Liability of Generative AI for Outputs Drawing Experience on Internet Intermediary

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Abstract

This contribution presents a German tort law-based liability framework for Generative AI (GenAI) system providers regarding outputs that infringe personality rights and copyright, drawing on lessons from the liability regimes of internet intermediaries. Similar to internet intermediaries, GenAI system providers do not actively generate the infringing content themselves; rather, the AI system produces the outputs. The liability of GenAI systems providers should be based on omission (*Unterlassen*) of duties of care (*Verkehrspflichten*). The determination of the duties of care of GenAI system providers crucially depends on whether the provider has knowledge of the specific infringement, including the obligation to acquire such knowledge. The specific duties of care owed by different actors along the GenAI value chain are analyzed based on their types, such as upstream GenAI model providers and downstream AI system providers. In principle, downstream GenAI systems providers' knowledge should de lege ferenda arise from notices by rights-holders or trusted third parties; however, for applications with a higher risk of infringement, a heightened duty of care may require proactive monitoring. Upstream GenAI models providers offering services to enterprises or releasing models as open source should be exempt from obligations to acquire knowledge of specific infringements, as well as from obligations to implement output filters.

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A. Introduction

Outputs generated by systems involving Generative AI (hereinafter: GenAI) in response to end-user prompts may constitute rights-infringing content. Examples include cases where an internet portal automatically processes business information about companies but produces false factual statements,[1] cases where GenAI models generate hallucinations that violate the principle of data accuracy as outlined in Art. 5(1)(d) of the GDPR,[2] and cases where generated images exhibit substantial similarity to pre-existing works or qualify as derivative works thereof.[3]

According to Recital 99 of the Artificial Intelligence Act (Regulation (EU) 2024/1689, hereinafter: AIA), large GenAI models are a typical example of a general-purpose AI model, given that they allow for flexible generation of content that can readily accommodate a wide range of distinctive tasks. This generality may reduce the foreseeability of specific harmful outputs from the perspective of model providers. Furthermore, GenAI models are trained on vast, unstructured data and operate with billions of parameters that interact in complex, opaque ways. This opacity of GenAI models stems from the architecture of the models, particularly the way neural networks automatically learn useful internal features during training based on raw input data, without human-designed features. Although mathematically accessible, their internal workings are not human-interpretable. As models scale, they may produce random or emergent outputs, complicating the attribution of liability for infringing content. This reduces both the traceability (*Zurechenbarkeit*) between human fault and the damage caused by AI-generated outputs and the foreseeability of harmful consequences.

Generative AI models are typically integrated into operational applications, i.e., GenAI systems, that are utilized by deployers or interact with end-users who are natural persons using these systems to generate content.[4] In the sense that GenAI systems providers do not actively generate the infringing output themselves, it is similar to cases of internet intermediaries.

1 LG Kiel MMR 2025, 227 (nicht rechtskräftig).
2 *Novelli et al.* Computer Law & Security Review (55) 2024, 6.
3 *Thalen*, Daily Dot, Artists fed up with AI-image generators use Mickey Mouse to goad copyright lawsuits, 2022 <https://www.dailydot.com/debug/ai-art-protest-disney-characters-mickey-mouse/>.
4 European Union Intellectual Property Office, Development of Generative Artificial Intelligence from a Copyright Perspective, 2025, p. 58 <https://www.euipo.europa.eu/en/publications/genai-from-a-copyright-perspective-2025>.

The contribution seeks to analyze, de lege ferenda, the possible legal bases under German tort law for holding providers of GenAI systems liable for outputs that infringe personality rights or copyright, drawing on the established liability framework for internet intermediaries in relation to user-generated content.

Another challenge in attributing liability to GenAI systems providers lies in the fact that the development and deployment of such models involve a wide range of actors. This complexity renders it challenging to assign responsibility for concrete infringing outputs to a specific provider. This contribution proposes that liability be assessed based on the type of GenAI systems providers within the value chain, taking into account the varying degrees of control that different actors exercise over the monitoring and filtering of infringing outputs.

The contribution first explores the grounds of liability for GenAI systems providers based on omission of duties of care (B.). It then examines the role of knowledge in determining duties of care (C.). Finally, it analyses the specific duties of care owed by different actors along the GenAI value chain, based on the types of these actors (D.).

B. Legal Bases for the Liability of GenAI Systems Providers

I. Fragmented Rules of Liability under the current EU Legal framework

Although the revision of the Product Liability Directive (EU) 2024/2853 (hereinafter: PLD) extended the terms of "product" to software, including AI systems, this does not apply to infringements of personality rights and copyright entailed in the AI-generated outputs for two reasons. First, the PLD covers liability for defective products that cause death or personal injury, property damage and destruction, or corruption of data.[5] Thus, the general right of personality in its various dimensions lies entirely outside the scope of protection of European product liability.[6] Intellectual property is not covered by the scope of damage in Art. 6 of the Product Liability Directive, either. Second, the PLD applies to defects in the product itself, where a product is defective when it does not provide the safety that a

5 Art. 6(1) PLD.

6 *Wagner*, Liability Rules for the Digital Age – Aiming for the Brussels Effect, 2023, p. 51 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4320285>.

person is entitled to expect.[7] GenAI outputs are therefore not considered products under the PLD.

