Article 2

Scope

Commentary by Daan van der Neut | Submitted: June 2026

AI Act provision

Article 2

1. This Regulation applies to:

(a) providers placing on the market or putting into service AI systems or placing on the market general-purpose AI models in the Union, irrespective of whether those providers are established or located within the Union or in a third country;

(b) deployers of AI systems that have their place of establishment or are located within the Union;

(c) providers and deployers of AI systems that have their place of establishment or are located in a third country, where the output produced by the AI system is used in the Union;

(d) importers and distributors of AI systems;

(e) product manufacturers placing on the market or putting into service an AI system together with their product and under their own name or trademark;

(f) authorised representatives of providers, which are not established in the Union;

(g) affected persons that are located in the Union.

2. For AI systems classified as high-risk AI systems in accordance with Article 6(1) related to products covered by the Union harmonisation legislation listed in Section B of Annex I, only Article 6(1), Articles 102 to 109 and Article 112 apply. Article 57 applies only in so far as the requirements for high-risk AI systems under this Regulation have been integrated in that Union harmonisation legislation.

3. This Regulation does not apply to areas outside the scope of Union law, and shall not, in any event, affect the competences of the Member States concerning national security, regardless of the type of entity entrusted by the Member States with carrying out tasks in relation to those competences.

This Regulation does not apply to AI systems where and in so far they are placed on the market, put into service, or used with or without modification exclusively for military, defence or national security purposes, regardless of the type of entity carrying out those activities.

This Regulation does not apply to AI systems which are not placed on the market or put into service in the Union, where the output is used in the Union exclusively for military, defence or national security purposes, regardless of the type of entity carrying out those activities.

4. This Regulation applies neither to public authorities in a third country nor to international organisations falling within the scope of this Regulation pursuant to paragraph 1, where those authorities or organisations use AI systems in the framework of international cooperation or agreements for law enforcement and judicial cooperation with the Union or with one or more Member States, provided that such a third country or international organisation provides adequate safeguards with respect to the protection of fundamental rights and freedoms of individuals.

5. This Regulation shall not affect the application of the provisions on the liability of providers of intermediary services as set out in Chapter II of Regulation (EU) 2022/2065.

6. This Regulation does not apply to AI systems or AI models, including their output, specifically developed and put into service for the sole purpose of scientific research and development.

7. Union law on the protection of personal data, privacy and the confidentiality of communications applies to personal data processed in connection with the rights and obligations laid down in this Regulation. This Regulation shall not affect Regulation (EU) 2016/679 or (EU) 2018/1725, or Directive 2002/58/EC or (EU) 2016/680, without prejudice to Article 10(5) and Article 59 of this Regulation.

8. This Regulation does not apply to any research, testing or development activity regarding AI systems or AI models prior to their being placed on the market or put into service. Such activities shall be conducted in accordance with applicable Union law. Testing in real world conditions shall not be covered by that exclusion.

9. This Regulation is without prejudice to the rules laid down by other Union legal acts related to consumer protection and product safety.

10. This Regulation does not apply to obligations of deployers who are natural persons using AI systems in the course of a purely personal non-professional activity.

11. This Regulation does not preclude the Union or Member States from maintaining or introducing laws, regulations or administrative provisions which are more favourable to workers in terms of protecting their rights in respect of the use of AI systems by employers, or from encouraging or allowing the application of collective agreements which are more favourable to workers.

12. This Regulation does not apply to AI systems released under free and open-source licences, unless they are placed on the market or put into service as high-risk AI systems or as an AI system that falls under Article 5 or 50.

Recitals

Recital 9

Harmonised rules applicable to the placing on the market, the putting into service and the use of high-risk AI systems should be laid down consistently with Regulation (EC) No 765/2008 of the European Parliament and of the Council (7), Decision No 768/2008/EC of the European Parliament and of the Council (8) and Regulation (EU) 2019/1020 of the European Parliament and of the Council (9) (New Legislative Framework). The harmonised rules laid down in this Regulation should apply across sectors and, in line with the New Legislative Framework, should be without prejudice to existing Union law, in particular on data protection, consumer protection, fundamental rights, employment, and protection of workers, and product safety, to which this Regulation is complementary. As a consequence, all rights and remedies provided for by such Union law to consumers, and other persons on whom AI systems may have a negative impact, including as regards the compensation of possible damages pursuant to Council Directive 85/374/EEC(10) remain unaffected and fully applicable. Furthermore, in the context of employment and protection of workers, this Regulation should therefore not affect Union law on social policy and national labour law, in compliance with Union law, concerning employment and working conditions, including health and safety at work and the relationship between employers and workers. This Regulation should also not affect the exercise of fundamental rights as recognised in the Member States and at Union level, including the right or freedom to strike or to take other action covered by the specific industrial relations systems in Member States as well as the right to negotiate, to conclude and enforce collective agreements or to take collective action in accordance with national law. This Regulation should not affect the provisions aiming to improve working conditions in platform work laid down in a Directive of the European Parliament and of the Council on improving working conditions in platform work. Moreover, this Regulation aims to strengthen the effectiveness of such existing rights and remedies by establishing specific requirements and obligations, including in respect of the transparency, technical documentation and record-keeping of AI systems. Furthermore, the obligations placed on various operators involved in the AI value chain under this Regulation should apply without prejudice to national law, in compliance with Union law, having the effect of limiting the use of certain AI systems where such law falls outside the scope of this Regulation or pursues legitimate public interest objectives other than those pursued by this Regulation. For example, national labour law and law on the protection of minors, namely persons below the age of 18, taking into account the UNCRC General Comment No 25 (2021) on children's rights in relation to the digital environment, insofar as they are not specific to AI systems and pursue other legitimate public interest objectives, should not be affected by this Regulation.

Recital 24

If, and insofar as, AI systems are placed on the market, put into service, or used with or without modification of such systems for military, defence or national security purposes, those should be excluded from the scope of this Regulation regardless of which type of entity is carrying out those activities, such as whether it is a public or private entity. As regards military and defence purposes, such exclusion is justified both by Article 4(2) TEU and by the specificities of the Member States' and the common Union defence policy covered by Chapter 2 of Title V TEU that are subject to public international law, which is therefore the more appropriate legal framework for the regulation of AI systems in the context of the use of lethal force and other AI systems in the context of military and defence activities. As regards national security purposes, the exclusion is justified both by the fact that national security remains the sole responsibility of Member States in accordance with Article 4(2) TEU and by the specific nature and operational needs of national security activities and specific national rules applicable to those activities. Nonetheless, if an AI system developed, placed on the market, put into service or used for military, defence or national

security purposes is used outside those temporarily or permanently for other purposes, for example, civilian or humanitarian purposes, law enforcement or public security purposes, such a system would fall within the scope of this Regulation. In that case, the entity using the system for other than military, defence or national security purposes should ensure compliance of the system with this Regulation, unless the system is already compliant with this Regulation. AI systems placed on the market or put into service for an excluded purpose, namely military, defence or national security, and one or more non-excluded purposes, such as civilian purposes or law enforcement, fall within the scope of this Regulation and providers of those systems should ensure compliance with this Regulation. In those cases, the fact that an AI system may fall within the scope of this Regulation should not affect the possibility of entities carrying out national security, defence and military activities, regardless of the type of entity carrying out those activities, to use AI systems for national security, military and defence purposes, the use of which is excluded from the scope of this Regulation. An AI system placed on the market for civilian or law enforcement purposes which is used with or without modification for military, defence or national security purposes should not fall within the scope of this Regulation, regardless of the type of entity carrying out those activities.

Recital 25

This Regulation should support innovation, should respect freedom of science, and should not undermine research and development activity. It is therefore necessary to exclude from its scope AI systems and models specifically developed and put into service for the sole purpose of scientific research and development. Moreover, it is necessary to ensure that this Regulation does not otherwise affect scientific research and development activity on AI systems or models prior to being placed on the market or put into service. As regards product-oriented research, testing and development activity regarding AI systems or models, the provisions of this Regulation should also not apply prior to those systems and models being put into service or placed on the market. That exclusion is without prejudice to the obligation to comply with this Regulation where an AI system falling into the scope of this Regulation is placed on the market or put into service as a result of such research and development activity and to the application of provisions on AI regulatory sandboxes and testing in real world conditions. Furthermore, without prejudice to the exclusion of AI systems specifically developed and put into service for the sole purpose of scientific research and development, any other AI system that may be used for the conduct of any research and development activity should remain subject to the provisions of this Regulation. In any event, any research and development activity should be carried out in accordance with recognised ethical and professional standards for scientific research and should be conducted in accordance with applicable Union law.

Recital 89

Third parties making accessible to the public tools, services, processes, or AI components other than general-purpose AI models, should not be mandated to comply with requirements targeting the responsibilities along the AI value chain, in particular towards the provider that has used or integrated them, when those tools, services, processes, or AI components are made accessible under a free and open-source licence. Developers of free and open-source tools, services, processes, or AI components other than general-purpose AI models should be encouraged to implement widely adopted documentation practices, such as model cards and data sheets, as a way to accelerate information sharing along the AI value chain, allowing the promotion of trustworthy AI systems in the Union.

Recital 97

The notion of general-purpose AI models should be clearly defined and set apart from the notion of AI systems to enable legal certainty. The definition should be based on the key functional characteristics of a general-purpose AI model, in particular the generality and the capability to competently perform a wide range of distinct tasks. These models are typically trained on large amounts of data, through various methods, such as self-supervised, unsupervised or reinforcement learning. General-purpose AI models may be placed on the market in various ways, including through libraries, application programming interfaces (APIs), as direct download, or as physical copy. These models may be further modified or fine-tuned into new models. Although AI models are essential components of AI systems, they do not constitute AI systems on their own. AI models require the addition of further components, such as for example a user interface, to become AI systems. AI models are typically integrated into and form part of AI systems. This Regulation provides specific rules for general-purpose AI models and for general-purpose AI models that pose systemic risks, which should apply also when these models are integrated or form part of an AI system. It should be understood that the obligations for the providers of general-purpose AI models should apply once the general-purpose AI models are placed on the market. When the provider of a general-purpose AI model integrates an own model into its own AI system that is made available on the market or put into service, that model should be considered to be placed on the market and, therefore, the obligations in this Regulation for models should continue to apply in addition to those for AI systems. The obligations laid down for models should in any case not apply when an own model is used for purely internal processes that are not essential for providing a product or a service to third parties and the rights of natural persons are not affected. Considering their potential significantly negative effects, the general-purpose AI models with systemic risk should always be subject to the relevant obligations under this Regulation. The definition should not cover AI models used before their placing on the market for the sole purpose of research, development and prototyping activities. This is without prejudice to the obligation to comply with this Regulation when, following such activities, a model is placed on the market.

Recital 100

When a general-purpose AI model is integrated into or forms part of an AI system, this system should be considered to be general-purpose AI system when, due to this integration, this system has the capability to serve a variety of purposes. A general-purpose AI system can be used directly, or it may be integrated into other AI systems.

Recital 102

Software and data, including models, released under a free and open-source licence that allows them to be openly shared and where users can freely access, use, modify and redistribute them or modified versions thereof, can contribute to research and innovation in the market and can provide significant growth opportunities for the Union economy. General-purpose AI models released under free and open-source licences should be considered to ensure high levels of transparency and openness if their parameters, including the weights, the information on the model architecture, and the information on model usage are made publicly available. The licence should be considered to be free and open-source also when it allows users to run, copy, distribute, study, change and improve software and data, including models under the condition that the original provider of the model is credited, the identical or comparable terms of distribution are respected.

Recital 103

Free and open-source AI components covers the software and data, including models and general-purpose AI models, tools, services or processes of an AI system. Free and open-source AI components can be provided through different channels, including their development on open repositories. For the purposes of this Regulation, AI components that are provided against a price or otherwise monetised, including through the provision of technical support or other services, including through a software platform, related to the AI component, or the use of personal data for reasons other than exclusively for improving the security, compatibility or interoperability of the software, with the exception of transactions between microenterprises, should not benefit from the exceptions provided to free and open source AI components. The fact of making AI components available through open repositories should not, in itself, constitute a monetisation.

Recital 104

The providers of general-purpose AI models that are released under a free and open source license, and whose parameters, including the weights, the information on the model architecture, and the information on model usage, are made publicly available should be subject to exceptions as regards the transparency-related requirements imposed on general-purpose AI models, unless they can be considered to present a systemic risk, in which case the circumstance that the model is transparent and accompanied by an open source license should not be considered to be a sufficient reason to exclude compliance with the obligations under this Regulation. In any case, given that the release of general-purpose AI models under free and open source licence does not necessarily reveal substantial information on the data set used for the training or fine-tuning of the model and on how compliance of copyright law was thereby ensured, the exception provided for general-purpose AI models from compliance with the transparency-related requirements should not concern the obligation to produce a summary about the content used for model training and the obligation to put in place a policy to comply with Union copyright law, in particular to identify and comply with the reservation of rights pursuant to Article 4(3) of Directive (EU) 2019/790 of the European Parliament and of the Council[10].

Recital 109

Compliance with the obligations applicable to the providers of general-purpose AI models should be commensurate and proportionate to the type of model provider, excluding the need for compliance for persons who develop or use models for non- professional or scientific research purposes, who should nevertheless be encouraged to voluntarily comply with these requirements. Without prejudice to Union copyright law, compliance with these obligations should take due account of the size of the provider and allow simplified ways of compliance for SMEs, including start-ups, that should not represent an excessive cost and not discourage the use of such models. In the case of a modification or fine-tuning of a model, the obligations for providers should be limited to that modification or fine-tuning, for example by complementing the already existing technical documentation with information on the modifications, including new training data sources, as a means to comply with the value chain obligations provided in this Regulation.

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Commentary

1. General remarks

1.1. Introduction

1. Article 2 AI Act establishes the principal rules on the material, territorial and personal scope of the AI Act.[1] A comprehensive understanding of the AI Act's scope in relation to general-purpose AI ("GPAI") models requires a systematic reading in conjunction with Article 3,[2] which contains the definitions of several key concepts referenced in Article 2. In particular, the interpretation of various definitions such as 'provider', 'placing on the market',[3] 'putting into service' and 'general-purpose AI model'[4] is essential for delimiting the AI Act's field of application. Many of these definitions are discussed in more detail elsewhere in this work.[5]

2. The scope of the AI Act should be understood in light of its overarching objectives, as set out in Article 1(1), and with the subject matter defined in Article 1(2). Accordingly, Article 2 can be interpreted in the context of the aims of the AI Act to improve the functioning of the internal market and promote the uptake of human-centric artificial intelligence, while at the same time ensuring a high level of protection against the harmful effects of AI systems in the Union.[6] Article 2(1) does not explicitly differentiate between the material, territorial and personal dimensions of scope contained within it but instead adopts an integrated approach in which these dimensions are interrelated in a way that connects to the Act's regulatory objectives.[7] This integrated approach is exemplified by Article 2(1)(a).[8] At first glance, the provision appears to only address the personal scope of the Act, as it begins by identifying the relevant addressees, namely providers of AI systems and GPAI models. However, it simultaneously outlines the material scope by referring to the placing on the market of GPAI models.[9] Moreover, it also incorporates the territorial scope by specifying that the AI Act applies irrespective of whether the provider is established within the Union or in a third country.[10]

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[1] Paul Voigt, 'Art. 2 Anwendungsbereich' in Jens Schefzig and Robert Kilian (eds), *Beck'scher Online-Kommentar KI-Recht* (4th edn, C.H. Beck 2025) para 1; Fritz-Ulli Pieper, 'Art. 2 Anwendungsbereich' in David Bomhard, Fritz-Ulli Pieper and Susanne Wende (eds), *Kommentar KI-VO: Verordnung über Künstliche Intelligenz* (1st edn, C.H. Beck 2025), para 9; also consider that this is a general position, without prejudice to the fact that the AI Act contains individual derogations to the scope of specific provisions contained in other articles of the AI Act, such as for example with regard to obligations for open-source general-purpose AI models in articles 53(2) and 54(6) AI Act.

[2] For a general discussion on systematic interpretation in EU law, see the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

[3] See the forthcoming commentary on Article 3(9) in this work.

