POSITION PAPER

VAUNET
German Media Association

Feedback to the European Commission's Call for Contributions on "Generative AI and Competition"

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Generative AI stands at the forefront of technological innovation, heralding a new era of content creation that promises to revolutionize how consumers and businesses interact with digital media.
For the private audiovisual media, creative industries and rights holders, AI can act as a catalyst for creativity and innovation.
However, to fully exploit all the opportunities offered by AI, it is paramount to foster a **pro-competitive** environment. The innovation spurred by AI must adhere to the principles and legal standards designed to ensure a fair competitive landscape within the European single market, safeguarding our cultural and creative heritage, and promoting diversity in expression and media.
This necessity and the capacity of Generative AI to create new content raises pressing concerns regarding copyright and intellectual property rights[1], but is also of central importance in the context of competition: access to AI training relevant data and the legality of its commercial use and exploitation as a core part of the AI value chain are critical for economic participation in the technology.
For the audiovisual media sector, where significant investments have been made to create content, the use of such content and related data for training AI models without proper consideration of intellectual property rights and compensation reflects an extensive exploitation of these rights. Thus, ensuring that training on such content is subject to the rights holders' opt-in and is adequately remunerated is crucial for ensuring the value chain of the creative sector. **Trustworthy media can only fulfil their role in democracy if this value creation can be ensured through fair competition for access to data and use of innovative technologies.**
The fervent debates surrounding incidents of fake news and deepfakes on prominent platforms like X or TikTok underscore the considerable societal dangers posed by AI systems and generative AI. These risks range from widespread plagiarism and the dissemination of false information to the creation of deepfakes, all of which threaten to erode public trust in media and government institutions, potentially exacerbating social polarization and radicalization.
A key concern in this scenario is the concentration of essential AI resources in the hands of dominant players within digital ecosystems. Such concentration has been a subject of legal scrutiny due to the anti-competitive actions of these entities, actions that have repeatedly been brought before European courts.

Since 2023, the ramifications of these emerging technologies have increasingly been viewed through the prism of antitrust policy and enforcement, drawing the focus of competition

[1] See VAUNET's position paper on the AI -Act, Copyright and Generative AI (https://vau.net/presse/positionen/vaunet-position-zum-ai-act-schutz-von-urheberrechten-beim-training-generativer-ki-systeme-essenziell/) and the Open Letter of VAUNET as part of an initiative of the Creative Sector to the German Federal Government requesting to vote in favor of the Trilogue compromise, https://vau.net/presse/positionen/ai-act-offener-brief-der-kultur-kreativ-und-medienwirtschaft-der-bundesrepublik-deutschland-an-die-bundesregierung/.

regulators across a variety of regions, including the UK[2], Portugal[3], Hungary[4], India[5], the United States[6], and France[7]. These developments underscore the strategic importance of aligning AI innovation with regulatory frameworks that uphold the integrity of competition and protect the diverse fabric of our cultural and media landscape.

The European Commission's commitment to enforcing EU competition rules is a vital step towards maintaining a competitive Single Market, which is essential for job creation and economic growth within the continent. This regulatory backdrop is especially relevant as we navigate the complexities introduced by generative AI. Ensuring a **level playing field** requires a nuanced understanding of these technologies' impact on competition, alongside proactive measures to address the potential monopolistic tendencies that could undermine the dynamism of the audiovisual industry.

