In bold = changes in relation to Commission compromise proposal v2

ANNEX I

Compromise proposal on general purpose AI models/general purpose AI systems

<u>Article 2(x).</u>

(new) This Regulation shall not apply to AI systems provided under free and open source licences unless they are high-risk AI systems or an AI system that falls under Title II and IV. In addition, this Regulation shall not apply to AI models that are made accessible to the public under a free and open-source licence whose parameters, including the weights, the information on the model architecture, and the information on model usage, are made publicly available, except the obligations referred to in Articles C(1)[(c)] and(d), Article D [and Article 28(2a)].

(Correspondingly, Article C paragraph 4 would be deleted and is bracketed in this version)

Article 3

Definitions

(xx) 'general-purpose AI model' means an AI model, including when trained with a large amount of data using self-supervision at scale, that displays significant generality and is capable to competently perform a wide range of distinct tasks regardless of the way the model is released on the market and that can be integrated into a variety of downstream systems or applications.

Proposal for an accompanying recital:

(X) Whereas the generality of a model can, among other criteria, also be determined by the number of parameters, models with at least a billion of parameters and trained with a large amount of data using self-supervision at scale for the models can display significant generality and to competently perform a wide range of distinctive tasks. Considering the fast pace of technology and evolution, it is appropriate for the Commission to be empowered to update the technical elements of the definition of general purpose models in the light of market and technological development.

<u>Clarifying recital – GPAI model definition:</u>

(x) (...) Large generative AI models are a typical example for a general-purpose AI model, given that they allow for flexible generation of content (such as in the form of text, audio, images or video) that can readily accommodate a wide range of distinctive tasks. (...)

(xx) 'high-impact capabilities' in general purpose AI models means capabilities that match or exceed the capabilities recorded in the most advanced general purpose AI models.

(xx) 'systemic risk at Union level' means a risk that is specific to the high-impact capabilities of general-purpose AI models, having a significant impact on the internal market due to its reach, and with actual or reasonably foreseeable negative effects on public health, safety, public security, fundamental rights, or the society as a whole, that can be propagated at scale across the value chain.

<u>Clarifying recital – systemic risk</u>

(x) General-purpose AI models could pose systemic risks which include, but are not limited to, any actual or reasonably foreseeable negative effects in relation to major accidents, disruptions of critical sectors and serious consequences to public health and safety; any actual or reasonably foreseeable negative effects on democratic processes, public and economic security; the dissemination of illegal, false, discriminatory, or otherwise harmful content. Systemic risks should be understood to increase with model capabilities and model reach, can arise along the entire lifecycle of the model, and are influenced by conditions of misuse, model reliability, model fairness and model security, the degree of autonomy of the model, it's access to tools, novel or combined modalities, release and distribution strategies, the potential to remove guardrails and other factors. In particular, international approaches such have so far identified the need to devote attention to risks from potential intentional misuse or unintended issues of control relating to alignment with human intent; chemical, biological, radiological, and nuclear risks, such as the ways in which barriers to entry can be lowered, including for weapons development, design acquisition, or use; offensive cyber capabilities, such as the ways in vulnerability discovery, exploitation, or operational use can be enabled; the effects of interaction and tool use, including for example the capacity to control physical systems and interfere with critical infrastructure; risks from models of making copies of themselves or "self-replicating" or training other models; the ways in which models can give rise to harmful bias and discrimination with risks to individuals, communities or societies; the facilitation of disinformation or harming privacy with threats to democratic values and human rights; risk that a particular event could lead to a chain reaction with considerable negative effects that could affect up to an entire city, an entire domain activity or an entire community.

(xx) 'general-purpose AI system' means an AI system which is based on a general-purpose AI model, that has the capability to serve a variety of purposes, both for direct use as well as for integration in other AI systems;

(xxx) 'floating-point operation' means any mathematical operation or assignment involving floating-point numbers, which are a subset of the real numbers typically represented on computers by an integer of fixed precision scaled by an integer exponent of a fixed base.

(xy) 'downstream provider of an AI system' means any provider of an AI system, including a GPAI system, who integrates a general-purpose AI model.

TITLE X

GENERAL-PURPOSE AI MODELS

Chapter X

Classification rules

Article A

Classification of general-purpose AI models as general-purpose AI models with systemic risk

- 1. A general-purpose AI model shall be classified as general-purpose AI model with systemic risk if it meets any of the following criteria:
 - a) it has high impact capabilities evaluated on the basis of appropriate technical tools and methodologies, including indicators and benchmarks;
 - b) based on a decision of the AI Office, ex officio or following a qualified alert by the scientific panel that a general purpose AI model has capabilities or impact equivalent to those of points a) and b).
- 2. A general-purpose AI model shall be presumed to have high impact capabilities pursuant to point a) or paragraph 1 when the cumulative amount of compute used for its training measured in floating point operations (FLOPs) is greater than 10^{25} .
- 3. The Commission is empowered to adopt delegated acts in accordance with Article 74(2) to amend the thresholds listed in the paragraphs above, as well as to supplement benchmarks and indicators in light of evolving technological developments, such as algorithmic improvements or increased hardware efficiency.