[4] See the forthcoming commentary on Article 3(63) in this work.

[5] See, more specifically, the forthcoming commentaries on Article 3(3), Article 3(9), and Article 3(63) in this work.

[6] AI Act, art 1(1) ('The purpose of this Regulation is to improve the functioning of the internal market and promote the uptake of human-centric and trustworthy artificial intelligence (AI), while ensuring a high level of protection of health, safety, fundamental rights enshrined in the Charter, including democracy, the rule of law and environmental protection, against the harmful effects of AI systems in the Union and supporting innovation.').

[7] For a discussion on the different aspects of scope – personal, material and territorial – contained within article 2(1) AI Act, see Voigt (n 1) paras 9–32; see also, Pieper (n 1) paras 30–52.

[8] AI Act, art 2(1)(a): 'providers placing on the market or putting into service AI systems or placing on the market general-purpose AI models in the Union, irrespective of whether those providers are established or located within the Union or in a third country'.

[9] ibid.

[10] AI Act, art 2(1)(c) states that the regulation applies to 'providers and deployers of AI systems that have their place of establishment or are located in a third country, where the output produced by the AI system is used in the Union'.

3. This integrated approach enables a precise attribution of responsibilities to specific actors engaging in particular activities, both within and outside the European Union. While this design helps to advance regulatory objectives, it simultaneously constructs a complex legal framework for determining the AI Act's scope.[11] Hence, a careful and ongoing case-by-case assessment is necessary to determine whether – and, if so, from which specific moment – a general-purpose AI model falls within the scope of the AI Act. This notably also involves determining whether any of the general exclusions to the scope of the AI Act contained in Article 2 apply in relation to GPAI models and their providers.

1.2. Structure and overview

4. Article 2 comprises twelve paragraphs. These can be best understood when grouped into four distinct thematic subsections, as they serve different regulatory objectives. First, paragraph 1 establishes the general rules regarding the Act's applicability, identifying both the relevant actors and the conditions under which the AI Act applies in relation to an AI system or a GPAI model. Relatedly, points (a) to (f) of paragraph 1 specify this rule by enumerating distinct categories of addressees that fall within the scope of the AI Act. GPAI models as such are only expressly mentioned under point (a).[12] Section 2.1. of this chapter examines these rules in greater detail insofar as they concern GPAI models.[13]

5. Second, paragraph 2 states that only specific provisions of the AI Act apply to AI systems already regulated under existing Union harmonisation legislation, as listed in Section B of Annex I. Although expressed in affirmative terms,[14] this provision operates primarily as an exclusion, which disapplies the majority of the AI Act's rules to such systems.[15] Its objective is to ensure that the AI Act only applies complementarily, avoiding duplicating or contradicting existing sectoral frameworks.[16] In doing so, it seeks to enhance legal coherence and minimise unnecessary administrative burdens.[17] This paragraph is not discussed further in this chapter, as it does not directly relate to GPAI models.[18]

6. Third, paragraphs 5, 7, 9 and 11 clarify the relationship between the AI Act and existing Union law, while also restating the limits of harmonisation in areas of retained Member State competence as defined in the Treaties.[19] Paragraphs 5, 7 and 9 explicitly establish that the AI Act shall not affect the application of certain existing EU pieces of legislation, such as those that concern the liability of intermediary service providers, data protection, consumer protection and product safety. Paragraph 11 confirms that the AI Act does not affect the capacity of the Union or Member States to enact laws

[11] This is in particular the case considering the conjunction with the definitions in article 3 AI Act.
[12] While GPAI models are only mentioned expressly under point a, this does extend to article 2(1)(f), which brings in scope the authorised representatives of providers which are not established in the Union.
[13] Considering our focus on rules that relate to GPAI models and GPAI models with systemic risk, this contribution does not extensively discuss provisions that primarily concern AI systems, but instead only discusses those to the extent that they relate to GPAI models.
[14] AI Act, art 2(2): 'For AI systems classified as high-risk AI systems in accordance with Article 6(1) related to products covered by the Union harmonisation legislation listed in Section B of Annex I, only Article 6(1), Articles 102 to 109 and Article 112 apply. Article 57 applies only in so far as the requirements for high-risk AI systems under this Regulation have been integrated in that Union harmonisation legislation.'
[15] Pieper (n 1) paras 53–57; Christiane Wendehorst, 'Art. 2 Anwendungsbereich' in Mario Martini and Christiane Wendehorst (eds), *KI-VO Verordnung über Künstliche Intelligenz* (2nd edn, C.H. Beck 2026) paras 33–35.
[16] ibid.
[17] AI Act, recital 64; see also, the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work for a general discussion on ensuring horizontal coherence and consistency within the EU legal order.
[18] See Pieper (n 1) paras 53–57; Wendehorst, 'Art 2' (n 15) paras 33–35.
[19] An identical grouping of art 2(5), (7), (9) and (11) is followed in Voigt (n 1) s D 'Verhältnis zu anderen Rechtsakten' ('Relationship to other legal acts') paras 46–52.

that (further) protect workers' rights when their employers use AI systems, or to allow collective agreements that are more favourable to workers.

7. Lastly, and similarly to paragraph 2, paragraphs 3, 4, 6, 8, 10 and 12 introduce targeted exclusions to the scope of the AI Act.[20] These exclusions pertain to different dimensions of scope: some operate at the material level – excluding, for instance, AI systems or models developed for the specific purpose of scientific research and development[21] – while others function at the personal level, exempting certain actors, such as public authorities of third countries and international organisations.[22] These provisions thus serve to limit the Act's reach in a manner that balances the AI Act's regulatory objectives with other legal and policy considerations. The substantive part of this section of the commentary will examine paragraphs 1, 3, 6 and 8 in greater detail, given the legal questions they raise in relation to GPAI models. Considering that the other paragraphs do not directly relate to GPAI models, they are not discussed in more detail here.[23]

1.3. General interpretations of Article 2

8. The dominant view in the reviewed literature appears to treat Article 2 as the primary provision delineating the AI Act's personal, material and territorial scope, thereby treating it as the *leading* and *exhaustive* provision for interpreting the AI Act's scope.[24] On this view, Article 2, which lists what '[t]his Regulation applies to' can be seen as exhausting *all* general scoping rules contained in the AI Act. In addition, while Article 2 interlocks with other provisions such as the definitions in Article 3, it operates as a leading scoping provision with independent effect. This interpretation therefore views Article 2 as the decisive gateway to the AI Act's scope, providing legal certainty through a structured and closed framework.

9. One might question this conclusion, however. First, some have pointed out that various Article 3 definitions are as important as Article 2 to fully delineate the AI Act's scope. As a result, Article 3 can be seen as playing 'at least as significant a role' as the former in determining the personal and material scope of the AI Act.[25] Second, and relatedly, it is interesting that many – if not most – of the scoping elements and limitations listed in Article 2 are reiterated elsewhere in the AI Act, often in Article 3's definitions,[26] or through more general provisions in other EU law.[27]

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[20] See also, Voigt (n 1) s C 'Ausnahmen vom Anwendungsbereich' ('Exceptions from the scope of application'), paras 33–45 which groups together the discussion on art 2(2)–(4), (6), (8), (10) and (12).
[21] AI Act, art 2(6).
[22] AI Act, art 2(4).
[23] If interested in commentary on the other paragraphs of article 2 AI Act, see for example: Wendehorst, 'Art 2' (n 15); Voigt (n 1); Pieper (n 1); Patrick Van Eecke and Bartholomäus Regenhardt, 'Article 2: Scope' in Ceyhun Necati Pehlivan, Nikolaus Forgó and Peggy Valcke, *The EU Artificial Intelligence (AI) Act: A Commentary* (Kluwer Law International 2024).
[24] Voigt (n 1) para 1; Pieper (n 1) paras 9 and 30.
[25] See similarly, Wendehorst, 'Art 2' (n 15) para 2 ('Insbesondere beruht Art. 2 auf einer Reihe von Begriffen, welche ihrerseits erst von Art. 3 näher konkretisiert werden. Daher kommt Art. 3 und seinen Begriffsbestimmungen bei der Bestimmung des persönlichen und sachlichen Anwendungsbereichs der KI-VO eine mindestens ebenso große Rolle zu.'). Also see the chapter on Internal Deployment in the AI Act, para 61 in this work.
[26] For example, the research, testing and development exclusion in article 2(8) AI Act is reiterated in the definition of GPAI model in article 3(63) AI Act.
[27] For example, criteria such as 'making available on the market' and 'putting into service' are derived from other product safety regulation based on the New Legislative Framework, as described in the Commission's Blue Guide (Commission Notice, The 'Blue Guide' on the Implementation of EU Product Rules 2022 [2022] OJ C247/1 ("Blue Guide")), ss 2.2 and 2.6); for a detailed discussion on the relationship between the AI Act and the New Legislative Framework, see the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

10. The latter could support a broader interpretation of the AI Act's scope, particularly given that not all of the Article 2's limitations are repeated as strongly or in the same way in those other provisions.[28] As a result, Article 2's impact on the AI Act's scope would be that of a leading or general scoping clause but not a closed or exhaustive one. A related, different approach, would achieve a similar result by considering the more substantive provisions of the AI Act as a *lex specialis* compared to Article 2's limitations.[29]

11. While, admittedly less firmly grounded in the literal wording of Article 2, such interpretations would allow certain mechanisms or factual situations not expressly covered by Article 2 to still fall within the AI Act's ambit to better fulfil some of the AI Act's underlying objectives. For example, certain mechanisms or factual situations that may arise with relation to a GPAI model, but which are omitted in Article 2, may still warrant – on the basis of the purpose and objectives of the regulation – the AI Act's application to them.[30] Additionally, such a more purposive reading could even question the *leading* character of Article 2, as it allows for viewing other AI Act provisions as more relevant and in some cases even leading sources for determining scope in specific contexts. Phrased differently, Article 2 provides the overall framework of application, whereas more detailed provisions in other articles within the regulation or in other EU laws specify the rules that delineate the scope of the AI Act in particular circumstances. An example on how this view can question the leading character of Article 2 can be found in Section 2.4.1. that discusses the apparent tension between Article 2(8)'s research and development exclusion with the substantive obligations for providers of GPAI models that relate to the research and development phase.

2. Substance

2.1. Article 2(1) AI Act

12. Article 2(1) establishes the default rules on the scope of the Act. It identifies the Act's addressees and defines both the territorial and material conditions under which GPAI models and AI systems fall within its scope.[31] To this end, it distinguishes between AI systems and GPAI models. The latter are

[28] For example, the scientific research exception found in article 2(6) is not repeated in other substantive provisions in the AI Act (and recital 109 even encourages voluntary compliance for those model developers). It is repeated, however, in recital 25. In addition, article 2(8)'s exclusion of development activities does not exactly mirror article 3(63)'s definition of a general-purpose AI model which includes a similar limitation.

[29] See, by analogy, Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector [2002] OJ L: 201/37, arts 1(3) and 15(1) and corresponding case law treating the latter as a *lex specialis*, particularly, Case C-623/17 *Privacy International v Secretary of State for Foreign and Commonwealth Affairs and Others* [2020] EU:C:2020:790, paras 30 ff. For a more detailed discussion of the tensions between the general scoping rules in article 2 and other, more specific operational provisions of the AI Act, see Sections 2.1.1.3. (on GPAI model integration into an AI system as a potential mechanism for placing the GPAI model on the market, despite the omission of integration from the general scope rule in article 2(1)), 2.1.2. and 2.3.2. (on the apparent tension between the seeming impossibility of putting a GPAI model into service under article 3(11) and the wording of article 2(6)'s exclusion), and 2.4.1. (on the relationship between article 2(8) and obligations under articles 52 and 55 that appear to apply to pre-market-placement activities).

[30] An example of an argument that relies on this general interpretation of article 2 AI Act can be found in Section 2.1.3.1. that examines whether a GPAI model could also be in scope of the AI Act when the GPAI model is 'put into service'.

[31] Voigt (n 1) para 1; Pieper (n 1) paras 9 and 30.

only explicitly mentioned in Article 2(1)(a).[32] This provision establishes that the AI Act applies to 'providers placing on the market or putting into service AI systems or placing on the market general-purpose AI models in the Union, irrespective of whether those providers are established or located within the Union or in a third country'.[33] Article 2(1)(a) thus clarifies that it is not relevant whether the provider is located in the Union; it is the placing on the Union market of the GPAI model that is the determining factor.[34] A provider that is not located in the Union but places a GPAI model on the Union market falls within the scope of the AI Act and is therefore obliged to comply with its provisions, including the requirement to appoint an authorised representative.[35] The following section examines Article 2(1)(a) AI Act in greater detail, focusing in particular on its relation with the notion of 'placing on the market' as the primary determining condition on the AI Act's application in relation to GPAI models.[36] The meaning of the terms mentioned in Article 2(1)(a) that are formally defined in Article 3, such as 'placing on the market' and 'provider', are analysed and discussed more broadly elsewhere in this work.[37]

2.1.1. Placing on the market

13. Article 2(1)(a) states that the AI Act applies to GPAI models that are 'placed on the market'.[38] Article 3(9) defines this as 'the first making available of an AI system or a general-purpose AI model on the Union market'. Article 3(10) in turn clarifies that 'making available on the market' refers to the supply of such systems or models for distribution or use on the Union market in the course of a commercial activity, whether for remuneration or free of charge.[39]

14. For the discussion of Article 2(1)(a) it is, however, relevant to emphasise that the definition of 'making available on the market' delineates between two types of actions a model may be subject to in the course of a commercial activity within the Union market: 'distribution' and 'use'.[40] Recital 97 also suggests a potential third mechanism for placing GPAI models on the market, namely where they are 'integrated' into an 'own' AI system that is subsequently made available on the market or put into service, even though this mechanism is not explicitly reflected in Article 3(9) or (10).[41] These three concepts of 'use', 'distribution' and 'integration' will be discussed in the following subsections. Before moving on to these three concepts, it is important to reiterate that both actions can only constitute 'making available on the market' when conducted in the 'course of a commercial activity', which is often understood in product safety regulation as 'providing goods in a business related context'.[42]

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[32] Voigt (n 1) para 16.
[33] AI Act, art 2(1)(a).
[34] E.g., Wendehorst, 'Art 2' (n 15) paras 25–26; for more details, see also, the forthcoming commentary on Article 3(9) in this work.
[35] AI Act, art 54; for more details, see also the commentary on Article 54 in this work.
[36] See, for example, Wendehorst, 'Art 2' (n 15) paras 15–18.
[37] See the forthcoming commentaries on Articles 3(9) and 3(3) in this work, respectively.
[38] Article 2(1)(a) notably omits any reference to 'putting into service' as a trigger for the AI Act's applicability to GPAI models, unlike its approach to AI systems. This has led authors to conclude that the market placement of a GPAI model by the provider is a general condition for the application of the AI Act to a GPAI model. This is discussed in more detail in Section 2.1.3.
[39] AI Act, art 54.
[40] It is noteworthy to re-emphasize that according to article 3(10) AI Act both actions can only constitute 'making available on the market' when conducted in the 'course of a commercial activity', as discussed below.
[41] See Jonathan Kirschke-Biller and Anna Lena Füllsack, 'Art. 3 Begriffsbestimmungen' in Jens Schefzig and Robert Kilian (eds), *Beck'scher Online-Kommentar KI-Recht* (4th edn, C.H. Beck 2025) para 182.
[42] Blue Guide (n 27) s 2.2: 'Commercial activity is understood as providing goods in a business related context. Non-profit organisations may be considered as carrying out commercial activities if they operate in such a context. This can only be appreciated on a case by case basis taking into account the regularity of the supplies, the characteristics of the product, the intentions of the supplier, etc. In principle, occasional supplies by charities or

2.1.1.1. Supply for distribution on the Union market in the course of a commercial activity

15. The first way in which a GPAI model may be made available on the market under Article 3(10) is through its 'supply [...] for distribution'. Under Article 3(9), the first making available of a GPAI model on the market constitutes its placement on the market. In turn, once placed on the market, under Article 2(1)(a) the GPAI model and its provider come within the AI Act's scope. Article 3(7) states that a 'distributor' means 'a natural or legal person in the supply chain, other than the provider or the importer, that makes an AI system available on the Union market'.[43] Hence, the distributor is the supply chain actor responsible for disseminating a product on the market.[44] The concept of distribution is not further defined in the AI Act. Textually, this refers to the further dissemination of a product on the market to other actors.[45] While this definition is made only with reference to AI systems, the non-differentiated reliance on 'distribution' in Article 3(10) for the making available on the market of AI systems and GPAI models suggests that a systematic interpretation may require its equivalent reading in relation to both.[46] Recital 97 offers up the following illustrative examples of market placement: 'through libraries, application programming interfaces (APIs), as direct download, or as physical copy'.[47] The Commission's Guidelines on the scope of obligations for providers of GPAI models provide more examples of this mechanism, such as the making available on the Union market 'by being copied onto a customer's own infrastructure ' or when the GPAI model is 'uploaded for the first time to a public catalogue, hub, or repository for direct download on the Union market'.[48] Following from the inferred intended will of the legislature as derived from the use of 'supply [...] for distribution' instead of only 'distribution' in Article 3(10) as well as the examples provided in Recital 97, it appears that a GPAI model may be placed on the market through (i) its direct distribution, meaning effective provision of access to another party, but also through (ii) its supply for distribution, understood as an action which allows for access to be gained regardless of whether another party has actually done so. The latter will occur where a commercial offering for GPAI model API access is, for example, made through a software library or public catalogue.