Through the legislative materials, it can be seen that EU regulators considered a fault-based liability regime or whatever regime is in place in national liability laws, and increased the standard by extending product liability to certain AI systems, consumer-facing products, and included certain provisions to ease the burden of proof for victims.[8] For example, the withdrawn draft of an AI Liability Directive[9] (hereinafter: AILD) covered claims for damages when the damage is caused by an output or the failure to produce an output by an AI system through the fault of a person, such as the provider or the user under the AI Act (Recital 15 AILD). Recital 24 of the AILD also stated that all national liability regimes have duties of care, taking as a standard of conduct different expressions of the principle of how a reasonable person should act, which also ensure the safe operation of AI systems in order to prevent damage to recognized legal interests. Such duties of care could, for instance, require users of AI systems to choose, for certain tasks, a particular AI system with concrete characteristics or to exclude certain segments of a population from being exposed to a particular AI system.

The liability limitation in Art. 6 of the Digital Services Act (Regulation (EU) 2022/2065, hereinafter: DSA) does not apply directly to providers of GenAI systems as well. According to Art. 3(g)(iii) of the DSA, providers of hosting services are those who offer the services consisting of the storage of information provided by, and at the request of, a recipient of the service. The outputs generated by the AI models during the inference phase, however, are not to be considered content being provided by and stored at the request of the end-users. Given these considerations, it is necessary to establish the underlying liability framework for generative AI providers, as discussed below.

7 Art. 7(1) PLD.

8 *Arcila*, Policy Report: AI Liability Along the Value Chain, 2025 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5209735>.

9 Proposal for a Directive of the European Parliament and of the Council on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive), 2022/0303 (COD).

II. Basis of Liability: Negligent Omission of Duties of Care

GenAI systems providers do not actively generate the infringing output themselves. Rather, the AI system produces content. The causal link and traceability between the fault and damage caused by AI-generated outputs and the foreseeability of consequences could be weakened due to the opacity of GenAI models. Consequently, providers are not liable as direct perpetrators of an unlawful act (*Tun*) because the infringing content is not their traditional act.

Similar to this situation is the liability of providers of hosting services. Host providers are also often considered the "cheapest cost avoiders", as they are in the best position to prevent or mitigate harm in the most cost-effective manner,[10] or "gatekeepers"[11] in the sense of capital market law. Despite the differences among national tort laws in Member States, the DSA establishes a binding and harmonized rule across all Member States regarding liability exemptions for providers of hosting services (Art. 6 DSA). Under German civil law, host providers cannot be held liable for accessories to the infringement according to Section 830(1) of the German Civil Code (BGB), as they usually lack the intention to aid the principal infringement committed by users.[12] Rather, they are held liable as "interferer" (*Störer*) under Section 823(1) of the BGB and in analogy to Section 1004(1).[13] The host provider is only liable for a cease and desist if it breaches so-called investigating obligations (*Prüfpflicht*).[14] By invoking investigation obligations, the German Federal Court of Justice (BGH) effectively made liability as an interferer for user content dependent on a breach of duties of care, thereby limiting the measures to be taken by the service provider to what is technically feasible and economically reasonable.[15] Liability of

10 *Leistner* GRUR Beil. 2010, 1 (32).
11 *Wagner* GRUR 2020, 329 (338).
12 MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 967.
13 BGH GRUR 2016, 855 – jameda.de II; BGH GRUR 2013, 751 – „Autocomplete"-Funktion; BGH NJW 2012, 148 – Blogeintrag.
14 BGH GRUR 2016, 855 Rn. 23 – jameda.de II; BGH NJW 2012, 148 – Blogeintrag; BGH NJW 2011, 753 Rn. 15; BGH GRUR 2011, 1038 Rn. 20 – Stiftparfüm; BGH AfP 2009, 494 Rn. 18 – Domainverpächter; BGH GRUR 2008, 702 Rn. 50 – Internetversteigerung III; BGH GRUR 2004, 693 – Schöner Wetten; BGH GRUR 2004, 860 – Internetversteigerung I; MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 968.
15 MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 969. With the judgments in copyright law for right to communication to the public of the CJEU and BGH concerning the platforms YouTube and Uploaded, the special status of liability as an interferer

providers can build on general tort liability and the doctrine of duties of care.[16]

The development of liability of host providers could serve as a prior lesson for the liability of GenAI systems providers. Under German tort law, liability arises from omissions (*Unterlassen*) where a legal duty to act exists.[17] Although GenAI systems providers do not actively generate the infringing output themselves, they may still be held liable for breaching duties of care. Duties of care are to be interpreted as duties to prevent or eliminate dangers that could harm others.[18] In this context, the provider's duty of care encompasses both the obligation to take appropriate preventive measures to avoid the generation of infringing outputs and the duty to prevent the further generation of infringing outputs once they have occurred.

