84 Expert Group on Liability and New Technologies, «Liability for Artificial Intelligence and other Emerging Digital Technologies» 2019, s. 25–27.

85 Are Stenvik, "Produktansvar for tobakksskader – en kommentar til Høyesteretts dom 31. oktober 2003 (røykedommen)" [Product liability for tobacco damage – a comment to the Supreme Court's judgment of 31 October 2003 (the smoking judgment)], *Lov og Rett* 43/3 pp. 199–207, on pp. 203–204

86 Cf. the argument above in section 4.3.

"strict liability" for both the "operator" and the "producer" of AI systems.[87] The main view is that strict liability should be attributed to the actor who has control of the risk ("in control of the risk").[88]

As described above in point 2, the European Parliament's original plan was that the EU regulation should be based on strict liability. The European Parliament is the institution in the EU that has the greatest democratic legitimacy. In the case in question, the European Parliament based its decision on the conclusions reached by an expert group consisting of academics specializing in tort law. However, the Council had objections, and after a round of consultations by the Commission, there is now, as referred, a directive that requires fault on the part of the offender. Both in principle and in reality, there is a marked difference between the two approaches.

The main reason why the EU has moved away from the line of strict liability is that it does not want to prevent or limit innovation that could strengthen the EU geopolitically in the competition to be a world leader in the market for industrial and commercial exploitation of artificial intelligence. If it had not been for this factor, there is reason to assume that the professional legal basis for using strict liability would have prevailed. From a purely tort law point of view, strict liability with compulsory insurance is the best regulation of the phenomenon of artificial intelligence.[89] A fault rule with a reversed burden of proof may prove to be an inappropriate set of rules in relation to the forces that are now being put into play. I refer in particular to the evidentiary difficulties demonstrated in my drone example above.

This also includes the fact that the European Commission, with its eyes open, has chosen not to harmonize more than it has done, and is content to introduce a presumption rule for fault, cf. the review in point 2 above.[90] This is done with the knowledge that some jurisdictions may operate with liability models based on strict liability.[91] Should we harmonize in an area where the EU with its eyes wide open does not harmonize?

In my opinion, one should be very cautious about attaching decisive weight to Wilhelmsen's analysis if the issue of responsibility for artificial intelligence comes to court. In my view, it is somewhat too easy to draw a conclusion from "competitive considerations" that we should not continue a traditional basis of responsibility with a firm foothold in the welfare state ideas that otherwise prevail in Norway and the rest of the Nordic countries. This must be especially true as long as the alleged «special Norwegian» form of liability was recommended by an expert group with members from a number of European countries.[92]

The most important objection to non-statutory strict liability for AI-caused damage will be that the liability will thus be stricter than in the area of the Product Liability Directive. By retaining non-statutory strict liability outside the Directive, while there is a requirement for safety deficiencies within the Directive, including for personal injuries, we will have the strictest regulation "where the need for protection is presumably less", to borrow Stenvik's formulation in the quote above. This situation arises because the area of product liability is completely harmonized, which closes off the possibility of establishing non-statutory strict liability in this area.

There is a form of coherence thinking behind Stenvik's argument at the end of the quoted text above: As long as Norwegian tort law is determined by EU law on one point, the other parts of tort law must be shifted in order for us to respect a coherent, comprehensive system. It will be readily admitted that I myself have thought along such lines before, as a form of overall systematic approach.[93]

However, coherence is not an intrinsic value that must be prioritized at all costs. As Hagstrøm and Stenvik have mentioned in another context, there may, depending on the circumstances, be pragmatic considerations that trump coherence thinking.[94] It may also be asked whether Norwegian tort law should at all times be relegated to formulating coherent rules as there are certain instances of EU law in different parts of the system. An equally justified strategy could be to seek to preserve the remnants of national tort law as best as possible within the framework of international law. There is reason to assume that other European nations are working from the same approach. Norwegian legal tradition, be it the administration of justice or jurisprudence, must first and foremost take responsibility for applying socially responsible rules that safeguard the rule of law and security in society. We should fulfil this responsibility within the framework of our obligations under international law, but we should not exceed these to the detriment of the quality of the Norwegian regulations.

5. Conclusion

After this review, it is, in my opinion, the best solution that product damage to things in business, caused by the production and/or use of artificial intelligence, is subject to a non-statutory strict liability.

87 Expert group, Report on liability, s. 39–44 (key findings 9–15).

88 Expert group, Report on liability, s. 41.

89 This is my own view, but it can be largely supported by the conclusions drawn by the expert group that advised the EU institution (see Expert Group, Report on liability, pp. 39–44, se also "key findings" no. 9 and 10 on p. 6.).

90 Cf. LTD Article 3 no. 5.

91 This is positively mentioned in AILD's preamble, paragraph 14.

92 See also Wendehorst 2022, which argues for strict liability for injuries that are the result of a risk of physical injury.

93 See in particular Bjarte Askeland, "Fra drivhjul til tannhjul – rettsvitenskapens makt etter EØS-rettens inntog" [From driving wheel to cog wheel – the power of jurisprudence after the entry of EEA law], in Kinander, Morten (ed.), *Makt og rett (Om makt- og Demokratiutredningens konklusjoner om rettsliggjøring av politikken og demokratiets forvitring*), Oslo 2005, pp. 169–192, at pp. 186–190.

94 See Hagstrøm and Stenvik 2019, p. 417, in relation to consistency between rules on compensation for preventive and mitigating measures: "And if one thinks that there is an inconsistency, then it is an inconsistency that the legal system should tolerate."