16. The concept of 'distribution', and the abovementioned examples linked to it, contrast with the notion of 'use' discussed in Section 2.1.2.2. While 'use' has been usually construed with reference to the

hobbyists should not be considered as taking place in a business related context.'; for the possibility to rely on interpretations derived from the Blue Guide and the New Legislative Framework more broadly, see the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

[43] This corresponds with Decision No 768/2008/EC on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC [2008] OJ L 218/82, Annex I, art R1(6); for a detailed discussion on the reliance of the AI Act on the 'reference' provisions contained in Decision No 768/2008/EC, refer to the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

[44] Blue Guide (n 27) s 3.4.

[45] See, e.g., Blue Guide (n 27) s 3.4: 'The distributor is a natural or a legal person in the supply chain, other than the manufacturer or the importer, who makes a product available on the market'. The distributor is therefore the entity that: 'acquires products for further distribution either from a manufacturer, from an importer, or from another distributor.'

[46] For more details on systematic interpretation see the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

[47] See also, Kirschke-Biller and Füllsack (n 41) para 182.

[48] European Commission, 'Communication from the Commission - Commission Guidelines on the Scope of the Obligations for Providers of General-Purpose AI Models Established by Regulation (EU) 2024/1689 (AI Act)' C(2025) 7719 final ("Commission GPAI Guidelines"), para 53.

operation of an AI system for its intended purpose,[49] 'distribution' concerns the GPAI model's (further) availability on the market through supply or transfer.[50]

2.1.1.2. (Supply for) use on the Union market in the course of a commercial activity

17. Use on the Union market in the course of a commercial activity appears to be another potential venue to bring a GPAI model into the scope of the AI Act.[51] Crucially, however, there is ambiguity as to whether Article 3(10) requires actual 'use' of a GPAI model for it to be considered made available on the market or whether the relevant condition is instead the 'supply' of the model for use. That ambiguity arises from the wording of Article 3(10), which can be read in two ways: first, as either requiring 'the supply [...] for distribution' of the GPAI model or its 'use [...] in the course of a commercial activity', or second, as meaning 'the supply [...] for distribution or use', so that 'supply' covers both 'distribution' and 'use'. In this regard, it is also important to note that the AI Act's provisions do not explicitly establish what would constitute 'use', nor whether a GPAI model may be used directly as such, or only through its integration into an AI system, such that prior integration would be necessary before the GPAI model can be regarded as being used through the use of the system.[52] The Commission's Blue Guide explains that 'use' 'refers to the intended purpose of the product as defined by the manufacturer under conditions which can be reasonably foreseen.'[53] It adds that this is usually the 'end use' of the product.[54] This implies that 'use' could be defined broadly in the context of the AI Act, as this definition of use in the Blue Guide does not limit particular forms or types of use but simply refers to an intended purpose. This is reflected, for example, in the Commission Guidelines on prohibited AI practices, which state that the term 'use' could be interpreted in a 'broad manner' with relation to AI systems,[55] in particular by taking into account uses across the system's lifecycle, such as its further integration into other, 'more complex systems, processes or infrastructure'.[56] Analogously, a broad understanding of the concept of 'use' would suggest an interpretation that encompasses an equally wide range of applications of GPAI models in commercial activities. This might include situations where a GPAI model is *used* to train another GPAI model released on the Union market.[57]

18. Two arguments push back against the direct transposition of the Blue Guide's reading of 'use', however. First, the Commission Guidelines on prohibited AI practices only implement such a broader perception of 'use' for AI systems, as these guidelines provide interpretative guidance on Article 5 AI Act.[58] In the same vein, these Guidelines on prohibited AI practices posit that 'use' should cover 'the use or deployment of the system at any moment of its lifecycle *after* having been placed on

[49] AI Act, art 3(12); see also Blue Guide (n 27) s 2.2.
[50] Christiane Wendehorst, 'Art. 3 Begriffsbestimmungen' in Mario Martini and Christiane Wendehorst (eds), *KI-VO Verordnung über Künstliche Intelligenz* (2nd edn, C.H. Beck 2026) paras 139–141; Kirschke-Biller and Füllsack (n 41) para 195; see also Blue Guide (n 27) s 3.4.
[51] Kirschke-Biller and Füllsack (n 41) paras 194 and 199.
[52] For example, the Commission GPAI Guidelines (n 48) para 14 speaks of the 'wide variety of [...] use cases *for* [GPAI] models' (emphasis added) but not of specific *uses of* GPAI models. Also see Section 2.1.2.
[53] Blue Guide (n 27) s 2.2: '"Use" refers to the intended purpose of the product as defined by the manufacturer under conditions which can be reasonably foreseen. Usually, this is the end use of the product.'
[54] ibid s 2.2.
[55] European Commission, 'Communication from the Commission - Commission Guidelines on prohibited artificial intelligence practices established by Regulation (EU) 2024/1689 (AI Act) C(2025) 5052 final' ("Commission Prohibited Practices Guidelines"), para 14.
[56] ibid para 14.
[57] Also see the chapter on Internal Deployment in the AI Act, paras 3–5 in this work.
[58] ibid paras 3–4; see also, Article 96(1)(b) AI Act.

the market or put into service'.[59] Under this reading, 'use' thus presupposes that the object of regulation has already been placed on the market.

19. While the Commission has thus suggested that it is offering up a 'broad' reading of 'use' in the Blue Guide and elsewhere in the Guidelines on prohibited practices, this subsequent narrowing of the term's temporal scope appears to raise significant conceptual ambiguities when applied to both AI systems and GPAI models. Specifically, if 'use' in the Union of an AI system or GPAI model can *itself* amount to the first making available on the market within the meaning of Article 3(10), then the two concepts of 'use' and 'placement on the market' risk becoming circular. On this reading, 'use' can occur only after market placement, yet market placement, in turn, may depend on a system's or model's prior 'use', potentially rendering important parts of the AI Act redundant.[60] The issue of circularity would also occur when the interpretation posited by the Guidelines on prohibited AI practices is applied to an AI system-specific concept such as that of 'putting into service' in Article 3(11), which also relies on the 'first use' of an AI system for its intended purpose.

20. Therefore, it can be argued that to truly retain a 'broad' nature of the interpretation of 'use', the Guidelines on prohibited AI practices could be read as treating the examples of usage *after* market placement as only one instance of 'use', namely one occurring within the post-placement phase of a system's lifecycle, rather than as confining 'use' *solely* to situations occurring after market placement. A similarly broad construing of 'use' also seems to be reflected in the Commission's Guidelines on the scope of the obligations for general-purpose AI models, which notes that a GPAI model can be considered to be placed on the market when it is 'used for internal processes that are essential for providing a product or service to third parties or that affect the rights of natural persons in the Union.'[61] Crucially, this reading seemingly does not require such internal uses to occur only after the model is already deemed placed on the market under other conditions.

21. Likewise, this issue is mitigated if one reads Article 3(10) as conditioning market availability on *supply* for use, rather than direct use. Construing Article 3(10) in such a way is supported by literal as well as systematic considerations. On a literal reading, it is noted that Article 3(10) does not contain a comma or another indication before the phrase 'or use' to suggest that 'supply [...] for' should be considered to qualify only distribution and not use. Such an interpretation is also strongly supported by the systematic need to avoid reading the term 'use' in a circular manner.

22. A second potential argument against reading 'use' analogously to the interpretation contained in the Commission Guidelines on prohibited AI practices relies on the Blue Guide definition of 'use', which ties 'use' to the 'intended purpose' of a product as defined by the manufacturer under conditions that can be reasonably foreseen.[62] The definition of 'intended purpose' in Article 3(12) expressly refers to AI systems and not to GPAI models, which could indicate that GPAI models – by virtue of being

[59] Commission Prohibited Practices Guidelines (n 55) para 14 (emphasis added).

[60] See, for example, in the sense that such interpretations that render some provisions redundant should be avoided: Case C-339/15 *Criminal proceedings against Luc Vanderborght* [2017] ECLI:EU:C:2017:335, para 41; Case C-601/14 *European Commission v Italian Republic* [2016] ECLI:EU:C:2016:759, para 46; Case C-181/16 *Sadikou Gnandi v État belge* [2018] ECLI:EU:C:2018:465, para 50; see also, Koen Lenaerts and José A Gutiérrez-Fons, 'To Say What the Law of the EU Is: Methods of Interpretation and the European Court of Justice' (2013) 20 Columbia Journal of European Law 3, 17 for a discussion on systematic interpretative techniques utilised by the CJEU which disfavour interpretations of EU law that have a practical effect of rendering certain provisions redundant.

[61] Commission GPAI Guidelines (n 48) para 51. Also see the chapter on Internal Deployment in the AI Act, para 16 in this work.

[62] Blue Guide (n 27) s 2.2: '"Use" refers to the intended purpose of the product as defined by the manufacturer under conditions which can be reasonably foreseen. Usually, this is the end use of the product.'

general-purpose – do not have an intended purpose. However, it should be noted that such an interpretation appears rather rigid. The fact that a model may be capable of serving a wide range of purposes might not necessarily preclude it from also being intended for a more specific use.[63] This is discussed in more detail in Section 2.3.2.

23. In conclusion, a broad reading of 'use', and even more strongly – preferring 'supply for use' – appears more compelling than a narrower reading.

2.1.1.3. Integration of a GPAI model into an AI system

24. A potential third mechanism through which a GPAI model can be first made available on the market and, thus, 'placed on the market', is through 'integration'.[64] While not named explicitly in Article 3(10), Recital 97 indicates that integration of an 'own' GPAI model into an AI system that is placed on the market or put into service, causes the GPAI model to be placed on the market.[65] In such cases, the obligations for GPAI models apply alongside those for AI systems.[66]

25. The AI Act acknowledges the possibility of such integration in a number of provisions. Article 3(63), for example, states that a GPAI model 'can be integrated into a variety of downstream systems or applications'.[67] Article 3(66) states that a GPAI system is a system that is based on a GPAI model. Recital 100 further explains that the GPAI system can then, in its turn, be integrated into another AI system for a specific purpose: '[a] general-purpose AI system can be used directly, or it may be integrated into other AI systems.'[68]

26. While integration is thus widely recognised throughout the AI Act as a mechanism to bring a GPAI model in the Act's scope, the integration mechanism is not explicitly mentioned in Article 2(1)'s reference to placing the model on the market or Article 3(10)'s definition of making available on the market. This leaves it unclear how integration affects the Act's scope.

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[63] Article 2(6) requires that an AI system or model be 'specifically developed and put into service [...] for the sole purpose of scientific research and development', without defining what a 'sole purpose' is. While the generality of GPAI models under article 3(63) might appear to preclude a 'sole purpose', such an absolute textual reading conflates technical generality with a functional purpose. A functional interpretation instead allows a GPAI model to be specifically developed for a single domain, such as scientific research, notwithstanding its capacity to have more general capabilities and therefore being able to support multiple downstream uses.

[64] AI Act, recital 97; see also, Commission GPAI Guidelines (n 48) paras 55–59; Kirschke-Biller and Füllsack (n 41) para 182. Also see the chapter on Internal Deployment in the AI Act, Section 2.2. in this work.

[65] AI Act, recital 97: '[...]AI models are typically integrated into and form part of AI systems. This Regulation provides specific rules for general-purpose AI models and for general-purpose AI models that pose systemic risks, which should apply also when these models are integrated or form part of an AI system. [...] When the provider of a general-purpose AI model integrates an own model into its own AI system that is made available on the market or put into service, that model should be considered to be placed on the market and, therefore, the obligations in this Regulation for models should continue to apply in addition to those for AI systems.' Also see Commission GPAI Guidelines (n 48) para 56.

[66] AI Act, recital 97: 'When the provider of a general-purpose AI model integrates an own model into its own AI system that is made available on the market or put into service, that model should be considered to be placed on the market and, therefore, the obligations in this Regulation for models should continue to apply in addition to those for AI systems.'

[67] Also see the forthcoming commentary on Article 3(63) in this work.

[68] AI Act, recital 100: 'When a general-purpose AI model is integrated into or forms part of an AI system, this system should be considered to be a general-purpose AI system when, due to this integration, this system has the capability to serve a variety of purposes. A general-purpose AI system can be used directly, or it may be integrated into other AI systems.'

27. A first possibility would be that integration into an own AI system constitutes an independent route to place a GPAI model on the market. In this reading, Article 3(10) can be construed as encompassing a non-exhaustive list of ways in which a GPAI model can be made available on the market, and thus placed on the market under Article 3(9). While this can include the first making available of a GPAI model on the market *directly*, for example, *inter alia*, through its offering as part of a 'software library or package', via API, or through its uploading 'for direct download on the Union market', it can also be considered placed on the market *indirectly* – when the AI system in which it is integrated is first made available on the market.[69] The Commission's Guidelines on the scope of the obligations for GPAI model providers seem to reflect this interpretation, as paragraphs 53 and 54 thereof explicitly provide that the Commission considers that a GPAI model has been 'placed on the market' in light of the examples provided in Recital 97 and in particular whenever a GPAI model has been integrated into a 'chatbot' or 'mobile application' made available on the market.[70]

28. A second, more functional interpretation might posit that 'integration' is not an independent route of 'placing' or 'making available on the market', but instead represents a subcategory of the concept of 'supply [...] for distribution or *use* in the Union',[71] which itself leads to placing on the market as per Article 3(9) and (10). Under this reading, the act of integration into an AI system can qualify as the supply for use when the model is integrated and the resulting AI system is placed on the market or put into service. It is key to note that this supply for use through integration would still have to take place in the course of a commercial activity in order to qualify as 'making available on the market'.[72] This would arguably be the case when a model is integrated into an AI system that is placed on the market or put into service for a commercial activity, for example when the system is used to sell products or is essential for the (internal) processes of a commercial enterprise.[73] This functional interpretation carries weight, as it interprets the literal wording of Article 3(10) to implicitly include 'integration' as part of 'supply for use' in light of the recitals and other provisions of the AI Act, instead of requiring the introduction of 'integration' as a separate act of making a GPAI model available on the market. This interpretation ensures the consistent interpretation of Article 3(10)'s definition for both AI systems and GPAI models, with integration representing a specific category of 'supply for use' available to the latter.[74] From a functional perspective, it appears more coherent to regard such integration as a form of 'supply for use', since the GPAI model is effectively employed in a market activity, for example when integrated into an AI system put into service for a commercial purpose such as a chatbot. The act of offering that chatbot for use means the GPAI model has been indirectly supplied for use itself.

