

Guidelines of the European Commission blur the interpretation of the AI system definition

The European Commission has published guidelines on how to interpret the definition of an AI system as stated in the AI Act.¹ The guidelines introduce exceptions for algorithmic systems that do not qualify as AI systems based on arguments that do not align with the legislative text. This is remarkable, as guidelines are intended to clarify the interpretation of the legislative text rather than introduce additional provisions. Consequently, the guidelines blur the interpretation of the AI system definition.

Specifically, the exceptions for systems for improving mathematical optimization (paragraphs (42)-(45)) and simple prediction systems (paragraphs (49)-(51)) cause issues.

For example, paragraph (49) states that machine learning systems that make use of a “*basic statistical learning rule*” are not AI systems. However, in the definition of an AI system in article 3 of the AI Act and in its explanation in recital 12, the complexity of a system is not mentioned as a determining factor for qualifying as an AI system.² The exception creates confusion: when is a statistical learning rule ‘basic’ enough to fall under this exception?

Paragraph (42) states that systems used for mathematical optimization do not qualify as AI

systems. However, according to the definition in the legislative text, the application does not determine whether a system is an AI system. This paragraph explains that established methods, such as linear and logistic regression, are not AI systems because “*while those models have the capacity to infer, they do not transcend ‘basic data processing’*”. This passage directly contradicts recital 12 of the AI Act, which states that: “*The capacity of an AI system to infer transcends basic data processing by enabling learning, reasoning or modelling*”. Both the claim that mathematical optimization falls outside the scope of the definition and the explanation for this are in conflict with the legislative text.

Another inconsistency arises in the interpretation of the term ‘adaptiveness’. Paragraphs (22)-(23) of the guidelines explain that adaptiveness is not a strict requirement to meet the definition of an AI system. However, later in paragraph (48), the guidelines state that heuristics do not qualify as AI systems due to a lack of ‘adaptability’.

With the introduced exceptions in these guidelines, the Commission appears to be narrowing the politically negotiated definition of an AI system between the Parliament and Council, and imposing its own interpretation of the Act. From a democratic perspective, the European Commission seems to be

¹ ‘[Guidelines on the definition of an artificial intelligence system established by AI Act](#)’, European Commission (2025).

² In recital 12, it is mentioned that “*the definition should be based on key characteristics of AI systems that distinguish it from simpler traditional software systems or programming approaches*”. Therefore, it must be assumed that a system that meets the AI system definition is not a simple traditional software system.

overstepping its mandate.

Given the tensions between the guidelines and the AI Act, it is important to note that the guidelines have a subordinate legal status compared to the legislative text in the hierarchy of regulatory instruments. Until case law from the Court of Justice of the European Union becomes available, Algorithm Audit advises organizations, in line with the position of the Dutch Data Protection Authority (Autoriteit Persoonsgegevens), to err on the side of caution when determining whether AI systems fall within the scope of the AI Act.³

Finally, we note that the developments mentioned above contribute to an attempt to narrow the scope of the AI Act. This time, not through a discussion on the scope of the risk classification of AI systems – since only high-risk AI systems are required to

comply with mandatory control measures – but through the question of whether algorithmic systems even fall under the definition of an AI system. In this way, the scope of the AI Act is being attempted to be narrowed both through the route of AI system identification and risk classification.

³ [Report AI- & algorithm risk the Netherlands](#), winter 2024/2025 (editie 4, February 2025), Direction Coordination Algorithms (DCA) – Dutch Data Protection Authority.

About Algorithm Audit

Algorithm Audit is a European knowledge platform for AI bias testing and AI standards. The goals of the NGO are four-fold:



Knowledge platform

Bringing together knowledge and experts to foster the collective learning process on the responsible use of algorithms, see for instance our [AI policy observatory](#) and [white papers](#)



Normative advice commissions

Advising on ethical issues that arise in concrete algorithmic practice through deliberative and diverse normative advice commissions, resulting in [algotrudence](#)



Technical tools

Implementing and testing technical tools to detect and mitigate bias, such as [unsupervised bias detection tool](#) and [synthetic data generation](#)



Project work

[Support](#) for specific questions from public and private sector organisations regarding responsible use of AI