These duties of care could arise when the provider of an AI system with generative functions has the actual and legal possibility of controlling the dangers (*Gefahrsteuerung*) in the specific case.[19] This responsibility is primarily justified by the principle that everyone is generally obligated to arrange their behavior and property so as to avoid infringing upon the legal interests of others, to the extent that this is reasonably achievable with economically proportionate effort.[20] It reflects the idea that everyone derives benefits from their behavior and property and must accordingly control and manage the associated risks of harm.[21] GenAI systems can be

(*Störerhaftung*) has likely come to an end in favor of a "reunification" of the intellectual property and tort liability systems, see EuGH GRUR 2021, 1054 – YouTube und uploaded; BGH NJW 2022, 2980; *Spindler* NJW 2021, 2554; *Ohly* NJW 2022, 2961; *Wagner* GRUR 2020, 329 (334 f.).

16 Some scholars are in favor of the integration of the liability as an interferer into general tort liability and the doctrine of duties of care (*Verkehrspflicht*), especially in the field of personality rights, see MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 976; similarly see *Czychowski/Nordemann* GRUR 2013, 986 (990 f.); *Hofmann* JuS 2017, 713 (719); *Hofmann*, Der Unterlassungsanpruch als Rechtsbehelf, 2017, S. 413; *Schiff*, Informationsintermediäre, 2021, S. 250 f.; *Spindler/Volkmann* WRP 2003, 1 (7 f.). However, there is no consensus in the debate on whether the concept of "Verkehrspflicht" or simply "Sorgfaltspflicht" in terms of negligence should continue to serve as the central basis for justifying tort liability.

17 *Larenz/Canaris*, Schuldrecht II/2, 1994, § 76 III 1 d; Staudinger/*Hager*, 2021, BGB § 823 Rn. E 3.

18 *Larenz/Canaris*, § 76 III 1 d; Staudinger/*Hager*, 2021, BGB § 823 Rn. E 3.

19 *v. Bar*, Verkehrspflicht, 1980, S. 122 ff.; MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 502.

20 MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 503 ff.

21 MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 505.

regarded as part of the providers' sphere if the providers derive benefits from offering the AI system as a service.

The liability should generally be limited to negligence of the providers of the GenAI systems. The limited liability for negligence is meant to preserve freedom of action, i.e., one should not have to look over one's shoulder at every action to determine whether a, perhaps even remote, danger might materialize.[22] From an incentives perspective, fault-based liability encourages actors to be careful in their activities, as if they are able to prove that they took due precautions, they will not be held liable even if an accident occurs.[23] This approach avoids unfairly attributing direct wrongful acts to providers for content autonomously generated by AI. Liability attaches only when providers neglect their preventive duties despite control and knowledge, not simply because the output infringes.

III. Restricted Implication of Regulatory Obligations of the AIA

As previously noted, it is challenging to define the applicable duties of care or standards of conduct in cases involving GenAI, and to establish their causal link to the resulting damage. EU legislators tended to ease the proof difficulties for the fault of AI providers and the causal link through presumption based on their violations of the obligations in the regulatory frameworks. For example, a presumption of the causal link between the fault of the providers or users and the output produced by the AI system provided for in Art. 4(1) of the withdrawn AILD draft required, inter alia, that the fault of the defendant has been proven by the claimant or presumed by the court under Art. 3(5) and that this fault involves non-compliance with a duty of care directly intended to protect against the damage that occurred.

Indeed, the determination of duties of care or standards of conduct requires a "flexible system" (*bewegliches System*), according to which the person applying the law should assess and balance the individual policy and value considerations according to their weight and importance to

22 *Deutsch* JZ 1997, 1030 (1033); Staudinger/*Caspers*, 2019, BGB § 276 Rn. 7.

23 *Arcila*, Policy Report: AI Liability Along the Value Chain, 2025 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5209735>.

achieve a fair and just decision for the specific case.[24] Depending entirely on the circumstances and conditions, the standard may be higher or lower, and certain measures may be indicated or unnecessary.[25] New technical possibilities could become the new standard, whereas a measure can lose its character as the standard if its particular danger is recognized.[26]

The standard of care could find itself in the regulatory obligations in the AIA, aiming to protect health, safety, fundamental rights enshrined in the Charter,[27] or the possible code of practice in terms of Art. 56 of the AIA.[28] However, such sets of rules do not establish an absolute standard of care. Rather, special circumstances may arise where compliance with the rules is not sufficient in the specific case to meet the level of care required. In this respect, the regulatory obligations in the AIA have only a restricted indicative value for the determination of the liability of the providers of GenAI. The burden of proof for the equivalence of the alternative solution lies with the party that chooses that solution.[29]