29. The reason why integration is regarded as a relevant mechanism for placing a GPAI model on the market primarily, or even exclusively, where it is integrated into the GPAI model provider's *own* AI

[69] Commission GPAI Guidelines (n 48) para 53.
[70] ibid.
[71] Emphasis added. The concept of use in the Union is discussed more extensively in Section 2.1.2.2.
[72] AI Act, art 3(10) sets multiple criteria. The integration mechanism would only satisfy the criterion of 'use in the Union'.
[73] Kirschke-Biller and Füllsack (n 41) para 182.
[74] Blue Guide (n 27) ss 2.2. and 2.3 discuss the 'making available on the market' and the 'placing on the market'. The integration of a GPAI model into an AI system does not reflect the actors and corresponding actions typically involved in the market placement of a product described in the Blue Guide. For example, the Guide states that: 'A product is made available on the market when supplied for distribution, consumption or use on the Union market in the course of a commercial activity, whether in return for payment or free of charge. Such supply includes any offer for distribution, consumption or use on the Union market which could result in actual supply in relation to products already manufactured (e.g. an invitation to purchase, advertising campaigns). Supplying a product is only considered as making available on the Union market, when the product is intended for end use on the Union market.' The 'integration' is distinct from distribution, consumption or use in the market.

system lies in the fact that where integration is carried out by a downstream entity that integration will usually occur only after the GPAI model has already been made available on the Union market on another basis. More specifically, where a GPAI model is supplied for distribution or use on the Union market and, following that supply, a downstream entity integrates it into an AI system, it is not the integration and subsequent placing on the market of that system that renders the GPAI model made available on the market; rather, it is the initial GPAI model availability for integration that does so.

30. That said, where the GPAI model was made available *outside* the Union market and is integrated by a downstream entity into an AI system that *is* placed on the Union market, the Commission considers the GPAI model likewise to have been placed on the market.[75] The Commission's GPAI Guidelines moreover state that even where a GPAI model was made available outside the Union market and its provider clearly and unequivocally excluded the placing on the Union market of AI systems into which it is integrated, yet such a system was nevertheless made available on the Union market, the GPAI model is still to be considered placed on the market.[76] The effect of the original GPAI model provider's exclusion is not that the GPAI model would not be considered placed on the market but only that its provider for the purposes of the AI Act would be the downstream AI system provider rather than the original *de facto* developer.[77]

31. A key question therefore arises of whether the wording of Recital 97, which addresses the relevant moment of market placement of a GPAI model integrated into an 'own' system only, can also aid in interpreting Article 3(9) and (10) as covering those situations of downstream integration. This is especially relevant given that the Guidelines may be self-binding on the Commission but not on the Court of Justice of the European Union ("CJEU").[78] While that question is examined in greater detail elsewhere in this commentary,[79] it is assumed for present purposes that the interpretation advanced in the Commission Guidelines is valid.

2.1.2. Putting GPAI models into service?

32. Article 2(1)(a) suggests that the 'placing on the market' of the GPAI model by a provider is a general condition for a GPAI model to be in scope of the AI Act.[80] While AI systems are in scope when placed on the market or put into service,[81] GPAI models would thus only fall within the Act's scope when placed on the market.[82] As such, the AI Act does not foresee the possibility of a GPAI model being put into service.[83] This means that a GPAI model is only in scope when 'placed on the market'

[75] Commission GPAI Guidelines (n 48) para 58.
[76] ibid para 59.
[77] ibid.
[78] ibid para 9.
[79] See the forthcoming commentaries on Articles 3(9) and (10) in this work.
[80] See AI Act, art 2(1)(a): This Regulation applies to: '(a) providers placing on the market or putting into service AI systems or placing on the market general-purpose AI models in the Union, irrespective of whether those providers are established or located within the Union or in a third country'; see also the definition of provider in AI Act, art 3(3): '"provider" means a natural or legal person, public authority, agency or other body that develops an AI system or a general-purpose AI model or that has an AI system or *a general-purpose AI model developed and places it on the market* or puts the AI system into service [...]'; furthermore, the Commission GPAI Guidelines (n 48) reflect that the 'placing on the market' of the GPAI model is the relevant trigger for the AI Act's scope.
[81] See AI Act, art 2(1)(a).
[82] The wording of article 2(1)(a) AI Act expressly distinguishes, in this respect, between AI systems and general-purpose AI models. The same goes for the wording of the definition of provider in article 3(3) AI Act that expressly distinguishes between the placing on the market of GPAI models and the placing on the market and putting into service of AI systems.
[83] Consider that a GPAI model may be integrated into an AI system, which is itself put into service. In line with the arguments in Section 2.1.1.3., this would mean that the GPAI model would then be considered placed on the

because it has been 'made available on the market'.[84] GPAI models that are not placed on the Union market would thus fall outside the Act's scope.[85]

33. More specifically, this reading assumes that a GPAI model cannot be put into service as Articles 2(1)(a), 3(3),[86] 3(11)[87] and 3(63)[88] do not explicitly foresee that GPAI models can be put into service. As a result, the legislature seemingly did not intend for the possibility of a GPAI model to be put into service and be brought into the scope of the AI Act via this mechanism. Instead, the conclusion is that the main condition under which a GPAI model falls within the scope is if it is placed on the market, not when put into service.

34. One might, however, argue that a GPAI model *can* be put into service under the AI Act and that such putting into service would also bring the GPAI model into scope of the AI Act.[89] This interpretation relies on two key conditions: first, that a GPAI model can be put into service under the AI Act, and second, that the putting into service of a GPAI model would also bring it in scope of the AI Act.

35. The first condition requires addressing the fact that Article 3(11) AI Act's definition of 'putting into service' only refers to AI *systems* and not to GPAI models. However, that does not necessarily mean that GPAI models cannot be put into service. Articles 2(6) and 2(8) both imply that AI systems *and* AI models can be put into service, though it is possible that the putting into service part of both provisions only refers to AI systems.[90] Nevertheless, the idea that a GPAI model can be put into service has some merit as various AI Act provisions refer to the 'use' of a GPAI model,[91] which supports the idea that a GPAI model can in fact have an intended purpose: that a model may be capable of serving a wide range of purposes might not necessarily preclude it from also being intended for a more specific use by its provider.[92] This implies that the model can also be put into service, as

market by virtue of this integration into an AI system that has been put into service; however, this does not mean the GPAI model itself has been put into service.

[84] AI Act, arts 3(9) and 3(10).

[85] See n82.

[86] Article 3(3) defines a provider as 'a natural or legal person, public authority, agency or other body that develops an AI system or a general-purpose AI model or that has an AI system or a general-purpose AI model developed and places it on the market or puts the AI system into service [...]'. This definition also explicitly differentiates between AI systems that can be developed and then either 'put into service' or 'placed on the market' versus GPAI models that can only be developed and 'placed on the market'.

[87] AI Act, art 3(11) defines the concept of putting into service as: 'the supply of an AI system for first use directly to the deployer or for own use in the Union for its intended purpose'.

[88] The definition of GPAI model in article 3(63) provides for an exemption for models that are used for research, development or prototyping activities prior to being placed on the market. This provision also omits reference to 'putting into service'. Also see the forthcoming commentary on Article 3(63) in this work for a more detailed discussion of the GPAI model definition.

[89] Although not discussed extensively, this is for example assumed in Charlotte Stix and others, 'AI Behind Closed Doors: A Primer on the Governance of Internal Deployment' (arXiv, 16 April 2025) <https://arxiv.org/abs/2504.12170> accessed 26 Mary 2026, 27: 'Second, the AI Act applies to "providers" "putting into service "AI systems" or "general-purpose AI models in the Union" (Article 2(1), AI Act 2024).'

[90] Note that AI Act, art 2(6) and (8) refer to 'AI models' rather than 'GPAI models'. This drafting choice is supported by the fact that the exclusions under art 2(6) and (8) apply to AI model research and development activities, whereas AI Act, art 3(63) defines a GPAI model as 'an AI model, including [...] except AI models that are used for research, development or prototyping activities before they are placed on the market'. It follows that, prior to market placement, the AI models falling within the exclusions in arts 2(6) and (8) cannot properly be characterised as GPAI models within the meaning of the AI Act.

[91] See, for example, AI Act, art 3(63); see also, AI Act, recital 97 ('The obligations laid down for models should in any case not apply when an own model is used for purely internal processes [...]'); for more arguments on this, see Section 2.1.2.2.

[92] Also see the forthcoming commentary on Article 3(63) in this work on the generality of GPAI models.

the definition of 'putting into service' under Article 3(11) refers to either the 'first use' by a deployer or the 'own use' for its intended purpose by the provider.[93] These arguments may be read to suggest that the legislature did not intend to exclude models entirely and that not mentioning GPAI models in Article 3(11) does not *per se* indicate that they cannot be put into service.

36. The second condition requires specifically addressing that – even if we assume that a GPAI model can be put into service under the AI Act – Article 2(1)(a) does not indicate that putting that GPAI model into service brings that GPAI model into the scope of the AI Act. An argument that supports this implicit extension of this provision is that Article 2 does not clearly exclude GPAI models that are put into service either. Building on the argument that a GPAI model can be put into service, it seems natural that putting the GPAI model into service would also bring it into scope of the Act, just as putting into service of an AI system does. The absence of GPAI models in Article 3(11) – and of the impact of putting them into service in Article 2(1)(a) – is then viewed as an omission rather than a deliberate choice, so that GPAI models should be treated analogously to AI systems when it comes to the Act's scope regarding 'putting into service'.[94] This view is supported by teleological arguments. AI's risks regarding fundamental rights, for example, can manifest themselves when a GPAI model is put into service, such as when used internally for own use and for its intended purpose by a deployer.[95] Given that the AI Act pursues the dual goal of internal market improvement and the protection of safety, health and fundamental rights,[96] not extending the AI Act's scope to GPAI models put into service would hinder the achievement of those goals.

37. Nevertheless, in conclusion, the more conservative interpretation of Article 2(1)(a) does not recognise that a GPAI model enters the Act's scope when it is put into service. This interpretation is likely the most compelling (i) from a literal interpretative perspective, because it follows from a more straightforward textual reading given that the definition in Article 3(11) does not indicate that it applies to GPAI models, and (ii) from a systematic interpretative perspective,[97] considering that in other instances where definitions are intended to apply to both AI systems and GPAI models, the AI Act appears to typically refer to both expressly,[98] and there are no other binding provisions on GPAI models that directly address the 'putting into service' of a model. This conclusion also seems to be uncontested in the discussions on this provision in the scholarship.[99] However, the AI Act does simultaneously offer arguments that might support the idea that GPAI models can be put into service, and these might become more compelling as the underlying technology advances. This could, for example, be the case when GPAI models with systemic risk that are *de facto* 'used' would otherwise fall out of the AI Act's scope, such as GPAI models that are extensively deployed internally by their 'would-be' providers.[100]

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[93] AI Act, art 3(11) ('putting into service' means the supply of an AI system for first use directly to the deployer or for own use in the Union for its intended purpose).

[94] A counterargument to this reading would be that the AI Act clearly delineates between AI systems and GPAI models and explicitly emphasises the importance of this delineation in recital 97. Therefore, it might not be logical to assume that the scoping rules would work in the same way for both regulatory objects.

[95] See the chapter on Internal Deployment in the AI Act, Section 1. in this work that discusses the risk that arises when AI is deployed internally in organisations. Also see Stix and others (n 89).

[96] AI Act, art 1(1)(a).

[97] For a discussion on the analogous application to GPAI models of concepts introduced in the AI Act in relation to AI systems, as well as on the use of systematic interpretation in EU law more broadly, see the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

[98] See, for example, AI Act, art 3(5), (9) and (10).

[99] Also see nm82.

[100] See more extensively in the chapter on Internal Deployment in the AI Act, Section 2.2. in this work.

2.1.3. Territorial scope

38. Article 2(1)(a) establishes that the AI Act applies to providers placing on the market GPAI models and placing on the market or putting into service AI systems in the Union. Whether the provider is located in the Union is irrelevant.[101] According to Article 2(1)(c), the AI Act also applies to all providers and deployers whose AI systems' output is used in the Union, irrespective of the providers' or deployers' location.[102] Under the dominant interpretation of the AI Act, the general scoping rule for GPAI models in Article 2(1)(a) relies strictly on the criterion of 'placing on the market' (Article 3(9)) and relatedly to 'making available on the market' (Article 3(10)).[103] Specifically in regard to the territorial scope, it is notable that the criterion of 'supply' in Article 3(10) may occur through various intangible forms such as through libraries, APIs or as a direct download, whereby the physical location of the provider becomes largely irrelevant.[104] As a consequence, the making available of a model or system in the course of a commercial activity, whether for remuneration or free of charge, via the internet will,[105] in principle, constitute placing on the market,[106] unless the provider has explicitly restricted access or use within the European Union.[107] In the same line of reasoning, the Commission has emphasised that where the provider of a GPAI model has excluded use in the Union but a downstream provider of an AI system decides to integrate that model into its system anyway, this downstream provider assumes the role of provider of the GPAI model under the AI Act, thereby bringing the GPAI model into scope.[108] In such cases, the downstream actor integrating the model in its AI system qualifies as the provider of the model.[109] This interpretation reflects the fact that the Act's territorial scope for GPAI models is largely functional: once a model is made available on the market, a person must be considered its provider so as to ensure the applicability of relevant obligations.[110]

39. This extraterritorial reach seeks to ensure both a level playing field for providers operating in the internal market and a consistent standard of safety for AI made available to Union users.[111] While this

[101] AI Act, art 2(1)(a): 'providers placing on the market or putting into service AI systems or placing on the market general-purpose AI models in the Union, irrespective of whether those providers are established or located within the Union or in a third country'; AI Act, recital 22 expressly explains this as an anti-circumvention mechanism: 'To prevent the circumvention of this Regulation and to ensure an effective protection of natural persons located in the Union, this Regulation should also apply to providers and deployers of AI systems that are established in a third country, to the extent the output produced by those systems is intended to be used in the Union'; see Wendehorst, 'Art 2' (n 15) paras 25–26. Also see the chapter on Internal Deployment in the AI Act, paras 11 and 23–25 in this work.

[102] AI Act, art 2(1)(c) establishes that the Act applies to: 'providers and deployers of AI systems that have their place of establishment or are located in a third country, where the output produced by the AI system is used in the Union'. Also see, on this, e.g., Yan Wang, 'Do Not Go Gentle into That Good Night: The European Union's and China's Different Approaches to the Extraterritorial Application of Artificial Intelligence Laws and Regulations' (2024) 53 Computer Law & Security Review 105965, 4.

[103] This is discussed in more detail in Section 2.1.3. Also see in n 73.

[104] See, on the difficulties presented by the absence of a physical embodiment of AI systems and, to an even higher extent, GPAI models on the determination of a first making available on the market compared to traditional product safety regulations, Kirschke-Biller and Füllsack (n 41) para 184; Wendehorst, 'Art 2' (n 15) para 16.

[105] In the same sense: Wendehorst, 'Art 2' (n 15) para 17. See, with more hesitation, Michèle Finck, 'In Search of the Lost Research Exemption: Reflections on the AI Act' (2025) 74 GRUR International 903.

[106] See AI Act, art 3(10) and (11); see the forthcoming commentaries on Articles 3(9) and 3(10) in this work.

[107] See, in the same sense, Wendehorst, 'Art 2' (n 15) para 17 (describing how the criterion is whether the offer was directed at the Union market).

[108] Commission GPAI Guidelines (n 48) para 59. The integration mechanism in relation to AI Act, art 3(10) is discussed in more detail in Section 2.1.2.3.

[109] Commission GPAI Guidelines (n 48)para 58.

[110] Also see nn 101–102.