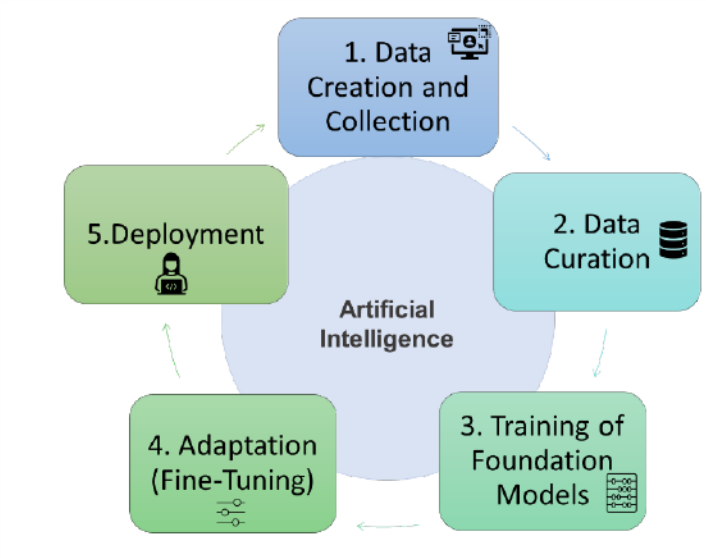
VAUNET's submission aims to highlight the specific challenges generative AI poses to the audiovisual sector, advocating for regulatory and policy frameworks that promote innovation while safeguarding competitive integrity. Our focus is on ensuring equitable access to AI technologies, protecting the rights of content creators and rightsholders, and fostering an environment where the audiovisual industry can leverage the benefits of generative AI.

1. What are the main components (i.e., inputs) necessary to build, train, deploy and distribute generative AI systems? Please explain the importance of these components

Building, training, deploying, and distributing generative AI systems involve a complex interplay of various crucial components. Each of these components plays a significant role in the lifecycle of an AI system, influencing its effectiveness, scalability, and ethical considerations.

AI development involves the following five stages (AI Stack)[8]:

[2] https://www.gov.uk/cma-cases/ai-foundation-models-initial-review.
[3] https://www.concorrencia.pt/sites/default/files/documentos/Issues%20Paper%20-%20Competition%20and%20Generative%20Artificial%20Intelligence.pdf
[4] https://www.gvh.hu/en/press_room/press_releases/press-releases-2024/gvh-launches-market-analysis-on-the-impact-of-artificial-intelligence.
[5] https://www.cnbctv18.com/news/cci-chairperson-ravneet-kaur-on-artificial-intelligence-discriminatory-pricing-anti-competitiveness-digital-competition-law-18492891.htm.
[6] https://www.ftc.gov/news-events/news/press-releases/2024/01/ftc-launches-inquiry-generative-ai-investments-partnerships
[7] https://www.autoritedelaconcurrence.fr/fr/communiques-de-presse/intelligence-artificielle-generative-lautorite-sautosaisit-pour-avis-et-lance
[8] Höppner/Streatfeild, Hausfeld Competition Bulletin (1/2023), Article 1, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4371681 with further references.



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Data as the Cornerstone of Generative AI : Foundational models, which are a key part of generative AI systems, rely heavily on extensive datasets that are both vast in quantity and diverse in content. These datasets often incorporate both proprietary and public data from various sources. The diversity and volume of data directly impact the model's performance, enabling it to generate more accurate and nuanced outputs.
Data serves as both the lifeblood of AI and a significant source of economic value, particularly as user interactions refine models and give rise to data-driven network effects.

Computational Power and Infrastructure: The backbone of generative AI development, training, and deployment is robust computational power, often provided through cloud computing infrastructure[9]. This infrastructure supports the technology stack for language and foundational models, including APIs and a significant amount of hardware resources.