C. Knowledge-based Duties of Care

I. Knowledge as the Determinative Factor

The doctrine of duty of care can adjust tort law norms to new situations where GenAI is involved. The courts in Europe often develop duties of care (*Verkehrssicherungspflichten, obligations de sécurité*) for numerous new and different tort situations.[30] Determination of the duties of care of GenAI

24 *Bydlinski*, Juristische Methodenlehre und Rechtsbegriff, 1991, S. 376 f.; *Deutsch* JZ 1997, 1030 (1032); *Magnus*, Principles of European Tort Law, 2012 <https://max-eup2012.mpipriv.de/index.php/Principles_of_European_Tort_Law_(PETL)#4._Guiding_principles>.

25 *Deutsch* JZ 1997, 1030 (1032).

26 *Deutsch* JZ 1997, 1030 (1032).

27 Art. 1(1) of the AIA.

28 For example the General-Purpose AI Code of Practice, which is currently under development, see General-Purpose AI Code of Practice, 6 June 2025 <https://digital-strategy.ec.europa.eu/en/policies/ai-code-practice>.

29 Staudinger/*Caspers*, 2019, BGB § 276 Rn. 7.

30 *Magnus*, Principles of European Tort Law, 2012 <https://max-eup2012.mpipriv.de/index.php/Principles_of_European_Tort_Law_(PETL)#4._Guiding_principles>. For example, the German Federal Court of Justice developed "wettbewerbsrechtliche Verkehrspflicht" to answer to the new situation involving internet auction, see BGH GRUR 2007, 890 – Jugendgefährdende Medien.

systems providers could draw lessons from the doctrine of duties of care for liability of internet intermediaries. The scope of duties of care crucially depends on whether the intermediary has knowledge of the infringement.[31] There is no general obligation to monitor or check third-party content proactively before it is made available on the platform. Rather, the intermediary's liability presupposes that it has obtained knowledge of the specific infringement.[32] Similarly, the duties of care of GenAI systems providers should be based on their knowledge of concrete infringements.

In German tort law, the provider of the search engine is regarded as the direct interferer for its autocomplete feature by the BGH. However, in this case, a cease-and-desist claim generally requires that the provider of a search engine has become aware of the legal violation and is then subject to investigation obligations.[33] The provider's acquisition of knowledge is thus determinative. If a person affected notifies the provider of the internet search engine of an unlawful infringement of their personality rights, the provider is obliged to prevent such violations in the future.[34]

Compared to this case, the latest case of LG Kiel, which is still subject to appeal, seems to have set an unreasonably high standard of liability for the provider of a GenAI system. In this case, the defendant operates an internet portal through which business information about German companies can be accessed using a fully automated process. According to LG Kiel, the provider is to be regarded as a direct interferer (*unmittelbarer Störer*) because he deliberately uses his software to respond to search queries, which extracts information from mandatory publications and republishes it in processed form.[35] Furthermore, the provider is also liable as a direct interferer for content posted by a third party based on the so-called "Zueigenmachen" doctrine if, from the perspective of a reasonable average user, and based on an overall assessment of all relevant circumstances, the provider has appropriated the content and outwardly assumed editorial responsibility for it. The defendant does so by bundling the mandatory publications concerning a company on his site and partly linking the information to one another. In this case, the provider's liability did not depend on the

31 MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 968.
32 BGH GRUR 2016, 855 – jameda.de II; BGH NJW 2012, 148 – Blogeintrag; BGH GRUR 2011, 1038 – Stiftparfüm.
33 BGH GRUR 2013, 751 Rn. 30 – Autocomplete-Funktion.
34 BGH GRUR 2013, 751 Rn. 30 – Autocomplete-Funktion.
35 LG Kiel MMR 2025, 227 Rn. 36 (nicht rechtskräftig).

provider's knowledge of the specific infringement of the output. This risks an unreasonable overextension of liability, requiring providers to monitor every individual output, which could prove technically impracticable and economically disproportionate.[36]

II. Normative Conception of Knowledge

The knowledge concerning the output as such, and its illegality should be concrete. This has been discussed in the intermediary liability. According to the case law of the CJEU, the condition set out in Art. 14(1)(a) of the former E-Commerce Directive (now in Art. 6 of the DSA) cannot be considered unfulfilled merely because the provider is generally aware of the fact that their platform is also used to share content that may infringe intellectual property rights.[37] Thus, abstract knowledge of an infringement in the form of making available protected content on the platform cannot serve as a basis for concluding that the condition for the liability privilege is not met.[38]