[111] Pieper (n 1) para 49; Voigt (n 1) para 27; Wendehorst, 'Art 2' (n 15) para 13.

regulatory technique is not novel in EU internal market legislation,[112] commentators have underscored its particular relevance for digital goods and services, which may be developed, hosted or distributed from anywhere in the world.[113] This extraterritorial reach is therefore also seen in other EU legislation focused on regulating the digital sphere, as notably in the Digital Services Act ("DSA")[114] and General Data Protection Regulation ("GDPR").[115]

40. A further key aspect of the AI Act's territorial reach is how it appears to function as a tool for reshaping the scope of other EU legislation. This is particularly evident in its interaction with copyright legislation, as Chapter V AI Act sets obligations for GPAI model providers to put in place a policy to comply with Union copyright law.[116] To ensure a level playing field for developers based in different jurisdictions,[117] the AI Act would strengthen the territorial scope of Union copyright requirements, such as those regarding the possibility to opt-out of text and data mining.[118]

2.2. Article 2(3) AI Act

41. Article 2(3) is often described as the national security exclusion, yet in substance, it clarifies that the AI Act applies only to activities falling within the scope of Union law.[119] The provision comprises three interrelated subparagraphs that together define this boundary, but each introduces a distinct limitation that requires separate analysis. The first subparagraph provides that the AI Act applies only within the scope of Union law and reflects the general division of competences between the Union and Member States established by the Treaties.[120] The second and third subparagraphs operate as subsets

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[112] See for example how this approach is used in different instruments in EU internal market legislation: Sybe de Vries, Olia Kanevskaia, and Rik de Jager, 'Internal Market 3.0: The Old "New Approach" for Harmonising AI Regulation' (2023) 8 European Papers 583, 586–595.

[113] Wendehorst, 'Art 2' (n 15) para 13; Pieper (n 1) para 49; Voigt (n 1) para 27.

[114] DSA, art 2(1): 'This Regulation shall apply to intermediary services offered to recipients of the service that have their place of establishment or are located in the Union, irrespective of where the providers of those intermediary services have their place of establishment.'

[115] See, for example, the report of the European Data Protection Board on the extraterritorial enforcement of the GDPR that describes both the legal frameworks and first practical experience with its application: Helena Kastlová, 'Report on the Extra-Territorial Enforcement of the GDPR' (European Data Protection Board 2024) <https://www.edpb.europa.eu/system/files/2024-10/edpb_20240417_report_extraterritorial_enforcement_gdpr_en.pdf> accessed 11 June 2026. See also: Christopher Kuner, 'The Internet and the Global Reach of EU Law' in Marise Cremona and Joanne Scott (eds), *EU Law Beyond EU Borders: The Extraterritorial Reach of EU Law* (Oxford University Press 2019) 112, 127–129; Oskar Josef Gstrein and Andrej Zwitter, 'Extraterritorial Application of the GDPR: Promoting European Values or Power?' (2021) 10 Internet Policy Review, 7–11.

[116] AI Act, art 53(1)(c): Providers shall 'put in place a policy to comply with Union law on copyright and related rights, and in particular to identify and comply with, including through state-of-the-art technologies, a reservation of rights expressed pursuant to Article 4(3) of Directive (EU) 2019/790'. Also see the commentary on Article 53 in this work.

[117] See AI Act, recital 106: 'This is necessary to ensure a level playing field among providers of general-purpose AI models where no provider should be able to gain a competitive advantage in the Union market by applying lower copyright standards than those provided in the Union.' See also: Anupam Datta, 'The Regulation of GPAI Model Providers under the EU AI Act' in Martin Denga and Lars Hornuf (eds), *Regulatory Competition in the Digital Economy* (Springer 2025) 119; see the commentary on Article 53 in this work.

[118] See, e.g., Matthias Stieper and Martin Denga, *The International Reach of EU Copyright through the AI Act* (Beiträge zum Transnationalen Wirtschaftsrecht No 194, Institut für Wirtschaftsrecht 2024) <http://dx.doi.org/10.25673/116949>. Also see the commentary on Article 53, Section 2.1.3.1.2. in this work.

[119] Pieper (n 1) para 58; Wendehorst, 'Art 2' (n 15) paras 64–68, Voigt (n 1) paras 36–39.

[120] Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union [2007] OJ C 202/1 ("TEU", "TFEU"); AI Act, recital 24 explicitly mentions that the 'exclusion is justified both by Article 4(2) TEU and by the specificities of the Member States' and the common Union defence policy covered by Chapter 2 of Title V TEU that are subject to public international law'.

of this general clause and further specify how this relates to the scoping mechanisms set out in Article 2(1).

2.2.1. Article 2(3) AI Act, first subparagraph

42. The first subparagraph of Article 2(3) states that the AI Act applies only to areas within the scope of Union law.[121] It does not specifically refer to either AI systems or GPAI models. This provision reflects the division of competences between the European Union and its Member States, as established in the Treaties.[122] It serves to ensure that the AI Act does not extend into areas falling outside the Union's legislative competence, thereby respecting the principle of conferral enshrined in Article 5 TEU.[123] Article 4(2) TEU expressly states that 'national security remains the sole responsibility of each Member State.' The legislature chose to affirm this principle in Article 2(3), first subparagraph, which states that the Act 'shall not, in any event, affect the competences of the Member States concerning national security'. Recital 24 AI Act further elaborates on this limitation and refers to Article 4(2) TEU multiple times, underlining that the AI Act does not encroach upon Member States' exclusive competence in matters of national security.[124] This provides Member States with leeway in relation to GPAI models in two main ways. First, authorities acting outside the scope of Union law, such as those responsible for national security, may buy, use, or possibly even develop GPAI models without having to adhere to the AI Act.[125] This has led commentators to argue that there is a risk that the development of GPAI models for national security and military purposes is siloed off into parallel processes out of the AI Act's reach.[126] Second, Member States may still adopt their own regulatory measures in the area of national security, as the exclusion preserves their competence to act independently where Union law does not apply.[127] This could for example provide room for a Member States' intelligence agency to demand insight into certain models based on provisions in national legislation on national security.[128]

43. However, exactly how much leeway Member States will actually enjoy under this carve-out relates to an ongoing jurisprudential discussion concerning the delineation of national competences and the

[121] AI Act, art 2(3): 'This Regulation does not apply to areas outside the scope of Union law, and shall not, in any event, affect the competences of the Member States concerning national security, regardless of the type of entity entrusted by the Member States with carrying out tasks in relation to those competences.'
[122] Pieper (n 1) para 58; Voigt (n 1) para 36; Wendehorst, 'Art 2' (n 15) para 64.
[123] For a further discussion on the principle of conferral see, for example, Inge Govaere, 'To Give or to Grab: The Principle of Full, Crippled and Split Conferral of Powers Post-Lisbon' (College of Europe, Department of European Legal Studies 2016) Research Paper in Law <https://www.coleurope.eu/sites/default/files/research-paper/researchpaper_4_2016_inge_govaere_0.pdf> accessed 29 January 2026; Robert Schütze, 'EU Competences: Existence and Exercise' in Damian Chalmers and Anthony Arnull (eds), *The Oxford Handbook of European Union Law* (1st edn, OUP 2015) 75ff.
[124] Also see AI Act, recital 24 ('If, and insofar as, AI systems are placed on the market, put into service, or used with or without modification of such systems for military, defence or national security purposes, those should be excluded from the scope of this Regulation regardless of which type of entity is carrying out those activities, such as whether it is a public or private entity [...])'.
[125] Plixavra Vogiatzoglou, 'The AI Act's National Security Exception' (*Verfassungsblog*, 2024) <https://verfassungsblog.de/the-ai-act-national-security-exception/> accessed 22 December 2025.
[126] Oskar J Gstrein, Noman Haleem and Andrej Zwitter, 'General-Purpose AI Regulation and the European Union AI Act' (2024) 13 Internet Policy Review, 19; see also, Pieper (n 1) para 58 and Voigt (n 1) para 36 for a discussion on the apparent misalignment between the stated 'risk-based' objectives of the AI Act as a whole and the exclusion of potentially highly dangerous AI systems and models from its scope.
[127] TEU, art 4(2).
[128] While no specific national-security-related AI legislation has been identified at the Member State level, a hypothetical example could be the conferral of specific investigatory powers on intelligence and national security authorities in relation to GPAI models.

scope of EU law.[129] In the Commission's original proposal for the AI Act, the national security exclusion focused more narrowly on excluding AI systems for military purposes.[130] During the negotiation process, the legislature broadened this exclusion substantively to cover those areas that fall outside the scope of Union law.[131] It was clarified that the exception applies regardless of which entity performs the activities for military or national security purposes.[132] As notably demonstrated in the field of data protection law, the exclusion of national security from the scope of Union law is not absolute, even when it is expressly included in the text of an EU regulation.[133] In *Privacy International*, the CJEU stated that while Member States do retain, under Article 4(2) TEU, the national security competence, this does not mean that every (regulatory) measure they take with the aim of promoting national security falls outside the scope of Union law. Member States need to act in accordance with the Union's laws when taking measures:

> although it is for the Member States to define their essential security interests and to adopt appropriate measures to ensure their internal and external security, the mere fact that a national measure has been taken for the purpose of protecting national security cannot render EU law inapplicable and exempt the Member States from their obligation to comply with that law.[134]

44. Hence, regulatory measures adopted by Member States in light of their national security interests that conflict with the rules established in the AI Act may still be subject to judicial review in relation to the AI Act.[135]

45. Authors have derived a further limitation from the case law, in particular from the *La Quadrature du Net* judgment.[136] In that case, the Court of Justice emphasised that the involvement of private actors constitutes a relevant indicator that the activities concerned fall within the scope of Union law and cannot be excluded on the ground of national security.[137] This raises the question of whether national security authorities can rely on private actors supplying GPAI models without triggering the applicability of the AI Act.[138] The repeated reference in Article 2(3) to the exclusion of national security activities from the AI Act's scope regardless of the actor entrusted with such tasks may be interpreted as reflecting an explicit legislative choice of departure by the AI Act from the reasoning of the Court in *La Quadrature du Net*.[139] This is particularly interesting since it has been argued that

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[129] For a discussion on the legal effects and limits of Article 4(2) TEU on Member State competences, see, for example: Trevor Hartley and Takis Tridimas, *The Foundations of European Union Law* (9th edn, OUP 2025), 376; Monika Zalnieriute, 'A Struggle for Competence: National Security, Surveillance and the Scope of EU Law at the Court of Justice of the European Union' (2022) 85 The Modern Law Review 198; Neil Murphy, 'Article 4(2) TEU: A Blow to the Supremacy of Union Law' (2017) 20 Trinity College Law Review 94; Marek Jaśkowski, 'National Security and Essential Security Interests in CJEU Jurisprudence' in Jens Hillebrand Pohl and others (eds), *Weaponising Investments* (vol 2, Springer 2023) 227.

[130] European Commission, 'Proposal for a Regulation of the European Parliament and of the Council laying down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) COM (2021) 206 final'. In the Commission's original proposal, article 2(3) consisted of a single sentence, providing that: 'This Regulation shall not apply to AI systems developed or used exclusively for military purposes.'

[131] Vogiatzoglou (n 125).

[132] AI Act, art 2(3), second subparagraph; see, also, Wendehorst, 'Art 2' (n 15) paras 69–73.

[133] *Privacy International* (n 29).

[134] ibid para 44.

[135] See also Joined Cases C-511/18, C-512/18 and C-520/18 *La Quadrature du Net and Others v Premier ministre and Others* ECLI:EU:C:2020:791, paras 94–104. See for example Vogiatzoglou (n 125) who discusses these developments in relation to the AI Act.

[136] Vogiatzoglou (n 125).

[137] *La Quadrature du Net and Others* (n 135) paras 102–105.

[138] Vogiatzoglou (n 125).

[139] ibid.

this Court judgement forms part of the primary law of the EU and that the AI Act's provisions cannot override it.[140] However, it can also be argued that the stricter interpretation of Article 4(2) TEU, as forwarded by the cited judgement, can be deemed applicable only insofar as a given national security exemption in EU secondary law is articulated in general terms. If the legislature has expressly limited the scope of harmonisation, as appears to be the present case, it can be argued that this general jurisprudential position cannot prejudice the legislature's competence to autonomously delineate the extent of harmonisation in a given field of EU law, including by excluding all activities related to national security, regardless of whether they are carried out by private or public entities.

2.2.1.1. Article 2(3), second subparagraph

46. Article 2(3), second subparagraph, stipulates that '[t]his Regulation does not apply to AI systems where and in so far as they are placed on the market, put into service, or used with or without modification exclusively for military, defence or national security purposes, regardless of the type of entity carrying out those activities.'[141] This subparagraph thus aims to exclude from the scope of the AI Act any AI system used exclusively for military, defence, or national security purposes, irrespective of the nature or identity of the actor involved.[142] Recital 24 substantiates this choice by referring to the common Union defence policy covered by Chapter 2 of Title V TEU and to Article 4(2) TEU.[143] In this sense, the second subparagraph can be viewed as a more specified version of the general rules on EU and Member State competences,[144] discussed in Section 2.2.1. This part of the exclusion in the second subparagraph is meant to ensure that AI systems used for the mentioned purposes are not burdened by the requirements applicable to (high-risk) AI systems, for example, in the case of intelligence operations or response to hybrid threats,[145] or to allow Member States to remain autonomous in matters of defence and military operations.[146] Given that this already follows from the division of competences in the Treaties, the subparagraph can therefore be viewed as having primarily a declaratory or affirmative nature rather than a substantive effect.[147] This declaratory function mainly lies in the fact that the provision notes that an AI system[148] is only out of scope of Union law when placed on the market, put into service or used exclusively for military, defence and national security purposes. Still, it can also be argued, as with subparagraph 1, that this express delineation may serve to provide additional legal certainty on the will of the legislature to exclude certain activities regardless of the entities which perform them, thereby removing them from the specific scope of harmonisation carried out by the AI Act.

2.2.1.2. Article 2(3), third subparagraph

47. The third exclusion under Article 2(3) states that the AI Act 'does not apply to AI systems which are not placed on the market or put into service in the Union, where the output is used in the Union exclusively for military, defence or national security purposes, regardless of the type of entity carrying

[140] ibid.
[141] See also, the discussion in Wendehorst, 'Art 2' (n 15) paras 69–73.
[142] AI Act, art 2(3), second subparagraph; AI Act, recital 24; see also, Pieper (n 1) para 59; Voigt (n 1) para 37; Wendehorst, 'Art 2' (n 15) paras 69–70.
[143] Pieper (n 1) para 59; Voigt (n 1) para 36.
[144] See nn121–123.
[145] Wendehorst, 'Art 2' (n 15) para 59.
[146] Van Eecke and Regenhardt (n 23) 41–42.
[147] See Section 2.2.1.
[148] While AI Act, art 2(3), second subparagraph mentions AI systems, the same would go for GPAI models. The AI Act can simply not apply to the use of GPAI models outside of the scope of Union law. Article 2(3) simply reiterates that general rule that also applies to GPAI models.

out those activities.' This provision appears to function as a carve-out from Article 2(1)(c), which extends the territorial scope of the Regulation to AI systems whose outputs are used in the Union, irrespective of the provider's or deployer's location. The third exclusion thus aims to limit the reach of Article 2(1)(c) in the specific context of military, defence and national security applications[149] and is intended to ensure that cooperation in the field of defence and national security between Member States and third countries can continue without the AI Office scrutinising third countries' AI systems and Member States' intelligence services.[150] This third exclusion can also be viewed as reaffirming the division of competences and declaring that this also applies to situations in which the use of an AI system's output would otherwise bring that system within the scope of the AI Act.

2.3. Article 2(6) AI Act

48. Article 2(6) provides an exclusion for AI systems and GPAI models that are specifically developed and put into service for the sole purpose of scientific research and development.[151] This provision, often referred to as a 'scientific exclusion',[152] was included to avoid an adverse impact on scientific progress.[153] Where the exclusion applies, the relevant AI systems and models, including GPAI models,[154] are not covered by the Act.[155] The following sections will examine the criteria of 'specifically developed for a sole purpose', 'put into service', and 'scientific research and development'. Doing so will shed light on whether, and to what extent, the Article 2(6) exclusion is relevant for GPAI models and can indeed be viewed as a purposive exclusion for scientific research and development purposes.[156]

2.3.1. Specifically developed [...] for the sole purpose

49. The Article 2(6) exemption only concerns AI systems and models that were 'specifically developed and put into service for the sole purpose' of scientific research and development. This provision gives rise to multiple interpretative approaches, notably because the concepts of neither 'specifically developed' nor 'sole purpose' are clearly defined in the AI Act.