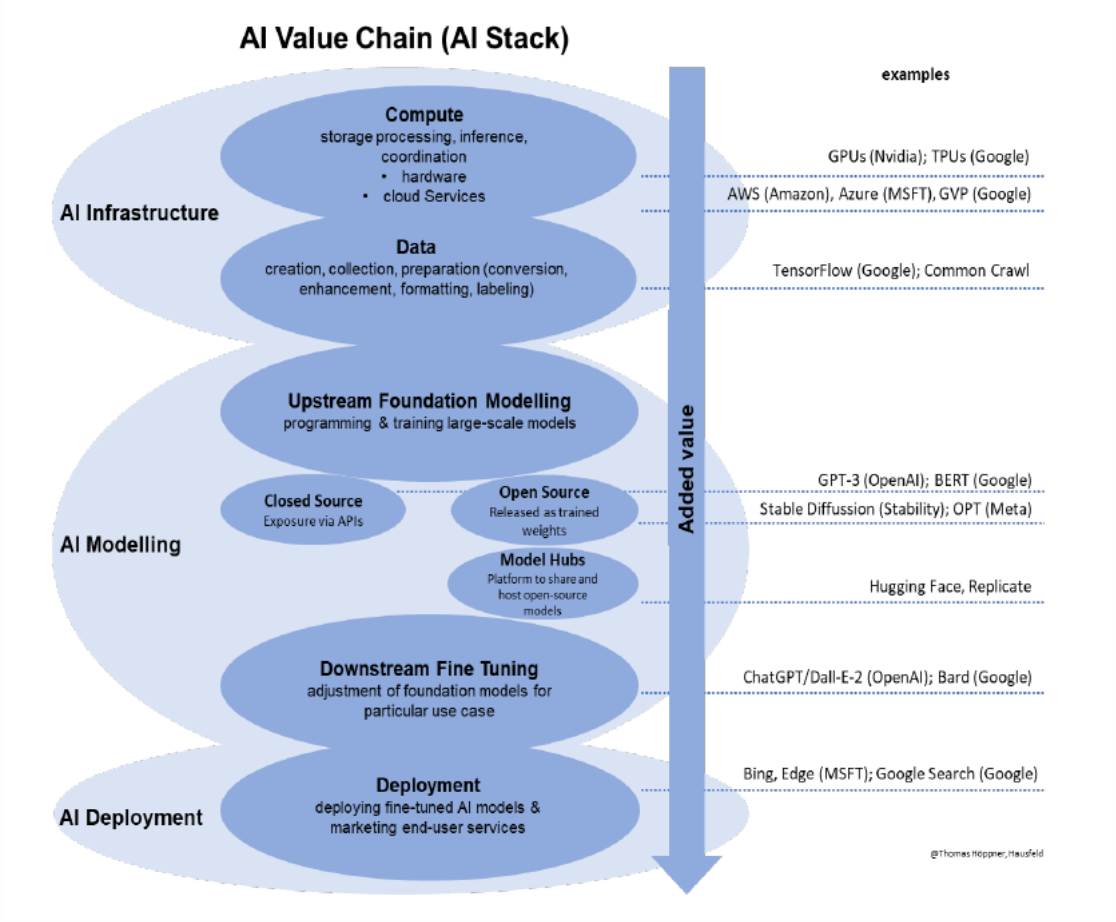
The cost of computing, which varies based on model size, data, hardware, and cloud provider, can be substantial. Although actual compute expenses are often undisclosed, it is known that they represent significant investments for the training, fine-tuning, and inference stages of AI development. Furthermore, the infrastructure for AI significantly shapes market dynamics, often enhancing the concentration of power among those already dominant in the tech sector. Access to computational resources thus becomes a pivotal factor, enabling firms to strengthen their market positions and exert influence.

Regulatory and Economic Frameworks: The generation and training of AI models on content, particularly in creative sectors, raise important considerations around intellectual property rights and the economic value derived from data. It's essential to navigate these concerns thoughtfully to ensure fair compensation and respect for the rights of content creators and rights holders.

[9] See the Sastry/ Heim et al., Report "Computing Power and the Governance of Artificial Intelligence", http://lcfi.ac.uk/resources/computing-power-and-governance-artificial-intellig/.

The distribution of computational resources and the ability to leverage vast datasets also have significant implications for market competition and innovation.

Höppner/Streatfeild illustrate the AI Stack as follows showing the interdependencies and overlaps between the different AI layers and players[10]:



2. What are the main barriers to entry and expansion for the provision, distribution or integration of generative AI systems and/or components, including AI models? Please indicate to which components they relate.

From the perspective of the audiovisual industry and rightsholders, the main barriers to entry and expansion in the provision, distribution, or integration of generative AI systems and components, including AI models, are multifaceted. These barriers can significantly impact the competitiveness and innovation within the sector, especially in light of the evolving dynamics of generative AI technology.