It remains questionable whether the liability of GenAI systems providers should depend on the "knowledge" of the AI model itself. It is a classic principle in ethics and jurisprudence that "ought" implies "can," in the logical sense of "if a ought to do p, then p can be done; that is, it must be possible for a to do p."[39] Thus, it is questionable if the AI model as such can obtain such a kind of "knowledge" with a normative evaluating aspect. According to the prevailing opinion in the literature, the AI model is regarded as lacking the ability to carry out content moderation in the same way humans do.[40] While AI functions based on probabilistic logic, human understanding unfolds through the hermeneutic circle between the whole and the part.[41] A survey shows that generative models typically struggle to produce genuine parodies in response to such requests, indicating that they

36 See also Recitals 5, 18, 21, 29 of the DSA.
37 EuGH GRUR 2021, 1054 Rn. 111 – YouTube und uploaded.
38 BeckOK Informations- und MedienR/*Radtke*, 47. Ed. 01.02.2025, DSA Art. 6 Rn. 35.
39 *Floridi* Philosophy & Technology 2023, 36 (41).
40 *Heldt* EuR 2020, 238 (244); *Janal* ZEuP 2021, 227 (250); *Spindler* NJW 2019, 3274 (3275); *Quintais et al.* IIC 2024, 157 (176), regarding copyright law.
41 *Gadamer*, Wahrheit und Methode, 4. Aufl., S. 277; *Röhl*, Allgemeine Rechtslehre, 3. Aufl., S. 118 f.

do not consistently grasp the concept of parody.[42] Thus, human knowledge about the illegality of *specific* output should be decisive. This interpretation aligns with Art. 6 of the DSA, which provides that legal assessments, given current technological capabilities, must rely on human judgment.

The term "knowledge" should be conceived in a normative sense, meaning it also includes the obligation to acquire knowledge of specific infringing generated outputs. However, the scope of the obligation should be limited to cases where the illegality is clearly apparent from the facts and circumstances. Such an interpretation reflects the approach taken in Art. 6(1)(a) of the DSA, which states that the liability exemption does not apply if host providers have actual knowledge or awareness of facts or circumstances from which the illegal activity or illegal content is apparent.[43]

The obligation to acquire knowledge about the specific infringing output or user content is a part of the duties of care of AI providers and host providers and, thus, is limited to technical feasibility. The limitation and proportionality reflect on the source of the information that could trigger knowledge about specific infringing outputs or user content. The notifications from rights-holders are considered one of many sources of information. Notably, such notices constitute mere allegations of infringement, and the objective accuracy of the claim is not guaranteed, often necessitating that providers undertake fact-finding procedures.[44] It is also possible that notifications from trusted third persons who help reduce the infringement rate of outputs can trigger knowledge. Besides, the knowledge about the infringing content could also stem from one's own monitoring and investigation. Depending on the degree of controllability over the outputs, as well as the technical and economic possibilities, the extent of obligation to acquire knowledge may vary with respect to sources of information. For example, the greater the degree of controllability over the outputs, the broader the scope of relevant information sources becomes, and the more stringent the obligation to acquire knowledge is. In the next section of this contribution (D.), varying degrees of obligations to acquire knowledge will be allocated to the different actors operating GenAI models along the value chain.

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42 *Henderson et al.* Journal of Machine Learning Research 24 (2023), 1 (15).

43 BeckOK Informations- und MedienR/*Radtke*, 47. Ed. 01.02.2025, DSA Art. 6 Rn. 39; Hofmann/Raue/*Hofmann*, DSA Art. 6 Rn. 58; Mast/Kettemann/Dreyer/Schulz/*Spindler*, DSA Art. 6 Rn. 32; MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 980.

44 BGH NJW 2012, 148 Rn. 25 – Blogeintrag.

III. Good Samaritan Privilege

As aforementioned, the knowledge about the infringing content could stem from one's own monitoring and investigation. In practice, to enhance user safety and experience, comply with regulations, and avoid potential legal repercussions, the providers of AI systems involving generative models could take such filtering or monitoring measures to prevent outputting infringing content. However, the providers who take voluntary measures to detect and remove infringing outputs should not be put in a worse off place than those who do not, because these measures could contribute to triggering the liability establishing knowledge about the illegal outputs, a concern commonly referred to as the "Good Samaritan Paradox"[45]. Similar concerns have arisen in the context of intermediary liability. Art. 7 of the DSA addresses this dilemma by establishing that providers of intermediary services shall not be deemed ineligible for the exemptions from liability solely because they, in good faith and in a diligent manner, carry out voluntary own-initiative investigations into, or take other measures aimed at detecting, identifying and removing, or disabling access to, illegal content, or take the necessary measures to comply with the requirements of Union law and national law in compliance with Union law. It is thus necessary to ensure that the knowledge of the GenAI systems providers will not be presumed solely because they carry out voluntary own-initiative investigations into, or take other measures aimed at identifying and blocking infringing outputs, or take the necessary measures to comply with the requirements of Union law, especially the AIA, and national law in compliance with Union law. Nonetheless, if the provider adds filters and safeguards to prevent the end-user from generating infringing content, the liability can be reduced, not merely by reducing the likelihood of infringement but by making a product that is not designed to facilitate infringement.[46]