[149] AI Act, art 2(1)(c): 'providers and deployers of AI systems that have their place of establishment or are located in a third country, where the output produced by the AI system is used in the Union'.
[150] Wendehorst, 'Art 2' (n 15) paras 53–59.
[151] AI Act, art 2(6): 'This Regulation does not apply to AI systems or AI models, including their output, specifically developed and put into service for the sole purpose of scientific research and development.'; see also, Pieper (n 1) para 67; Wendehorst, 'Art 2' (n 15) paras 84–85, Voigt (n 1) para 41.
[152] See, for example, Pieper (n 1) para 67 ('Ausnahme: Wissenschaft/Forschung'); Voigt (n 1) para 41 ('Forschungsprivileg'); Wendehorst, 'Art 2' (n 15) para 84 ('Wissenschaftsprivileg'); Van Eecke and Regenhardt (n 23) 43 ('Exemption for Scientific Research and Development').
[153] AI Act, recital 25 states that this exclusion is necessary to support innovation and respect the freedom of science: 'This Regulation should support innovation, should respect freedom of science, and should not undermine research and development activity. It is therefore necessary to exclude from its scope AI systems and models specifically developed and put into service for the sole purpose of scientific research and development.' See also: Voigt (n 1) para 41, who connects this exemption to the 'freedom of science'. See also: João Pedro Quintais, 'What Is a "Research Organisation" and Why It Matters: From Text and Data Mining to AI Research' (2025) 74 GRUR International 397, 398.
[154] Van Eecke and Regenhardt (n 23) 43; this is discussed in more detail in Section 2.1.3. That section also examines other perspectives on the question whether placing on the market is a general condition for a GPAI model is in scope of the AI Act.
[155] See n 151.
[156] The latter question is covered in Section 2.3.2.

50. Specifically in the context of GPAI models, a textual reading of the very definition of a GPAI model[157] implies significant generality, the capability to competently perform a wide range of distinct tasks, and being integrable into various downstream systems or applications.[158] This seemingly precludes it from having been *developed specifically* for a s*ole purpose*, such as scientific research.[159] In this reading, the 'sole purpose' might largely overlap with the concept of 'intended purpose' defined in Article 3(12), which is only applicable to AI systems that serve a purpose intended by the provider.[160] While a provider or deployer may *use* a GPAI model for the sole purpose of scientific research and development, Article 2(6) also requires that the model is *specifically developed* for that same sole purpose. It has therefore been questioned whether this exclusion can meaningfully apply to GPAI models because a research project can have both scientific and practical applications at the same time.[161] GPAI models, by their very definition, competently perform a wide range of tasks.[162]

51. Under this interpretation, the inherent generality of GPAI models would render them structurally incompatible with the scope of this exclusion.[163]

52. It may also be possible to read 'sole purpose' more broadly, differentiating it from the more narrowly construed 'intended purpose' found in Article 3(12), which is aimed at specific forms of use of AI systems as envisioned by the provider.[164] A GPAI model might then display significant generality and be capable of performing a wide range of distinct tasks,[165] despite having been developed for a 'sole purpose' such as research and development.

53. Phrased differently, Article 3(63)'s generality of purpose would thus indicate that the model can later be integrated into AI systems with specific intended purposes as meant in Article 3(12).[166] However, that possibility of integration does not necessarily exclude the possibility that a GPAI model is specifically developed for a particular domain, as meant in Article 2(6). This alternative interpretation of 'sole purpose' seems convincing from a more functional and technical perspective, as an AI model that is optimized for a certain task or domain can still qualify as a GPAI model under Article 3(63).

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[157] See the forthcoming commentary on Article 3(63) in this work.
[158] AI Act, art 3(63); see also, Commission GPAI Guidelines (n 48) paras 13–21.
[159] AI Act, art 3(63): '"general-purpose AI model" means an AI model, including where such an AI model is trained with a large amount of data using self-supervision at scale, that displays significant generality and is capable of competently performing a wide range of distinct tasks regardless of the way the model is placed on the market and that can be integrated into a variety of downstream systems or applications, except AI models that are used for research, development or prototyping activities before they are placed on the market'. See, more extensively, the forthcoming commentary on Article 3(63) in this work. Also see the chapter on Internal Deployment in the AI Act, Section 3.1. in this work.
[160] AI Act, art 3(12) states that '"intended purpose" means the use for which an AI system is intended by the provider, including the specific context and conditions of use, as specified in the information supplied by the provider in the instructions for use, promotional or sales materials and statements, as well as in the technical documentation'. Also see Wendehorst, 'Art 3' (n 50) paras 157–162.
[161] Also see Van Eecke and Regenhardt (n 23) 44; Finck (n 105); Antonio Krüger and Reinhard Karger, 'Die KI-Verordnung und das Forschungsprivileg' (2025) Kommunikation & Recht 85. This also closely relates to the delineation of 'scientific research and development', discussed below.
[162] Also see the forthcoming Commentary on Article 3(63) in this work.
[163] This connects to the division of responsibility between the developer of a GPAI model and the user of an AI system as discussed in: Arto Lanamäki, Karin Väyrynen and Fanny Vainionpää, 'The European Union's Regulatory Challenge: Conceptualizing Purpose in Artificial Intelligence' (2024) <https://aisel.aisnet.org/ecis2024/track04_impactai/track04_impactai/1> accessed 11 June 2026, 9.
[164] 'Intended purpose' is defined in AI Act, art 3(12) as 'the use for which an AI system is intended by the provider, including the specific context and conditions of use, as specified in the information supplied by the provider in the instructions for use, promotional or sales materials and statements, as well as in the technical documentation'. Also see Wendehorst, 'Art 3' (n 50) paras 157–162.
[165] For more on significant generality of GPAI models, see the commentary on Article 3(63) in this work.
[166] This is discussed more extensively elsewhere in the commentary on Article 3(63) in this work.

An additional argument supporting this functional interpretation lies in the legislature's choice of terminology. Article 2(6) does not rely on the notion 'intended purpose' but instead introduces the distinct concept of 'sole purpose'. If the legislature had intended these terms to carry the same meaning, there would have been no need to introduce a new one.[167] Under this compelling functional interpretation, a GPAI model specifically developed for a sole purpose may fall within the Article 2(6) exclusion.[168]

2.3.2. Put into service

54. Interestingly, the Article 2(6) exclusion seemingly stands at odds with Article 2(1)(a)'s requirement – which is considered to be a general condition to be subject to the Act's scope[169] – that the AI Act would only apply to GPAI models that are 'placed on the market'.[170] Specifically, Article 2(6)'s exclusion seems to be tailored to AI systems and AI models that are not placed on the market, but that are 'specifically developed and *put into service* for the sole purpose of scientific research development' (emphasis added). Yet, the AI Act does not expressly acknowledge that AI or GPAI models can be put into service in the first place, nor does it indicate that such putting into service would bring a GPAI model within the scope of the Act.[171] Consequently, Article 2(6) may appear superfluous in relation to GPAI models, as they are only in scope when placed on the market and the AI Act does not explicitly foresee their being put into service.

2.3.2.1. Within scope because put into service?

55. There are, however, some arguments that support the idea that a GPAI model can be 'put into service' in the sense of Article 3(11),[172] as discussed above.[173] Assuming that a GPAI model can indeed be put into service, does, however, not necessarily imply that this also brings that model within the scope of the AI Act. The definitional question of what constitutes 'putting into service' and the scoping question of whether this in turn triggers the AI Act's application are closely connected, yet distinct in nature and in the arguments they rely on.[174] Interestingly, however, the view that a GPAI model can be put into service without bringing it within the Act's scope would create an interpretative conundrum when it comes to excluding GPAI models from the AI Act's scope under Article 2(6). Namely, the GPAI model could in principle be excluded under Article 2(6) if it is put into service and adheres to the other criteria of Article 2(6) AI Act – such as being 'specifically developed for the sole purpose of scientific research and development'[175] – but the GPAI model would not have been in scope on the basis of Article 2(1)(a) in the first place. This reading would still render Article 2(6) superfluous

[167] Lenaerts and Gutiérrez-Fons (n 60) 17. Also see the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.
[168] It is important to note that under this interpretation the provider of the GPAI model has to set clear boundaries on the model's downstream use – for example through contractual clauses or licensing terms – to prevent its later integration into AI systems within the scope of the AI Act. Such integration would render the model *placed on the market* and thereby subject to the AI Act.
[169] This is discussed in more detail in Section 2.1.3. This section also discusses other perspectives on the question whether placing on the market is a general condition for a GPAI model is in scope of the AI Act.
[170] See n7282.
[171] This is discussed in more detail in Section 2.1.3.1.
[172] Note that this specifically concerns the interpretative question of whether a GPAI model can under the AI Act be considered to be put into service and does not go into the question of whether such putting into service would also trigger the applicability of the AI Act. These two steps are discussed in more detail in Section 2.1.3. Also see the forthcoming commentary on Article 3(11) in this work.
[173] This is discussed in Section 2.1.2.
[174] These two subsequent questions are discussed in more detail in Section 2.1.2.
[175] These other criteria mentioned in AI Act, art 2(6) are discussed in Sections 2.3.2. and 2.3.3.

in relation to GPAI models, even if their putting into service is acknowledged as a factual possibility. Nevertheless, this corresponds to the prevailing interpretation of the AI Act, according to which Article 2(6) does not apply to GPAI models because these models are only in scope when 'placed on the market'.[176]

56. A question therefore arises as to whether a GPAI model may first be placed on the market, thereby falling within the scope of the AI Act, and only subsequently be put into service exclusively for scientific research and development, with the result that it would then fall outside the scope of the AI Act. In principle, the concepts 'placing on the market' and 'putting into service' are to be viewed as two distinct triggers of the applicability of the AI Act – or at least in relation to AI systems.[177] Even though the Blue Guide contains the phrasing 'products which are intended to be placed (*and/or* put into service) on the market'[178] (emphasis added), the Commission has explained that this might create a wrong impression and has clarified that these two concepts refer to two different 'moments' in the process of bringing a product to the market.[179] In addition, it states that '[e]ven if the reference to two terms may create the impression that "placing on the market" and "putting into service" are two different moments when a product compliance is to be assessed, this is not the case: as these two terms are mutually exclusive, either one or the other is relevant.'[180] Article 2(1)(a) reflects this quite clearly, as it expressly states that it concerns providers placing on the market *or* putting into service AI systems.[181] Given that 'putting into service' and 'placing on the market' constitute two distinct concepts referring to two different moments in time at which the Act may become applicable, the conclusion could be drawn that a model cannot be placed on the market and subsequently be put into service. Even if a GPAI model that has already been placed on the market could subsequently be put into service, that action might appear to be legally irrelevant insofar as any provider obligations would have become enforceable at the moment of market placement.

57. Nevertheless, at the same time, it is impossible to fully rule out a different interpretation with more overlapping terminology, according to which 'placing on the market' and 'putting into service' would be more sequential stages in which a GPAI model can enter the Act's scope through market placement and afterwards be *de facto* put into service, for example when being integrated into an AI

[176] See Section 2.1.2.

[177] European Commission, 'Frequently Asked Questions (FAQ) on the Ecodesign Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products and its Implementing Regulations' (*European Commission Docs Room*, 2019) <https://ec.europa.eu/docsroom/documents/38822> accessed 23 December 2025, 4. The European Commission has explained that: 'The term "putting into service" is used, as the EU legislation also needs to cover products, which are "physically" never placed on the market, but installed directly at the end-user's place.'

[178] See, e.g., Blue Guide (n 27) s 2.1.

[179] European Commission, 'Frequently Asked Questions (FAQ) on the Ecodesign Directive 2009/125/EC' (n 177) 4: 'The sentence: "be placed on the market and/or put into service", creates the impression that placing on the market and putting into service are cumulative, i.e. that there are two different moments from when on a product has to comply, which is wrong. The way the concepts should be understood is that 'placing on the market' (making a product available for the first time on the EU market) and "putting into service" (first use of a product for its intended purpose by an end-user in the EU) refer to two different "moments" in the process of bringing a product to the market; compliance for the "entry" into the market is required only once based either on the moment when the product is placed on the market or when it is put into service. [...] Only where a product is "not placed on the market" in the literal meaning, the moment of compliance is the putting into service.'

[180] European Commission, 'What is considered putting into service and how does it differ from placing on the market?' (*European Commission Energy Efficient Products*) <https://energy-efficient-products.ec.europa.eu/faqs-0/what-considered-putting-service-does-it-apply-top-placing-market_en accessed> 23 December 2025.

[181] AI Act, art 2(1)(a): 'providers placing on the market or putting into service AI systems or placing on the market general-purpose AI models in the Union, irrespective of whether those providers are established or located within the Union or in a third country'.

system. Extending this logic to Article 2(6) means that a GPAI model developed for the sole purpose of scientific research and development, then 'placed on the market' – thereby bringing it in the scope of the Act pursuant to Article 2(1)(a) – and then 'put into service' for the sole purpose of scientific research and development, might fall within the Article 2(6) exemption.[182]

2.3.2.2. Integration into an AI system that is put into service

58. As mentioned above, there are two main ways in which a GPAI model may be integrated into an AI system: by the model provider itself or by a downstream actor.[183] In the first scenario, if the GPAI model is not made available on the market separately from the AI system into which it is integrated, the placing on the market of the system and of the model coincide.[184]

59. In the second scenario, by contrast, the model is supplied on the Union market for further integration into AI systems by downstream actors. Therefore, the first instance of making available the GPAI model on market for subsequent system integrations will itself constitute market placement and not those subsequent integrations. In that case, whether or when downstream integration actually occurs is irrelevant for determining the moment at which the original provider places the model on the market. Rather, the decisive moment is when the provider makes the model available on the Union market for further integration, for example by offering it as part of a 'software library or package'.[185] Even though a downstream actor might subsequently integrate the model into an AI system that falls within the exception of Article 2(6), it does not appear preferable, in principle, to automatically extend that exception to the model as well.

60. Thus, Article 2(6) appears relevant primarily in the first scenario – where the GPAI model provider integrates the GPAI model into an own AI system and then puts that system into service solely for the purposes of scientific research and development. Insofar as the GPAI model has not been made available independently of the system into which it is integrated, it appears possible to argue that if the AI system falls outside the scope of the AI Act on the basis of Article 2(6), then the GPAI model likewise falls outside the scope. The analysis below therefore focuses only on the viability of the first integration scenario, given that GPAI models made available on the market for further integration by downstream actors are *a priori* excluded from the scope of application of Article 2(6).

61. Based on a textual reading, the Article 2(6) exclusion only applies to the AI system that is specifically developed and put into service for the sole purpose of scientific research and development. The GPAI model can then be considered to be placed on the market because it was integrated into an AI system that was placed on the market or put into service.[186] Therefore, when integrated into an AI system, the GPAI model is not 'put into service' but rather 'placed on the market', disqualifying it for the Article 2(6) exclusion. It would thus remain within the Act's scope after the integration, even though the AI system built on top of it is itself excluded from the AI Act.[187] This interpretation finds teleological support in the Act's regulatory objectives: the risks of the underlying GPAI model that Chapter V AI Act addresses are not inherently more limited in scientific instead of commercial

[182] It is noteworthy that the alternative interpretation discussed in Section 2.3.1. in which 'put into service' in article 2(6) AI Act does not strictly correspond to 'putting into service' in article 3 also provides room for an interpretation in which a GPAI model is in scope of the AI Act because it's been placed on the market, but then is taken out of the scope because it is 'put into service' under article 2(6) AI Act.
[183] Section 2.1.2.3. discusses the integration mechanism in more detail.
[184] See Section 2.1.2.3.
[185] Commission GPAI Guidelines (n 48) paras 13–21 and 53.
[186] The integration mechanism is discussed in more detail in Section 2.1.3.2.
[187] See, differently, the chapter on Internal Deployment in the AI Act, Section 3.1. in this work.

contexts.[188] In addition, the procedural rather than substantive nature of the GPAI requirements[189] implies a lower compliance threshold,[190] which would imply that the exclusion's goals could be realised at a minimal cost, thus respecting the rationale underpinning the research exemption to avoid adversely impacting scientific research.