[10] The French Competition Authority uses a similar infographic illustrating the current value chain of AI https://www.autoritedelaconcurrence.fr/sites/default/files/2024-02/Infographie_eng.png.

Scale Effects and Switching Costs: The development and deployment of foundational models in the generative AI domain exhibit pronounced scale effects and high switching costs[11]. This situation inherently favors incumbents and early adopters, potentially leading to a high concentration within the market. For new entrants, this means overcoming substantial barriers to effectively compete with established players who already possess extensive datasets, computational resources, and technological infrastructure. The reliance on foundational models that require significant investment to develop and maintain can deter new players from entering the market.

Access to Data: Access to diverse and high-quality data stands as a crucial asset for the training and refinement of generative AI models. However, the acquisition of such datasets is often costly and involves issues of copyright and data ownership. Big Tech companies currently hold a majority of data, providing them with a distinct advantage. This dynamic creates a significant hurdle for the AV sector, whose data is also the basis for training the AI models.

Computational Resources: The scarcity and high cost of computational resources necessary for developing and deploying AI models present another significant barrier. New startups and smaller players must secure compute credits from major tech firms or contract with hosted model service providers, which can be a costly and complex process. The concentration of computational resources among a few dominant tech companies can lead to market dynamics that further entrench their positions, making it difficult for new entrants to compete effectively.

Infrastructure Costs and Third-Party Dependency: The substantial cost associated with the infrastructure required for AI development and deployment is a notable barrier. Most players in the sector need to rely on third-party providers for access to computational resources and AI technologies. This dependency on a limited number of suppliers could potentially lead to an oligopoly, where a few providers wield disproportionate influence over the market. Ensuring a competitive market is crucial for preventing such a scenario and guaranteeing fair and equal access to essential tools for content creation.

Vertical Integration and Market Access: The vertical integration of businesses that offer both generative AI models and digital platforms, poses a unique challenge. It's essential to ensure guaranteed access to data and AI tools for content creators and right holders to foster competition. Without fair access to data as basis for the whole AI value chain, content creators and right holders in the AV sector might find themselves unable to compete with vertically integrated entities that control both the creation tools and distribution platforms.

[11] https://www.concorrencia.pt/sites/default/files/documentos/Issues%20Paper%20-%20Competition%20and%20Generative%20Artificial%20Intelligence.pdf, p.24.

3. What are the main drivers of competition (i.e., the elements that make a company a successful player) for the provision, distribution or integration of generative AI systems and/or components, including AI models?

The main drivers of competition in this domain include:

Access to Data: High-quality, diverse datasets are foundational for training effective generative AI models. Companies with extensive access to such data can develop more sophisticated and accurate AI systems, giving them a competitive edge.

Technological Expertise and Innovation: Continuous research and development in AI technologies and algorithms are critical. The ability to innovate and improve AI models, including developing proprietary algorithms or adopting cutting-edge techniques, can set a company apart in terms of the capabilities and efficiency of their AI solutions.