Article B

Procedure

- 1. Where a general-purpose AI model meets the requirements referred to in points (a) or (b) of Article A(1), the relevant provider shall notify the Commission without delay and in any event within 2 weeks after those requirements are met or it becomes known that these requirements will be met. That notification shall include the information necessary to demonstrate that the relevant requirements have been met. If the Commission becomes aware of a general-purpose AI model presenting systemic risks of which it has not been notified, it may decide to designate it as a model with systemic risk.
- The provider of a general-purpose AI model that meets the requirements referred to in points

 (a) or (b) of Article A(1) may present, with its notification, sufficiently substantiated arguments to demonstrate that, exceptionally, although it meets the said requirements, the

general-purpose AI model does not present, due to its specific characteristics, systemic risks and therefore should not be classified as general-purpose AI model with systemic risk.

- 3. Where the Commission concludes that the arguments submitted pursuant to paragraph 2 are not sufficiently substantiated and the relevant provider was not able to demonstrate that the general-purpose AI model does not present, due to its specific characteristics, systemic risks, it shall reject those arguments and the general-purpose AI model shall be considered as general-purpose AI model with systemic risk.
- 4. The Commission may designate a general-purpose AI model as presenting systemic risks, ex officio or following a qualified alert of the scientific panel pursuant to point (a) of Article [*Alerts of systemic risks by the scientific panel*] (1) on the basis of criteria set out in Annex YY. The Commission shall be empowered to specify and update the criteria in Annex YY by means of delegated acts in accordance with Article 74 (2).
- 5. The Commission shall ensure that a list of general-purpose AI models with systemic risk is published and shall keep that list up to date, without prejudice to the need to respect and protect intellectual property rights and confidential business information or trade secrets in accordance with Union and national law.

Chapter Y

Obligations for providers of general-purpose AI models

Article C

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,¹ including its training and testing process and the results of its evaluation, which shall contain, at a minimum, the elements set out in Annex XX for the purpose of providing it, upon request, to the AI Office and the national competent authorities;
 - b) draw up, keep up-to-date and make available information and documentation to providers of AI systems who intend to integrate the general-purpose AI model in their AI system. Without prejudice to the need to respect and protect intellectual property rights and confidential business information or trade secrets in accordance with Union and national law, the information and documentation shall:
 - i. enable providers of AI systems to have a good understanding of the capabilities and limitations of the general-purpose AI model and to comply with their obligations pursuant to this Regulation; and
 - ii. contain, at a minimum, the elements set out in Annex XY;

1

Add a recital referring to the possibility to use model cards.

- c) put in place a policy to respect Union copyright law in particular to identify and respect, including through state of the art technologies where applicable, the reservations of rights expressed pursuant to Article 4(3) of Directive (EU) 2019/790;
- 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;

[the provision on watermarking has been moved to Art. 52]

- 2. Providers of general-purpose AI models shall cooperate as necessary with the Commission and the national competent authorities in the exercise of their competences and powers pursuant to this Regulation.
- 3. [Providers of general purpose AI models may rely on codes of practice within the meaning of Article E demonstrate compliance with the obligations in paragraph 1, until a harmonised standard is published. Compliance with a European harmonised standard grants providers the presumption of conformity. Providers of general-purpose AI models with systemic risks who do not adhere to an approved code of practice shall demonstrate alternative adequate means of compliance for approval of the Commission.]
- 4. The obligations set out in this Article, with the exception of paragraph 1(e), shall not apply to providers of pre-trained AI models that are made accessible to the public under a 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.

Recitals - copyright relevant provisions:

(x) General-purpose models capable of generating text, images, and other content, present unique innovation opportunities but also challenges to artists, authors, and other creators and the way their creative content is created, distributed, used and consumed. The development and training of such models require access to vast amounts of text, images, videos, and other data. Text and data mining techniques may be used extensively in this context for the retrieval and analysis of such content, which may be protected by copyright and related rights. Any use of copyright protected content requires the authorization of the rightholder concerned unless relevant copyright exceptions apply. Directive (EU) 2019/790 introduced exceptions allowing reproductions and extractions of works or other subject matter, for the purposes of text and data mining, under certain conditions. Under these rules, rightholders may choose to reserve their rights over their works or other subject matter to prevent text and data mining, unless this is done for the purposes of scientific research. Where the rights to opt out has been expressly reserved in an appropriate manner, providers of general-purpose AI models need to obtain an authorisation from rightholders if they want to carry out text and data mining over such works.