45 *Madiega*, Reform der EU-Haftungsregelung für Online-Vermittler, 2020, S. 22 <https://www.europarl.eu ropa.eu/RegData/etudes/IDAN/2020/649404/EPRS_IDA(2020)649404_DE.pdf>; *Kuczerawy*, CITIP Blog, 24 April 2018 <https://www.law.kuleuven.be/citip/blog/the-eucommission-on-voluntary-monitoring-good-samaritan-2-0-or-good-samaritan-0-5/>.

46 *Henderson et al.* Journal of Machine Learning Research 24 (2023), 1 (22).

D. Duties of Care along the AI Value Chain

I. Types of GenAI Providers Along the Value Chain

The involvement of multiple actors in the lifecycle of GenAI models complicates the attribution of liability for specific outputs to individual providers. Liability should be assessed based on the types of GenAI providers, as different actors along the AI value chain exercise varying degrees of control over the monitoring and filtering of infringing outputs.

Upstream GenAI model providers differ from downstream enterprises that integrate these models into end-user-facing applications.[47] GenAI models, as typical examples of general-purpose AI, are characterized by their generality and the diversity of tasks they perform. Unlike purpose-built systems, their intended uses are not predetermined and can vary widely. In contrast, downstream applications often specify concrete purposes through fine-tuning and integration into broader systems. Downstream enterprises that integrate GenAI models into larger systems and evolve them into more specialized, task-optimized solutions, either through fine-tuning, API-level configuration, or simply by adding user interfaces and integrating them into online sharing platforms, are considered providers of AI systems. Specialization of the purpose of usage of GenAI models enhances the foreseeability of the appearance of individual infringing outputs and potentially enables greater control over the legality of outputs within the context of their services.[48] This is especially the case when providers release their GenAI models as open-source software, which results in losing control over downstream use.

Notably, some GenAI model providers also offer services directly to the public, such as Chatbots or content generation tools, in addition to those tailored for enterprises.[49] Often, these services share the same underlying model but apply different filters or monitoring depending on the deployment context. Consequently, different duties of care may apply depending on the type of service provided.

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47 *Küspert et al.*, The value chain of general purpose AI, 2023 <https://www.adalovelaceinstitute.org/blog/value-chain-general-purpose-ai/>.

48 This could be comparable to the CJEU's "The Pirate Bay" judgment, according to which those who structure their network specifically to facilitate infringements are more likely to be held liable, see EuGH GRUR 2017, 790 Rn. 38 – The Pirate Bay.

49 European Union Intellectual Property Office, Development of Generative Artificial Intelligence from a Copyright Perspective, Annex IV, 2025 <https://www.euipo.europa.eu/en/publications/genai-from-a-copyright-perspective-2025>.

II. Source of Information

As aforementioned, the sources of information that trigger the obligation to acquire knowledge may vary depending on the degree of controllability over the outputs, as well as the technical and economic possibilities. It should also take the entrepreneurial freedom enshrined in Art. 16 of the Charter of Fundamental Rights of the European Union (CFR) of AI systems providers and the right to freedom of expression and information under Art. 11 of the CFR, as well as the right to freedom of arts and sciences under Art. 13 of the CFR of the end-users in to consideration. To strike a balance among fundamental rights, there should be no general obligation to proactively monitor for infringements of copyright or personality rights. Notices from injured parties can drastically reduce the costs of preventing further harm, as they enable the provider to identify the specific content at issue.[50] Consequently, the sources of information available to AI providers along the value chain should, in principle, be limited to notices from rightsholders.

GenAI model providers offering services for enterprises or releasing models as open source should, in principle, be exempt from obligations to acquire or act upon knowledge of specific infringements, even when notified by injured parties. This is because enterprise clients typically concretize and exercise control over the intended use of the model and are subject to clearer regulatory responsibilities in applying the relevant compliance standards and policies.[51] This, in turn, allows them to better foresee and address potential infringement risks. On the other hand, market-based mechanisms, particularly contractual indemnification, can play a role in mitigating the risk of infringement. In practice, major providers such as Microsoft and Google extend broad indemnification clauses to commercial and enterprise users, on the condition that these downstream entities comply with specific obligations, including adherence to codes of conduct and the implementation of technical filtering measures.[52] However,

50 MüKoBGB/*Wagner*, 9. Aufl. 2024, BGB § 823 Rn. 974.

51 Customization of GenAI models for specific tasks requires compliance with sector-specific regulations, such as the EU's Medical Device Regulation 2017/745 for medical AI devices.