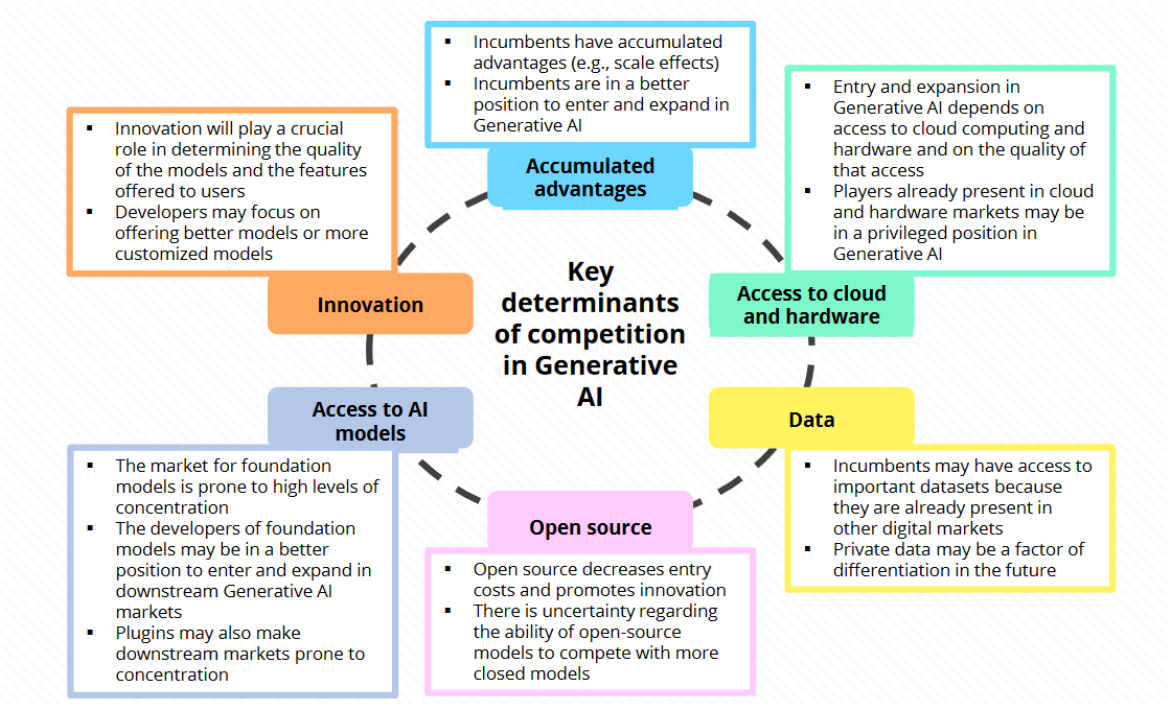
Scalability and Flexibility: Successful companies must be able to scale their AI solutions efficiently to accommodate the needs of a growing and diverse customer base. Flexibility in addressing various use cases and adapting to different industry requirements is also vital.

Partnerships and Ecosystem Collaboration: Forming strategic alliances with other technology providers, research institutions, and industry-specific clients can enhance a company's offering by integrating complementary technologies and expanding market reach.

Regulatory Compliance and Ethical Standards: Navigating the complex regulatory landscape and adhering to ethical guidelines, including data privacy and security standards, is increasingly becoming a competitive advantage, building trust with users and clients.

Success hinges on leveraging these drivers across the development and distribution of AI systems. A very good overview regarding the main determinants of competition in Generative AI is given by the Autoridade da Concorrenza in its paper on the risks of AI in Competition[12].

[12] https://www.concorrencia.pt/sites/default/files/documentos/Issues%20Paper%20-%20Competition%20and%20Generative%20Artificial%20Intelligence.pdf.



The abovementioned drivers of competition are deeply influenced by the technological and strategic advantages held by major tech companies. Addressing the challenges posed by these dynamics is essential for ensuring a competitive and vibrant AV sector that can leverage generative AI technologies to their fullest potential.

4. Which competition issues will likely emerge for the provision, distribution or integration of generative AI systems and/or components, including AI models? Please indicate to which components they relate.

The Generative AI landscape is fraught with competition issues that could limit innovation, entry, and fair market practices[13]. Addressing these concerns requires comprehensive regulatory approaches, ensuring fair access to data, computational resources, and markets, while protecting the interests of creators and rightsholders in the audiovisual and creative sectors.

Market Concentration and Scale Effects: Generative AI markets are particularly susceptible to high levels of concentration due to scale effects that benefit digital incumbents. These firms leverage their vast volumes of data and substantial computing power to build competitive advantages, often leading to significant market power. This power enables them to potentially create and exploit bottlenecks, excluding or disadvantaging competitors.

Compute Scarcity: The high demand for computational resources for training and deploying AI models can concentrate market power in the hands of a few companies controlling these

[13] See Open Markets Institute "AI in the Public Interest: Confronting the Monopoly Threat", https://www.openmarketsinstitute.org/publications/report-ai-in-the-public-interest-confronting-the-monopoly-threat.

essential resources. This scarcity can hinder new entrants and innovation, reinforcing the dominance of established players.

