Free and open source exceptions in AI Act

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Topics

- 1) AIA rules
- 2) Final remarks

Regulation (EU) 2024/1689 of the european Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial **Intelligence Act**)

Article 3 (Definitions)

(1) 'AI system' means a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can

influence physical or virtual environments;

Article 1 (Subject matter)

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.

Article 1 (Subject matter)

- 2. This Regulation lays down:
- (a) harmonised rules for the **placing on the market**, the **putting into service**, **and** the **use** of AI systems in the Union;
- (b) **prohibitions** of certain AI practices;
- (c) specific **requirements for high-risk AI systems** and obligations for operators of such systems;
- (d) harmonised transparency rules for certain AI systems;
- (e) harmonised rules for the **placing on the market of general-purpose AI models**;
- (f) rules on **market monitoring**, market **surveillance**, **governance and enforcement**;
- (g) measures to **support innovation**, with a particular focus on SMEs, including start-ups.

AIA model

Risk based approach

Not acceptable risk (i.e. social scoring): **Proibited**

Sistemic risk of general-purpose AI models:

Permitted under certain conditions

High Risk: Permitted under certain conditions

General-purpose AI models: **Permitted** with transparency obbligations

Transparency risk (i.e. bot that simulate people): **Permitted with transparency obligations**

Law risk: Permitted without restrictions

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Art. 2 (Scope)

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.

AIA model

For high risk:

Approach adopted for dangerous products (i.e. medical devices, machines): subject to third party evaluation according to applicable industry regulations

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art. 25 (Responsibilities along the AI value chain)

4. The provider of a high-risk AI system and the third party that supplies an AI system, tools, services, components, or processes that are used or integrated in a high-risk AI system shall, by written agreement, specify the necessary information, capabilities, technical access and other assistance based on the generally acknowledged state of the art, in order to enable the provider of the high-risk AI system to fully comply with the obligations set out in this Regulation. This paragraph shall not apply to third parties making accessible to the public tools, services, processes, or components, other than general-purpose AI models, under a free and open-source licence.

Whereas

(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.

Whereas

(102) Software and data, including models, released under a free and opensource 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.

Whereas

(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.

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art. 53 (Obligations for providers of general-purpose AI models)

2. The obligations set out in paragraph 1, points (a) and (b), shall not apply to providers of AI models that are released under a free and open-source licence that allows for the access, usage, modification, and distribution of the model, and whose parameters, including the weights, the information on the model architecture, and the information on model usage, are made publicly available. This exception shall not apply to general-purpose AI models with systemic risks.

art. 53 (Obligations for providers of general-purpose AI models)

- 1. Providers of general-purpose AI models shall:
- (a) **draw up and keep up-to-date the technical documentation of the model**, ...providing it, upon request, to the AI Office and the national competent authorities;
- (b) ...make available information and documentation to providers of AI systems who intend to integrate the general-purpose AI model ...
- (c) ...policy to comply with Union law on copyright and related rights...
- (d) draw up and make publicly available a sufficiently detailed summary about the content used for training of the general-purpose AI model, according to a template provided by the AI Office.

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art. 54 (Authorised representatives of providers of general-purpose AI models)

6. The obligation set out in this Article shall not apply to providers of **general-purpose AI models** that are **released under a free and open-source licence** that allows for the access, usage, modification, and distribution of the model, and **whose parameters**, including the **weights**, the **information on the model architecture**, and the information on **model usage**, are made **publicly available**, **unless** the **general-purpose AI models present systemic risks**.

art. 54 (Authorised representatives of providers of general-purpose AI models)

- 1. Prior to placing a general-purpose AI model on the Union market, providers established in third countries shall, by written mandate, **appoint an authorised representative which is established in the Union**.
- 2. The provider shall enable its authorised representative to perform the tasks specified in the mandate received from the provider.
- 3. The authorised representative shall

Whereas

(104) The providers of general-purpose AI models that are released under a free and open-source licence, 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.

Whereas

(112) It is also necessary to clarify a procedure for the classification of a general-purpose AI model with systemic risks. A general-purpose AI model that meets the applicable threshold for high-impact capabilities should be presumed to be a general-purpose AI models with systemic risk. The provider should notify the AI Office at the latest two weeks after the requirements are met or it becomes known that a general-purpose AI model will meet the requirements at lead to the presumption. This is especially relevant in relation to the threshold of floating point operations because training of general-purpose AI models takes considerable planning which includes the upfront allocation of compute resources and, therefore, providers of general-purpose AI models are able to know if their model would meet the threshold before the training is completed. **In the context of that notification**, the **provider should be able to demonstrate** that, because of its specific characteristics, a general-purpose AI model exceptionally does not present systemic risks, and that it thus should not be classified as a general-purpose AI model with systemic risks. **That information** is valuable for the AI Office to anticipate the placing on the market of general-purpose AI models with systemic risks and the providers can start to engage with the AI Office early on. **That** information is especially important with regard to general-purpose AI models that are planned **to be released as open-source**, given that, after the open-source model release, necessary measures to ensure compliance with the obligations under this Regulation may be more difficult to implement.

Final remarks

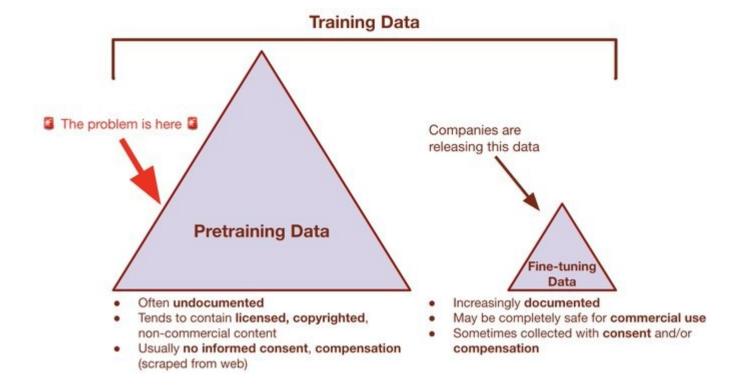
Open Source AI definition

https://opensource.org/ai/open-source-ai-definition

Freedom in ML applications

https://www.fsf.org/news/fsf-is-working-on-freedom-in-machine-learning-applications

Final remarks



https://nitter.snopyta.org/mmitchell_ai/status/1646242689862729728

Final remarks

To think about

- Epistemological problem
- Oligopolistic scenario
- Scientific developments
- Free Software & Open Source: different scope?

Thank you

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