52 Microsoft announces new Copilot Copyright Commitment for customers, Microsoft blogs, 2023, <https://blogs.microsoft.com/on-the-issues/2023/09/07/copilot-copyright-commitment-ai-legal-concerns/>; Shared fate: Protecting customers with generative AI indemnification, Google Cloud blog, 2023, <https://cloud.google.com/

when the same GenAI models are offered through services accessible to the public, providers should remain obligated to acquire knowledge through notifications, not only from injured parties but also from trusted flaggers, similar to the obligations imposed on online platform providers under Art. 22 of the DSA.

For a higher standard of duties of care, which could extend the obligation to acquire knowledge to include proactive measures to investigate the potential illegality of specific outputs even without notices from injured parties, the justification should take into account, among other things, whether applications are designed for particularly sensitive uses that carry a heightened risk of infringement. This could be compared to the CJEU judgments on "The Pirate Bay"[53] and "Filmspeler".[54] Notably, commercial use should not solely justify a more intensive obligation to acquire knowledge, similar to the CJEU judgement on "YouTube and Uploaded".[55] However, conversely, it is possible for the providers of GenAI models to reduce their liability through arguing, among others, that the nature of their models was non-commercial if they released the model under a non-commercial license and actively prevented its use for commercial purposes.[56]

An example of this particularly sensitive application of a GenAI model with heightened risk of infringement is the image-generating and sharing online platform, which enables end-users to generate images based on text prompts, train LoRA models to reinforce the intended image to be generated by the GenAI model, and share the generated images on the platform. This occurred in a Chinese copyright case, whose assessment of the facts may be taken into consideration when evaluating the tort liability of GenAI

blog/products/ai-machine-learning/protecting-customers-with-generative-ai-indemnification>; European Union Intellectual Property Office, Development of Generative Artificial Intelligence from a Copyright Perspective, Annex IV, 2025, p. 334 <https://www.euipo.europa.eu/en/publications/genai-from-a-copyright-perspective-2025>.

53 EuGH GRUR 2017, 790 – Stichting Brein/Ziggo.

54 EuGH GRUR Int. 2017, 527 – Filmspeler.

55 EuGH GRUR 2021, 1054 Rn. 86 – YouTube und uploaded.

56 A milder standard of liability applies to gratuitous contracts, cf. §§ 521, 599, and 690 of the BGB. In such cases, liability is either limited to the level of diligence ordinarily exercised by the individual in their own affairs or otherwise specifically restricted. For example, donors and lenders are only liable for intent and gross negligence, while a gratuitous safekeeper is only required to exercise the care they typically apply in their personal matters. See also *Henderson et al.* Journal of Machine Learning Research 24 (2023), 1 (23).

system providers under German law.[57] In this case, a Chinese court opined that the service enabling users to train LoRA models, which increases the risk of copyright infringement, justifies imposing a heightened standard of care on the provider, meaning the provider may be held liable even in the absence of notices from the rightsholder. When users only input the text prompt "Ultraman" (a famous Japanese comic character) and use the platform's base Checkpoint model for training, it is not possible to directly generate a specific image of Ultraman. However, when the Ultraman LoRA model is added during training, the system becomes capable of generating Ultraman images. While GenAI systems typically lack identifiability and intervenability regarding the outcomes of user behavior, and their outputs are generally random, the addition of the Ultraman LoRA model led to generated images that consistently displayed recognizable Ultraman features. In this scenario, the GenAI system demonstrated increased identifiability and intervenability concerning the outcomes of user actions. Furthermore, once the Ultraman LoRA models, trained using data uploaded by end-users, are shared on the platform, they can be repeatedly used by other users. This results in the continuous generation of additional infringing content, and the risk of widespread dissemination of infringing material becomes significantly higher.

III. Obligation to Implement Output Filters and Built-in Guardrails

Once providers become aware of the illegality of a specific output, or if the illegality is so obvious that providers should have known it without unreasonable effort, the infringing outputs must be prevented from being displayed again through the user interface. One possible approach, which is more meaningful for preventing copyright infringement, could be to apply a filter during model inference so that any output that mirrors the training data can be detected.[58] This kind of filter may fail to detect those outputs that are not identical to copyrighted works but still fall within copyright exemptions and limitations. Neither could this kind of filter detect the outputs entailing false factual statements, like in the aforementioned judge-

57 Copyright Infringement and Unfair Competition Dispute Case of Zhejiang Province Hangzhou Intermediate People's Court (China), Case No. (2024) Zhe 01 Min Zhong No. 10331,(2024)浙 01 民终 10332 号.

58 *Henderson et al.* Journal of Machine Learning Research 24 (2023), 1 (29).

ment of the LG Kiel.[59] Also, this filter could easily be bypassed with a single instruction. In the field of liability of social networks, in order to avoid bypassing the injunction through changing slightly words, the CJEU confirmed that an injunction may also cover future user-generated content which is substantially similar to the content that has been sentenced as personality rights infringing.[60] This requires the filtering system to detect potential outputs that mirror or are substantially similar to those reported by injured parties and identified as rights-infringing.