Tying and Bundling Practices: Dominant firms might use tying and bundling practices to promote their products over competitors, potentially distorting competition. Such strategies may enable firms with dominance in one area to unfairly leverage their position to gain an advantage in other competitive markets.

Control Over Consumer Data: Major tech companies' control over consumer behavioral data presents significant entry barriers for potential competitors. This control not only entrenches incumbents' positions but also makes it exceedingly difficult for new entrants to challenge their dominance.

Algorithmic Collusion: The risk of algorithmic collusion through pricing algorithms or cartel arrangements poses new challenges. Algorithms might learn to collude over time, even if not explicitly programmed to do so, leading to excessive pricing and undermining competitive practices.

Refusal to Supply and Ecosystem Lock-in: Larger companies may refuse to supply critical components or data to competitors, while ecosystem lock-in effects make it difficult for newcomers to compete. These strategies exacerbate the challenges of entering and expanding in the AI market.

Killer Acquisitions: The practice of "killer acquisitions," where incumbent firms acquire emerging competitors to neutralize potential threats, has extended to the digital industry. Such acquisitions can stifle competition, innovation, and market entry, raising calls for increased regulatory scrutiny.

Specific Concerns for the Audiovisual and Creative Sector: For the audiovisual and creative sectors, a key concern is the exploitation of rightsholders' content to create competing products and services. This exploitation poses direct challenges to the value creation and distribution in these industries, necessitating considerations around intellectual property rights and fair remuneration for the use of such content in generative AI applications.

7. What is the role of data and what are its relevant characteristics for the provision of generative AI systems and/or components, including AI models?

The role of data in the realm of generative AI systems and components, including AI models, is foundational and multifaceted, underpinning not just the technical capabilities of these systems but also their strategic and ethical considerations. Data's significance is highlighted by several critical characteristics that directly influence the effectiveness and competitiveness of generative AI technologies.

Volume and Variety: Large and diverse datasets are instrumental in training robust AI models. The volume of data ensures that the models can recognize a wide range of patterns and nuances, while the variety—spanning different types, sources, and formats—enables the models to understand and generate content that is rich and varied. This diversity is particularly important in generative AI, where the ability to produce novel, complex outputs across different domains relies heavily on the breadth and depth of the training data.

Quality and Relevance: The quality of data, defined by its accuracy, cleanliness, and relevance to the task at hand, directly impacts the performance of AI models. High-quality, domain-specific data allows models to learn more effectively, leading to outputs that are more accurate, coherent, and useful. For generative AI the relevance and precision of the training data are paramount.

Access and Exclusivity: Control over unique or proprietary datasets can provide significant competitive advantages. Exclusive access to specific types of data can allow companies to develop AI models with unique capabilities or to better serve niche markets. This exclusivity can become a key differentiator, especially in sectors where data is scarce, highly specialized, or difficult to collect.

Ethical and Legal Considerations: Generative AI raises significant ethical and legal issues, particularly regarding privacy, security, and intellectual property rights. The use of copyrighted material as training data without proper authorization can lead to copyright infringement issues, posing challenges for both AI developers and copyright holders[14]. Furthermore, the manipulation of training data to influence AI model outputs can introduce risks related to the reliability, security, and ethical implications of these systems.

Ensuring that AI development respects copyright, intellectual property rights and privacy considerations is crucial. This balance is not only a matter of legal compliance but also of fostering trust and sustainability within the AI ecosystem.

In summary, data is at the heart of generative AI, influencing everything from technical capabilities to competitive positioning and ethical considerations. Understanding and navigating the complexities of data usage—balancing volume, variety, quality, and access with respect for privacy and intellectual property rights—is essential for the advancement and responsible deployment of generative AI technologies.

10) What is the rationale of the investments and/or acquisitions of large companies in small providers of generative AI systems and/or components, including AI models? How will they affect competition?

Large companies invest in smaller AI ventures to access innovative technologies and thus stay at the forefront of AI advancements. They further want to expand their market reach by entering new markets or enhancing current offerings[15].