62. Nevertheless, the AI Act could also be interpreted more holistically. Once a GPAI model is integrated into an AI system that is put into service, one could view that model as being *integrated* into that system, entailing that it is therefore no longer separable from it.[191] After all, the whole applicability of the AI Act to that model, at that point, rests on its integration into the AI system that falls within the Act's scope. When that AI system itself is excluded from the Act's scope under Article 2(6), the basis for triggering the Act's applicability likewise can be argued to have ceased to exist. Phrased differently, where a GPAI model would be considered placed on the market and thus subject to the AI Act's scope solely by virtue of its integration into an AI system that has been put into service, it can be argued that the underlying model cannot be treated as separately within scope if the AI system into which it is embedded falls under the scientific research exclusion.

63. The more textual interpretation appears more compelling as the wording of the Act does not indicate with sufficient clarity that a GPAI model should be considered to fall outside of the AI Act's scope in this scenario. Furthermore, from a policy perspective, it seems coherent that the relevant GPAI model would remain within the Act's scope, given its potential to generate systemic risks irrespective of the specific context in which a specific downstream system is deployed.[192] Nevertheless, the alternative structure-based interpretation retains merit, as it rightly questions how a model could fall within the Act's scope when it was only brought within the scope on the basis of its integration in a system that would, itself, fall outside the scope of the Act.

2.3.3. Scientific research and development

64. Article 2(6) requires that an AI model was specifically developed and put into service for the sole purpose of 'scientific research and development'. The AI Act does not further define 'scientific research and development'.[193] Recital 25, which clarifies the exclusion's goal,[194] explicitly contrasts the concept of *scientific* research and development to the conduct of research and development as an activity by stating:

> Furthermore, without prejudice to the exclusion of AI systems specifically developed and put into service for the sole purpose of scientific research and development, any other AI system that may be used for the conduct of any research and development activity should remain subject to the provisions of this Regulation.

65. As a result, some have argued that the Article 2(6) exclusion is specifically meant for the use of AI systems and models without placing them on the market, and therefore concerns either the own use

[188] See the chapter on Internal Deployment in the AI Act, para 34 in this work.
[189] See the commentaries on Articles 53 and 55 in this work.
[190] Maarten Herbosch, 'Beyond the False Dichotomy: Regulating AI Safety, Ethics and Innovation' (SSRN, 2025) <https://doi.org/10.2139/ssrn.5640031> accessed 23 December 2025, 68.
[191] See Section 2.1.1.3. for a more detailed discussion on the integration of a GPAI model into an AI system.
[192] See the chapter on Internal Deployment in the AI Act, para 34 in this work.
[193] Van Eecke and Regenhardt (n 23) 43.
[194] AI Act, recital 25: 'This Regulation should support innovation, should respect freedom of science, and should not undermine research and development activity. It is therefore necessary to exclude from its scope AI systems and models specifically developed and put into service for the sole purpose of scientific research and development [...]'. See Section 2.3.1.; see also n 153.

or the direct supply of a bespoke research-focused AI system or model to a third entity conducting scientific research without being made available on the market in another way.[195] Adopting a similar line of thinking, other authors have stated that the Article 2(6) exclusion reflects the AI Act's goal of internal market harmonisation, by ensuring that AI systems used solely for scientific research and development, as a primarily non-commercial activity, remain outside of the scope of the AI Act.[196] However, legal uncertainty persists regarding this concept's interpretation. Furthermore, it is important to note that large AI research projects, notably those stimulated by European Union institutions, usually involve significant public-private collaboration[197] and correspondingly a collaboration between parties with a primarily scientific or commercial interest. Thus, it comes as not surprise that some authors have criticised such distinctions as 'antiquated'.[198] A strict interpretation of the concept of scientific research and development as excluding all commercial actors thus threatens to render Article 2(6)'s exclusion significantly less useful in practice.[199]

66. In an attempt to gain more clarity on the meaning and boundaries of Article 2(6)'s 'scientific research and development' one can attempt to draw interpretative guidance from other areas of EU law.[200] As a general note, it is important to emphasise that drawing upon definitions in other legislation is to be done with appropriate caution.[201] The following sections will examine two relevant fields that have received the most attention in the literature: copyright and data protection law.[202] As discussed below, these fields share a common feature: the interpretation of 'scientific research purposes' is closely intertwined with national legal traditions and with the regulatory frameworks governing research institutions in each Member State.[203] This does not, of course, imply that the CJEU must take these national differences into account when interpreting the notion of scientific research and development under the AI Act; the Union is not bound by national interpretations of these terms but may, instead, construe 'scientific research and development' as an autonomous concept of EU law.[204]

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[195] Wendehorst, 'Art 2' (n 15) para 94.

[196] Gstrein, Haleem and Zwitter (n 126) 7.

[197] Finck (n 105); Van Eecke and Regenhardt (n 23)Pehlivan, Forgó and Valcke, *AI Act: A Commentary* (n 86) 43 also emphasise that: 'research can explore potential scenarios where a research project might have both scientific and practical applications'.

[198] Particularly on research by public versus private organisations: Liane Colonna, 'The AI Act's Research Exemption: A Mechanism for Regulatory Arbitrage?' in Eduardo Gill-Pedro and Andreas Moberg (eds), *YSEC Yearbook of Socio-Economic Constitutions 2023* (Springer 2024) <https://link.springer.com/chapter/10.1007/16495_2023_59> accessed 23 December 2025, 53. This source thoroughly discusses the usability of the exemption in the context of contemporary academic research and blurring boundaries between public and private research.

[199] ibid.

[200] Also see the chapter on Internal Deployment in the AI Act, Section 3.1. in this work.

[201] See the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

[202] Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC [2019] OJ L 130/92 ("CDSM Directive"), arts 2(1) and 3; Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L 119/1, arts 9(2)(j) and 89; for an additional discussion on the concept of scientific research as used in other field of EU law fields, see Colonna (n 198) 52–60.

[203] See Section 2.3.3.2.

[204] The Court of Justice applies the method of autonomous interpretation, under which terms in Union law receive a Union meaning rather than one derived from national legal systems. Applied here, the Union need not follow Member State views on what constitutes 'scientific research', but may construe it as an autonomous concept of Union law, shaped by the objectives of the AI Act. This is discussed in more detail in the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

67. Given the ambiguity surrounding the notion 'scientific research and development', it is instructive to look at how other EU law instruments deal with this notion. The latter may inspire the interpretation applicable in the context of the AI Act.[205]

2.3.3.1. Scientific research and development under the CDSM Directive and the DSA

68. In the context of copyright and related intellectual property rights, Article 3 of the Directive on Copyright in the Digital Single Market ("CDSM Directive") requires Member States to (*inter alia*) introduce an exception on certain rights for 'reproductions and extractions made by research organisations and cultural heritage institutions in order to carry out, for the purposes of scientific research, text and data mining of works or other subject matter to which they have lawful access.'[206]

69. Recital 12 of the CDSM Directive provides interpretative guidance on the notion of 'scientific research', stating that the term may encompass all scientific disciplines, including both the natural sciences and the humanities.[207] Notably, the CDSM Directive restricts the scope of the exception by reference to the nature of the entity conducting the research, namely the notion of a 'research organisation', defined as an entity that operates on a primarily non-commercial basis.[208] The CDSM Directive's Article 2(1) and Recital 12 clarify that entities subject to 'decisive influence' by commercial undertakings, such as through shareholding or membership structures granting preferential access to research outcomes, should not be regarded as research organisations for the purposes of the Directive.[209] However, certain national judgements, such as that in the German case *Knesche v. Laion eV* (on the German implementation of this CDSM Directive: Article 60d of the *Urheberrechtsgesetz*[210]) stress that this notion should not be understood too narrowly.[211]

70. Notably, the DSA directly imports the CDSM Directive's approach to the notion of scientific research. In particular, Article 40(4) DSA requires providers of very large online platforms and very large online search engines to grant data access to 'vetted researchers' for the 'sole purpose' of conducting research aimed at detecting, identifying and understanding systemic risks within the Union, as well as at evaluating the adequacy and effectiveness of risk-mitigation measures adopted by providers under Article 35 DSA. The first cumulative condition for obtaining 'vetted researcher' status under Article 40(8)(a) DSA is that the applicant be affiliated with a research organisation within

[205] See the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.
[206] CDSM Directive (n 202) art 3(1): 'Member States shall provide for an exception to the rights provided for in Article 5(a) and Article 7(1) of Directive 96/9/EC, Article 2 of Directive 2001/29/EC, and Article 15(1) of this Directive for reproductions and extractions made by research organisations and cultural heritage institutions in order to carry out, for the purposes of scientific research, text and data mining of works or other subject matter to which they have lawful access.'
[207] CDSM Directive (n 202) recital 12: 'The term "scientific research" within the meaning of this Directive should be understood to cover both the natural sciences and the human sciences.'
[208] CDSM Directive (n 202) art 3(1). The research organisation is defined in article 2(1) CDSM Directive as: '[...] a university, including its libraries, a research institute or any other entity, the primary goal of which is to conduct scientific research or to carry out educational activities involving also the conduct of scientific research: (a) on a not-for-profit basis or by reinvesting all the profits in its scientific research; or (b) pursuant to a public interest mission recognised by a Member State; in such a way that the access to the results generated by such scientific research cannot be enjoyed on a preferential basis by an undertaking that exercises a decisive influence upon such organisation'. See for a brief and complete overview of what constitutes the 'research organisation' Quintais (n 153).
[209] Quintais (n 153); Wendehorst, 'Art 2' (n 15) para 90.
[210] Copyright Act of 9 September 1965 (Federal Law Gazette I, p. 1273), as last amended by Article 25 of the Act of 23 June 2021 (Federal Law Gazette I, p. 1858).
[211] *Robert Kneschke v LAION e.V.* (Regional Court of Hamburg, 27 September 2024), 310 O 227/23.

the meaning of Article 2(1) CDSM Directive.[212] Article 40(8)(b) DSA further stresses that those researchers should be 'independent from commercial interests'. The DSA, therefore, has not developed an autonomous notion of scientific research but rather closely follows the CDSM Directive's relatively narrow scope of clearly delineated institutions that may benefit from the concept.

71. In contrast, however, the AI Act does not contain a similar express limitation related to the character of the entities that may conduct scientific research to fall under the conditions for Article 2(6) application. This may be interpreted as implying that the relevant research can be carried out by any entities, including those with primarily commercial character.[213] Conversely, however, the need to distinguish 'research and development' as a commercial activity under Article 2(8)[214] might support a narrower interpretation of 'scientific research and development' under Article 2(6), similar to that under the CDSM Directive and the DSA.

2.3.3.2. Scientific research and development in data protection law

72. Union data protection rules, and specifically the GDPR, appear to also offer a relevant point of interpretative comparison, considering that a research exemption (Article 9(2)(j) GDPR) applies to Article 9 GDPR's prohibition of the processing of special categories of data, such as data on health or political opinion.[215] Article 9(2)(j) GDPR allows the Union or Member State legislature to lift this prohibition if required for archiving purposes in the public interest, for scientific or historical research purposes, or for statistical purposes.[216] Moreover, Article 89 GDPR similarly emphasises the need for appropriate safeguards when processing data for 'archiving purposes in the public interest, scientific or historical research purposes or statistical purposes'.[217] This results in a different system than under

[212] See also, Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (Digital Services Act) [2022] OJ L 277/1 ("DSA"), recital 97, which likewise emphasises that providers may be compelled to grant data access to researchers affiliated with research organisations within the meaning of article 2(1) CDSM Directive, and clarifying that, for the purposes of the DSA, this category 'may include [...] civil society organisations that are conducting scientific research with the primary goal of supporting their public interest mission.'

[213] See, in the same sense, the chapter on Internal Deployment in the AI Act, para 49 in this work.

[214] See Section 2.4.

[215] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L 119/1 ("GDPR"), art 9(1): 'Processing of personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation shall be prohibited.'

[216] GDPR art 9(2)(j): 'processing is necessary for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes in accordance with Article 89(1) based on Union or Member State law which shall be proportionate to the aim pursued, respect the essence of the right to data protection and provide for suitable and specific measures to safeguard the fundamental rights and the interests of the data subject'; see also GDPR, recital 159 which states that: '[...]scientific research purposes should be interpreted in a broad manner including for example technological development and demonstration, fundamental research, applied research and privately funded research.'

[217] GDPR, art 89: '1. Processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes, shall be subject to appropriate safeguards, in accordance with this Regulation, for the rights and freedoms of the data subject. [...]
2. Where personal data are processed for scientific or historical research purposes or statistical purposes, Union or Member State law may provide for derogations from the rights referred to in Articles 15, 16, 18 and 21 [...]
3. Where personal data are processed for archiving purposes in the public interest, Union or Member State law may provide for derogations from the rights referred to in Articles 15, 16, 18, 19, 20 and 21 [...]'.

the AI Act. Under the GDPR, more targeted derogations for specific rights are to be enacted via Union or Member State law that not only have to provide for additional safeguards on the processing for these purposes, but that also would limit how broadly the exemption can be interpreted.[218] This contrasts with the AI Act's approach in Article 2(6) that provides for a blanket exclusion from the AI Act's scope as a whole. Second, the GDPR's framework allows Member States to connect the GDPR exemption to their respective definition of scientific research in national legislation,[219] which over ten Member States have taken advantage of.[220] The AI Act, on the other hand, does not permit Member States to further develop the meaning or applicability of the scientific exclusion in Member State law.[221] These points of difference between the AI Act and GDPR limit the possibility of interpreting the AI Act's definition on scientific research and development in light of the GDPR.[222]

73. These differences imply that the notion of scientific research under the GDPR differs significantly from the similar notion under the AI Act, as its legislative framework is inherently designed to accommodate diverging Member State rules. Consequently, this fundamental divergence in approaches appears to support a view that the AI Act's notion of 'scientific research' should be interpreted independently, rather than by analogy to the GDPR and other similar derogations in other EU legislation.[223]

2.4. Article 2(8) AI Act

74. Article 2(8) contains another important limit to the Act's scope. It offers an exclusion for research, testing and development activities that are being executed before an AI system or AI model is placed on the market or put into service.[224] This is sometimes referred to as an exemption for commercial use.[225] Recital 25, which appears to relate to both Articles 2(6) and 2(8), reflects this idea by discussing 'product-oriented research, testing and development'.[226] Despite this exemption's generality in terms

Note that in contrast to the CDSM directive, the operative text of the GDPR itself does not make an explicit distinction between public and private research. See also: Colonna (n 198) 56. However, this delineation may be carried out under Member State law implementing the concept of scientific research at national level.

[218] For example in the Dutch *Uitvoeringswet AVG,* the legislature decided that to make use of the derogation from the prohibition to process special categories of data for scientific research (Article 9(2)(j), the research in question needs to be 'in the public interest').

[219] GDPR, art 89(2) provides Member States with the opportunity to create derogations from GDPR specific rights for 'scientific or historical research purposes or statistical purposes'. These concepts are not harmonized at the EU level but defined in national law.

[220] European Data Protection Board, 'Study on the Secondary Use of Personal Data in the Context of Scientific Research' (EDPS 2020) 2019/02–04 <https://www.edpb.europa.eu/our-work-tools/our-documents/other/study-secondary-use-personal-data-context-scientific-research_en> accessed 12 June 2026, 17.

[221] In contrast to the GDPR, article 2(6) of the AI Act does not afford Member States discretion to establish tailored national derogations. Instead, it introduces a uniform concept of 'scientific research and development' that must be applied consistently across the Union.

[222] See more generally the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

[223] Also see (differently) the chapter on Internal Deployment in the AI Act, para 50 in this work. For a more detailed discussion on the use of analogy to interpret the AI Act and EU laws more broadly, see the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

[224] AI Act, art 2(8): 'This Regulation does not apply to any research, testing or development activity regarding AI systems or AI models prior to their being placed on the market or put into service.'; Pieper (n 1) paras 70–74; Wendehorst, 'Art 2' (n 15) paras 109–112, Voigt (n 1) paras 42–43.