However, this obligation should not interfere with the exercise of the right to freedom of expression and information under Art. 11 of the CFR. This tension between two fundamental rights is particularly pronounced in copyright law. This calls for a consideration of the copyright dimension. The constitutional requirement for the proportionality of Art. 17 of the Directive on Copyright in the Digital Single Market (EU) 2019/790, which entails a de facto obligation to implement upload filters, requires that a filtering system should be able to sufficiently distinguish between unlawful and lawful content.[61] Content for which the rightholders have not given a blocking instruction to the online content-sharing service provider should not be considered manifestly infringing.[62] Accordingly, output filters in GenAI systems should be limited to cases where substantial similarity and content infringement are manifestly evident.

As aforementioned, human knowledge about the illegality of the specific output should be decisive. Therefore, while the output filter can be implemented through algorithms, this does not preclude the need for the content moderation results to be subject to subsequent human inspection where necessary.[63] The rigid statutory approach to filtering systems and human review mechanisms, as seemingly endorsed by the CJEU in its *Glawischnig-Piesczek* judgment, fails to account for the necessity of case-by-case assessment.[64] The providers must demonstrate which measures they have taken to detect unlawful content and explain why these measures constitute the

59 LG Kiel MMR 2025, 227 Rn. 36 (nicht rechtskräftig).

60 EuGH GRUR 2019, 1208 Rn. 36 – Glawischnig-Piesczek.

61 EuGH GRUR 2022, 820 Rn. 86 – Polen/Parlament und Rat.

62 Mitteilung der Kommission, Leitlinien zu Art. 17 der RL (EU) 2019/790 über das Urheberrecht im digitalen Binnenmarkt, 4 June 2021, COM(2021) 288 final, 21 ff.; *Leistner* GRUR 2022, 803 (806).

63 *Holznagel* ZUM 2019, 905 (912); *Janal* ZEuP 2021, 227 (250); *Schiff*, 2021, S. 277; *Spindler* NJW 2019, 3274 (3275).

64 EuGH GRUR 2019, 1208 Rn. 46 – Glawischnig-Piesczek; *Holznagel* ZUM 2019, 905 (912); *Kettemann/Tiedeke*, Welche Regeln, welches Recht? Glawischnig-Piesczek und

best efforts they can reasonably undertake. Courts may impose obligations such as human review or the use of filtering systems. However, the question of constitutionality must still be assessed on a case-by-case basis, taking into account the specific circumstances.

Downstream providers can and should be obligated to implement output filters upon becoming aware of the illegality of a specific output, given their enhanced oversight of the model's usage and their responsibility to uphold the relevant regulatory and policy frameworks, as mentioned above. Upstream model providers offering services to downstream enterprises or releasing models as open source could be exempted from obligations to implement output filters. However, GenAI models that simultaneously provide services to the public should be required to implement such output filters in their public-facing services.

Besides implementing output filters, built-in guardrails, such as fine-tuning or Reinforcement Learning from Human Feedback (RLHF), can be employed to prevent the re-generation of infringing outputs by reinforcing desired model behaviors. Additionally, "machine unlearning" is frequently discussed as a potential solution to address privacy concerns or copyright infringements arising from AI-generated outputs.[65] However, it is widely recognized that "machine unlearning" remains an emerging and nascent field,[66] and it remains to be seen how the technology will develop and what implications it will have for liability frameworks.

E. Conclusions

This contribution proposes the legal bases, de lege ferenda, under German tort law for holding providers of GenAI systems liable for outputs that infringe on personality rights or copyright due to omission of duties of care. The liability of GenAI system providers should balance interests among protecting subjective rights for rightholders, the entrepreneurial freedom of AI system providers, and the right to freedom of expression and information for end-users. This balance could be achieved through the normative

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die Gefahren nationaler Jurisdiktionskonflikte im Internet, 2019 <https://verfassungsblog.de/welche-regeln welches-recht/>.

65 *Novelli et al.* Computer Law & Security Review 55 (2024), 9; *Henderson et al.* Journal of Machine Learning Research 24 (2023), 1 (19).

66 *Henderson et al.* Journal of Machine Learning Research 24 (2023), 1 (18); *Pesch/Böhme* MMR 2023, 917 (919); *Piltz* K&R 2016, 557 (561).

structure of duties of care reconstructed in this article. By emphasizing normative knowledge as a decisive factor, this liability framework allows for flexible tailoring of duties of care to different kinds of providers along the AI value chain and can incorporate public regulatory rules and private ordering mechanisms into tort law systems. This research highlights the urgent need for further investigation into how public regulatory norms and private ordering interact within liability frameworks under tort law systems. The significant potential of co-regulation approaches in the emerging AI landscape warrants deeper conceptual exploration.