Partnerships between e.g. large cloud providers and model developers will potentially raise merger concerns. First, they may not meet the criteria for control under the European Merger Regulation (EUMR). In many cases these partnerships consist of exchanging access to models for access to cloud computing resources. While the cloud partner may exert a competitive constraint on the model partner, the former reportedly lacks control over the latter. In such cases, the partnership is likely to fall outside the scope of the Block Exemption Regulation.

[14] See above p.1.
[15] Carugati, "Competition in Generative Artificial Intelligence Foundation Models" (2023) Bruegel Working paper; "Digital Competition's Submission to the European Commission's Consultation on Generative AI", https://www.digital-competition.com/comment/digital-competition%E2%80%99s-submission-to-the-european-commission%E2%80%99s-consultation-on-generative-ai.

Second, these partnerships take different forms. Some are exclusive, such as the partnership between Microsoft and OpenAI, while others are non-exclusive, such as the partnership between Amazon and Anthropic[16]. While these collaborations can foster competition and investment, they can also lead to problematic practices such as tying.

The Commission can only review a partnership under the EUMR if it results in a change of control. Consequently, there is a potential enforcement gap where the partnership does not result in a change of control.

To address this, the Commission could consider revising the EUMR to cover partnerships by changing the definition of control from a change of control requirement to a competitive influence requirement, as in German merger control law[17]. However, such a change could result in a potentially higher number of mergers being reviewed that do not raise competition concerns. Given the relatively small number of potentially anti-competitive partnerships and the increased administrative costs for the Commission, this change may not be cost effective.

11) Do you expect the emergence of generative AI systems and/or components, including AI models to trigger the need to adapt EU legal antitrust concepts?

The emergence of generative AI systems necessitates the quick adaptation of antitrust concepts to address:

- New Forms of Market Power, especially related to data and algorithms.
- Dynamic Competition: Reflecting the fast-paced evolution of AI technologies.

From the perspective of the German private audiovisual media industry, the advent of generative AI systems and components, including AI models, undeniably signals a pressing need to adapt EU legal antitrust concepts and enhance antitrust enforcement. The integration of generative AI into various sectors, especially in creating content, marketing, and user interaction, brings forth novel challenges and dynamics that current antitrust frameworks may not fully address.

New Forms of Market Power: Generative AI technologies introduce new forms of market power, particularly through the control of data and the algorithms that process this data. The competitive advantage now increasingly lies in the accumulation and analysis of vast datasets, which feed the self-learning capabilities of AI systems. This control over data can lead to unprecedented market dominance, as those with access to more (or more nuanced) data can develop more advanced and capable AI models, further entrenching their market position. Moreover, algorithms themselves can become sources of market power. Their ability to learn, adapt, and make decisions with minimal human intervention can lead to outcomes that might not be immediately transparent or even understandable to humans, including potential anti-competitive behaviors that traditional antitrust laws are not equipped to manage.
Dynamic Competition: The rapid evolution of AI technologies poses another significant challenge. Generative AI systems are not static; they continuously evolve, learning from new data and interactions. This dynamism can drastically alter market landscapes within short periods,

[16] https://www.handelsblatt.com/technik/ki/kuenstliche-intelligenz-amazon-investiert-vier-milliarden-dollar-in-ki-start-up-anthropic/29409764.html
[17] https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2023/15_11_2023_Microsoft_OpenAI.html; It was established that OpenAI's activities in Germany were not substantial until 2023; examination of all possible aspects suggested that Microsoft's involvement was not subject to a notification obligation under merger control in Germany.

potentially outpacing the regulatory mechanisms designed to ensure fair competition. The fast-paced development and deployment of AI technologies mean that antitrust concepts must be agile and adaptable to remain effective.