[225] Van Eecke and Regenhardt (n 23) 44.

[226] AI Act, recital 25 AI Act 'Moreover, it is necessary to ensure that this Regulation does not otherwise affect scientific research and development activity on AI systems or models prior to being placed on the market or put into service. As regards product-oriented research, testing and development activity regarding AI systems or models, the provisions of this Regulation should also not apply prior to those systems and models being put into service or placed on the market.'

of relevant actor, domain and purpose, it is important to emphasise that Article 2(8)'s exclusion does come with some key limitations. More specifically, this provision targets certain *activities* before market placement or deployment.[227]

2.4.1. Research and development activities

75. The AI Act does not define the concept of 'research, development and testing activities'. Some authors have therefore argued that these activities include all preparatory activities carried out before an AI system or model is placed on the market,[228] regardless of their later field of application, which is the primary differentiating factor from the exclusion under Article 2(6).[229] Others state that research, testing and development activities in the field of AI are diverse and can encompass both theoretical studies as well as practical applications.'[230] In doing so, they rely on a broad reading of these types of activities and assume a clear-cut delineation between the pre- and post-market phase. Under that broad reading, preparatory activities could span several stages of preparation, including development planning and the pre-processing of data, pre-training, and post-training activities aimed at fine-tuning the model.[231] In contrast, activities that are aimed at model and system integration or post-deployment monitoring would not benefit from the exemption.[232]

76. This broad reading sits in tension with various other AI Act provisions that relate directly to research and development activities that would supposedly be out of scope by virtue of unfolding prior to the AI system or model being placed on the market or put into service. In particular, Chapter III imposes obligations on providers of high-risk AI systems that in some cases expressly relate to the development in the pre-market phase, such as testing,[233] risk mitigation,[234] and design requirements.[235] Chapter V similarly contains provider obligations that encompass research and development activities involving GPAI models prior to their placement on the market, such as the obligations set out in Article 53, *inter alia*, with regard to training data and compliance with Union copyright law in the development process (Article 53 (1)(c))[236] and the explicit reference to the development phase in Article 55(1)(b),[237]

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[227] Pieper (n 1) para 70.
[228] Wendehorst, 'Art 2' (n 15) para 114.
[229] Pieper (n 1) para 73; Wendehorst, 'Art 2' (n 15) para 110.
[230] Pieper (n 1) para 70: 'Forschungs-, Test- und Entwicklungstätigkeiten im Bereich KI sind vielfältig und umfassen verschiedene Aspekte – von theoretischen Studien bis hin zu praktischen Anwendungen. Im Bereich der *Grundlagenforschung* liegt der Fokus auf der Entwicklung neuer Algorithmen, die die Leistungsfähigkeit und Effizienz von KI-Systemen verbessern können. Dazu gehören beispielsweise Studien zu den mathematischen und statistischen Grundlagen von Machine Learning und den darin verwendeten neuronalen Netzen.'
[231] Also see the chapter on Internal Deployment in the AI Act, Section 3.2. in this work.
[232] Yoshua Bengio and others, 'International AI Safety Report' (DSIT 2025/001, 2025) <https://internationalaisafetyreport.org/publication/international-ai-safety-report-2025> accessed 1 June 2026, 30–34.
[233] AI Act, art 9(8): 'The testing of high-risk AI systems shall be performed, as appropriate, at any time throughout the development process, and, in any event, prior to their being placed on the market or put into service.' This provision directly relates to the entire development process.
[234] AI Act, art 9(3): 'The risks referred to in this Article shall concern only those which may be reasonably mitigated or eliminated through the development or design of the high-risk AI system, or the provision of adequate technical information.' This provision requires taking into account specific risks in the development and design phase of AI systems.
[235] Additionally, AI Act, recital 73 explains that: 'High-risk AI systems should be designed and developed in such a way that natural persons can oversee their functioning, ensure that they are used as intended and that their impacts are addressed over the system's lifecycle.' This recital confirms that the AI Act requirements should be implemented by design.
[236] See the commentary on Article 53 in this work.
[237] ibid.

as well as in the related recitals.[238] This tension between Article 2(8)'s exclusion – excluding the development phase from the Act's scope – and these more substantive obligations which, by their very nature, relate to that phase,[239] underscores the importance of a thorough understanding of Article 2(8). This tension might also imply that Article 2(8)'s 'research, testing or development activity regarding AI systems or AI models prior to their being placed on the market or put into service' should be given a narrower reading.

77. Such a narrow reading could help largely relieve the tension between these obligations with pre-market implications and the phrasing of Article 2(8). A very narrow reading would be to restrict these activities to open-ended exploratory and non-product-oriented research activities that are not yet directed at the development of a specific GPAI model (or AI system) that would be placed on the market or put into service. Alternatively, Article 2(8)'s '*research, testing or development activity* regarding AI systems or AI models prior to their being placed on the market or put into service' could also be read more broadly without necessarily implying a broad interpretation of Article 2(8) as a whole. To this end, more types of activities would be captured, while the scope of the exclusion would remain limited through an emphasis on 'prior to being placed on the market or put into service'.[240] The latter reading seems to offer the most balanced approach to alleviate the apparent tension inherent in Article 2(8), as is explored in more detail in the following section.

2.4.2. Prior to their being placed on the market or put into service

2.4.2.1. Temporal implications

78. Article 2(8)'s exclusion only applies to research, testing and development activities conducted prior to the AI model being placed on the market (or put into service).[241] This raises the question of at what point in time the AI Act starts to apply to a provider of a GPAI model. Article 2(8) is sometimes seen as a temporal rather than a substantive scope limitation, whereby research, testing and development activities are excluded from regulatory obligations only for as long as the AI system or model remains in the development phase before market placement or deployment.[242] Substantively, these activities could then include more preparatory activities conducted before an AI system or model is placed on the market (broad reading),[243] or some more limited, specific, targeted activities (narrow reading), as discussed in the previous section.

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[238] See, for example, AI Act, recitals 110, 114, 115 on continuous systemic risk assessment and mitigation throughout the entire model lifecycle, which is also emphasised in the Commission GPAI Guidelines (n 48) para 22 ('The iterative and interlinked process through which a provider may develop a "model", for example through techniques such as distillation, quantisation, or merging of model weights, makes it difficult to clearly delineate a model and its lifecycle. In light of this challenge, the Commission understands the notion of "model", and consequently its "lifecycle", in a broad sense. In practice, the Commission considers the lifecycle of a general-purpose AI model to begin at the start of the large pre-training run.').

[239] See similarly Finck (n 105).

[240] See for example: Voigt (n 1) para 42: 'Allerdings müssen die Anforderungen der KI-VO nicht schon zum Zeitpunkt der Entwicklung erfüllt sein, sondern erst, wenn das KI-System tatsächlich auf dem Markt bereitgestellt oder in Betrieb genommen wird'; see also Wendehorst, 'Art 2' (n 15) paras 114–116 who argues that: 'Gemeint ist allerdings nicht, dass bei der Entwicklung von KI-Systemen die Anforderungen nach der KI-VO nicht zu berücksichtigen wären, sondern nur, dass die KI-VO für Forschungs- und Entwicklungstätigkeiten *keine unmittelbaren Pflichten* enthält und daher eine Person, die ein mit der KI-VO nicht kompatibles KI-System entwickelt, damit noch nicht gegen die KI-VO verstößt und auch nicht sanktioniert werden kann.'

[241] The question of whether a GPAI model can be put into service is discussed in more detail in Section 2.1.3.1.

[242] Voigt (n 1) para 42; Wendehorst, 'Art 2' (n 15) para 113.

[243] Wendehorst, 'Art 2' (n 15) para 114.

79. However, it should be noted that neither reading of Article 2(8) excludes the need for providers to take the substantive obligations of the AI Act into account during the development phase. Rather, the exclusion in Article 2(8) indicates that the AI Act does not impose any 'immediate obligations' in relation to those activities as such.[244] Once a GPAI model is placed on the market, however, it falls within the scope of the AI Act, and from that moment onwards, the substantive obligations laid down in the AI Act become applicable to it.[245] This also implies that any such obligations would need to be 'retroactively' complied with: compliance at the time of placing the model on the market is dependent on behaviour during this preliminary phase.[246] In this sense, Article 2(8) has a *distinct temporal effect* ensuring that the AI Act only applies once a GPAI model falls within its scope. This is arguably a reiteration of Article 2(1)(a)'s scoping provision, which may lead one to consider Article 2(8) to be superfluous, as it already follows from Article 2(1) that no obligations can arise for a GPAI model insofar as it has not been placed on the market.[247]

80. This 'temporal' effect of Article 2(8) finds further support in the provision's second sentence which underscores that research, testing and development activities must be conducted 'in accordance with applicable Union law', notably including Union copyright law as explicitly referenced in Article 53(1)(c).[248] It also finds support in Article 3(63)'s definition of a GPAI model,[249] which explicitly provides that a model used for research, development or prototyping activities prior to its placing on the market does not qualify as a GPAI model under the AI Act.[250] In the same vein, Recital (a) of the GPAI Code of Practice Safety and Security Chapter affirms that 'the Signatories recognise that providers of general-purpose AI models with systemic risk should continuously assess and mitigate systemic risks, taking appropriate measures along the entire model lifecycle (including during development that occurs before and after a model has been placed on the market) [...]'.[251] Measure 1.1. of the Safety and Security Chapter also states that providers will create a state-of-the-art safety framework that takes into account the models that they are *developing*.[252] Moreover, the Safety and Security Chapter requires signatories to take appropriate measures along the entire lifecycle of the model.[253]

81. While this temporal interpretation of Article 2(8) is rather compelling, some authors hint at an alternative view: in order to resolve the apparent tension between Article 2(8)'s exclusion and the AI Act provisions relating to the development stage, they consider the possibility 'that the research exemption does not apply in relation to requirements explicitly addressed during testing and development."[254] But as also mentioned by these authors, such a *lex specialis* view conflicts with the

[244] ibid para 115 ('keine unmittelbaren Pflichten').
[245] See Pieper (n 1) para 73: 'Solange ein KI-System nicht in den Verkehr gebracht oder in Betrieb genommen ist, hält der europäische Gesetzgeber die Forschung daran unabhängig von seinem Zweck für zulässig. Dient ein KI-System hingegen generell alleine der wissenschaftlichen Forschung und Entwicklung, kann es auch nach Inverkehrbringen und Inbetriebnahme ohne Berücksichtigung der KI-VO genutzt werden.'
[246] Finck (n 105) 904
[247] Voigt (n 1) paras 42–43; Finck (n 105) 904; Wendehorst, 'Art 2' (n 15) para 115: 'Die Regelung drückt im Grunde eine Selbstverständlichkeit aus, beschränkt doch schon Abs. 1 den Anwendungsbereich der KI-VO auf Personen, die ein KI-System in Verkehr bringen oder in Betrieb nehmen oder es nach seinem Inverkehrbringen oder seiner Inbetriebnahme vertreiben oder verwenden.'
[248] On that provision, also see the commentary on Article 53 in this work.
[249] See the forthcoming commentary on Article 3(63) in this work.
[250] ibid.
[251] European Commission, 'Code of Practice for General-Purpose AI Models – Safety and Security Chapter' (2025) <https://ec.europa.eu/newsroom/dae/redirection/document/118119>.
[252] ibid Measure 1.1.
[253] ibid recital a.
[254] Finck (n 105) 904.

broad wording of Article 2(8)[255] as well as with the wording of other elements of Article 2[256] and Article 3.[257] Furthermore, under general principles of systematic and purposive interpretation in EU law, any construction of the research exclusion that would deprive the rules governing the development phase of their practical effect, in particular the risk-assessment and mitigation obligations related thereto, is difficult to reconcile with the AI Act's general scheme and objectives.[258] Nevertheless, this view does find some support in Article 1(1)'s reference to the functioning of the internal market rather than solely to the market placement of products.[259]

2.4.2.2. Enforcement implications

82. With regard to enforcement, Article 2(8)'s temporal interpretation would suggest that, while a model does not formally fall within the scope of the Act during its pre-market development or internal testing – the methods, safeguards, and procedures applied during that phase are subjected to regulatory scrutiny once the model is placed on the market. At that point in time, the Act applies in full and the AI Office's enforcement powers could be applied vis-à-vis the provider. This temporal emphasis has led some authors to suggest that the wording of Article 2(8), stating that the AI Act 'does not apply', might in fact be too broad, as certain provisions clearly relate to research, development and testing activities.[260]

83. A consequence seems to be that, while the substantive obligations relevant to GPAI model providers as set out in Chapter V do govern the development phase and apply to the model's entire lifecycle, they would only be enforceable once the model is placed on the market (or arguably, when it is put into service).[261] It is at that point that the model enters the scope of the AI Act and the temporal exclusion established in Article 2(8) ceases to apply. An important implication is that if a GPAI model was developed in such a way that compliance with the AI Act's obligations is impossible, for example because it is trained in a way in which it can no longer comply with obligations on training data under Article 53,[262] the provider would by definition be in breach of the Act as soon as it places the model on the market.[263] As a result, providers would be required to, in practice, take the AI Act's obligations into account during the development phase of an AI system or GPAI model if they might later bring that model to the EU market.[264]

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[255] ibid.

[256] For example, this would require that certain substantive obligations relating to the research and development phase apply to GPAI models before they are placed on the market, even though this is expressly excluded via articles 2(1)(a), 2(8) and 3(63) AI Act.

[257] As most of these obligations target 'providers', it is notable that a party only qualifies as a 'provider' in the sense of article 3(3) if the model or system has been put into service or placed on the market. See also the forthcoming commentary on Article 3(3) in this work.

[258] Joined Cases C-402/07 and C-432/07 *Christopher Sturgeon, Gabriel Sturgeon and Alana Sturgeon v Condor Flugdienst GmbH (C-402/07) and Stefan Böck and Cornelia Lepuschitz v Air France SA (C-432/07)* [2009] ECR I-10923, para 47 and case law cited therein ('where a provision of Community law is open to several interpretations, preference must be given to that interpretation which ensures that the provision retains its effectiveness'); see also, the forthcoming chapter on Interpreting the AI Act through Systematic Analogies in this work.

[259] See the forthcoming commentary on Article 1 and the forthcoming chapter on Model, Product and Entity Regulation in this work.

[260] Wendehorst, 'Art 2' (n 15) para 115.

[261] Or arguably when it is 'put into service'. Whether a GPAI model can be put into service and what this would imply for the AI Act's scope is discussed in Section 2.1.3.1.

[262] See the commentary on Article 53 in this work.

[263] See the commentary on Article 53 in this work.

[264] Voigt (n 1) paras 42–43; also, Wendehorst, 'Art 2' (n 15) para 115.

84. It is key to underscore that this view does not imply that providers are not governed by the AI Act. The AI Act's obligations throughout their entire development process imply that AI development is governed by the AI Act, and that – from a teleological perspective – regulatory oversight on such development is very much mandated, required and desirable to ensure AI Act compliance, constituting a form of anticipatory compliance. This informal governance mechanism corresponds with the AI Act's goals to prevent risks.[265] It also finds support in the Code of Practice where signatories have agreed to: '[...] continuously assess and mitigate systemic risks, taking appropriate measures along the entire model lifecycle (including during development that occurs before and after a model has been placed on the market)[...]'.[266]

85. Article 2(8) therefore does not operate as an exception that allows providers to claim that a model remains outside the scope of the AI Act merely because it is still under development. Instead, it establishes a narrowly circumscribed temporal enforcement clarification that applies only for as long as a model has not entered the scope of the Act through the applicability triggering mechanisms – notably by being placed on the market (or, potentially, put into service).[267] In this sense, Article 2(8) AI Act does not create a substantive derogation. Rather, it reinforces and makes explicit the temporal limitations that already follow from Article 2(1)(a) concerning the conditions under which the AI Act becomes applicable.

[265] See the forthcoming commentary on Article 1 in this work.
[266] Code of Practice, Safety and Security Chapter (n 251) recital a.
[267] See Sections 2.1.2. and 2.1.3. of this work. Also see the chapter on Internal Deployment in the AI Act, Section 3.2. in this work.