Antitrust Concepts Adaptation: Given these considerations, there's a clear need for EU antitrust concepts to evolve. This evolution should in particular account for the role *of* data*:* Recognizing data as a critical competitive asset and addressing the monopolization of data resources is key. The DMA and its obligations for gatekeepers are an important step in the right direction.
But the DMA also needs an update to address the specifics of the AI industry: The DMA's current framework, while addressing core platform services, does not specifically contemplate the implications of AI as a platform. Given the pervasive role of AI in enhancing the capabilities of online intermediation services, search engines, virtual assistants, and particularly cloud computing services, a revision is needed. An updated DMA should explicitly address AI platforms, ensuring that data practices within these contexts do not undermine competition by unfairly tailoring AI offerings or creating barriers to entry.

12) Do you expect the emergence of generative AI systems to trigger the need to adapt EU antitrust investigation tools and practices?

The emergence of generative AI systems undeniably prompts a reconsideration of the European Union's antitrust investigation tools and practices, especially from the perspective of the private audiovisual media in Germany. This sector, deeply intertwined with digital innovation and content distribution, stands at the forefront of experiencing the shifts brought about by AI technologies.

To effectively navigate these changes, there are critical areas where adaptations are deemed essential:

Assessing AI-driven Markets: The complexity and dynamism of AI-driven markets necessitate a refined approach to antitrust investigations. Traditional models of understanding competition may fall short in capturing the nuanced ways in which AI can influence market dynamics, consumer behavior, and competitive advantages. Thus, adapting investigation tools to better understand these new competitive landscapes is paramount. This includes developing methodologies capable of assessing the impacts of AI algorithms on market structures and the behaviors they incentivize or the expansion of market investigation options[18].

Ensuring Fair Competition: Generative AI introduces novel challenges that could potentially skew competition. Algorithms, in particular, pose a unique set of concerns, as their autonomous decision-making processes can lead to outcomes such as self-optimized pricing strategies or even unintentional collusion without explicit human directive. Ensuring fair competition in this context requires tools and practices that can effectively analyze and interpret algorithmic decision-making and its implications on competitive dynamics.

Enhanced Cooperation Among Competition Authorities: The rise of AI technologies exacerbates the potential for Big Tech companies to cement their market power, necessitating

[18] In this respect, see the speech of Sven Giegold, *Secretary of State in the German Federal Ministry for Economic Affairs and Climate Protection (BMWK)* or the International Cartel Conference (IKK) on 29 Feb. 2024 outlining the plans for Germany's and Europe's future in the field of competition policy, https://www.bmwk.de/Redaktion/DE/Reden/2024/rede-sven-giegold-internationalen-kartellkonferenz.html.

closer cooperation among competition authorities at national, European, and international levels. The vertical integration observed across the AI value chain introduces significant conflicts of interest, potentially leading to anti-competitive leveraging behavior. Ensuring a coherent approach to addressing these challenges will likely require intensified collaboration within frameworks such as the International Competition Network (ICN) and the European Competition Network (ECN).

Assessment of Legal Frameworks: The interplay between various legal frameworks, including the Data Act and the AI Act, and competition law merits careful examination. The AI Act, for example, introduces new procedural powers for supervisory agencies, which will inevitably influence competition law enforcement practices. These powers include enhanced investigative capabilities that could be pivotal in scrutinizing AI systems for compliance with both AI-specific regulations and broader competition principles.

The adaptation of EU antitrust investigation tools and practices in response to the emergence of generative AI systems is not just beneficial but essential. The private audiovisual media industry in Germany, along with other sectors, will benefit from a regulatory environment that is agile, informed, and capable of ensuring that the development and deployment of AI technologies promote healthy competition, innovation, and consumer protection. This requires a forward-looking approach that embraces the complexities of AI, equipping antitrust authorities with the tools, knowledge, and collaborative frameworks necessary to address the challenges of tomorrow's digital markets.

About VAUNET:

VAUNET is the umbrella organisation of private audiovisual media in Germany. The diverse business areas of the approximately 160 members include TV, radio, web and streaming offerings. The trade association aims to create acceptance for the political and economic concerns of the audiovisual media on a national and European level and to raise awareness of the great socio-political and cultural importance of the industry in the digital age.