(xx) Providers that place general-purpose AI models on the EU market or put them into service in the EU should ensure compliance with the relevant obligations in this Regulation. For this purpose, providers of general-purpose AI models should put in place a policy to respect Union law on copyright and related rights, in particular to identify and respect the reservations of rights expressed by rightholders pursuant to Article 4(3) of Directive (EU) 2019/790. Any provider placing a general-purpose AI model on the EU market should comply with this obligation, regardless of the jurisdiction in which the copyright-relevant acts underpinning the training of these foundation models take place. 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 EU market by applying lower copyright standards than those provided in the Union.

Clarifying recital – the scope of the "detailed summary" (proposed by EP):

(x) "In order to increase transparency on the data that is used in the pre-training and training of general purpose AI models, including text and data protected by copyright law, it is adequate that providers of such models draw up and make publicly a sufficiently detailed summary of the content used for training the general purpose model. This summary should be comprehensive in its scope instead of technically detailed, for example by listing the main data collections or sets that went into training the model, such as large private or public databases or data archives, and by providing a narrative explanation about other data sources used. It is appropriate for the AI Office to provide a template for the summary, which should be simple, effective, and allow the provider to provide the required summary in narrative form"

Chapter Z

Obligations for providers of general-purpose AI models with systemic risk

Article D

Obligations for providers of general-purpose AI models with systemic risk

- 1. In addition to the obligations listed in Article C, providers of general-purpose AI models with systemic risk shall:
 - a) perform model evaluation in accordance with standardised protocols and tools reflecting the state of the art;
 - b) assess and mitigate possible systemic risks at Union level, including their sources, that may stem from the development, placing on the market, putting into service or use of general-purpose AI models with systemic risk;
 - c) keep track of, document and report without undue delay to the Commission and, as appropriate, to national competent authorities, relevant information about serious incidents and possible corrective measures to address them;
 - d) Conduct and document adversarial testing of the model in addition to or as part of fulfilling the obligation in Article C (1)(a), with a view to identify and mitigate systemic risks;
 - e) ensure an adequate level of cybersecurity protection for the general purpose AI model with systemic risk and the physical infrastructure of the model;
 - f) keep track of, document and report about known or estimated energy consumption of the model; in case not known or as long as no standard available, this could be based on information about computational resources used.
- 2. Providers of general purpose AI models with systemic risk may rely on codes of practice within the meaning of Article E to demonstrate compliance with the obligations in paragraph 1, until a harmonised standard is published. Compliance with a European harmonised standard grants providers the presumption of conformity. Providers of general-purpose AI models with

systemic risks who do not adhere to an approved code of practice shall demonstrate alternative adequate means of compliance for approval of the Commission.

- 3. Where strictly necessary for the purposes of complying with the obligations laid down in this article, trade secrets shall be preserved in accordance with Directive (EU) 2016/943 and shall only be disclosed provided that all specific necessary measures are taken in advance to preserve their confidentiality, in particular with respect to third parties.
- 4. The exemption provided for in Article C(4) shall not apply to general-purpose AI models with systemic risk.

Article E

Codes of practice

- 1. The AI Office shall encourage and facilitate the drawing up of codes of practice at Union level as an element to contribute to the proper application of this Regulation, taking into account international approaches.
- 2. The AI Office and the AI Board shall aim to ensure that the codes of practice cover, but not necessarily be limited to, the obligations provided for in Articles C and D, including the following issues:
 - a) means to ensure that the information referred to in Article C (a) and (b) is kept up to date in the light of market and technological developments, and the adequate level of detail for the summary about the content used for training;
 - b) the identification of the type and nature of the systemic risks at Union level, including their sources when appropriate;
 - c) the measures, procedures and modalities for the assessment and management of the systemic risks at Union level, including the documentation thereof. The assessment and management of the systemic risks at Union level shall be proportionate to the risks, take into consideration their severity and probability and take into account the specific challenges of tackling those risks in the light of the possible ways in which such risks may emerge and materialize along the AI value chain.
- 3. The AI Office may invite the providers of general-purpose AI models, as well as relevant national competent authorities, to participate in the drawing up of codes of practice. Civil society organisations and other relevant stakeholders may support the process.
- 4. The AI Office and the Board shall aim to ensure that the codes of practice clearly set out their specific objectives and contain commitments or measures, including key performance indicators as appropriate, to ensure the achievement of those objectives and take due account of the needs and interests of all interested parties, including affected persons, at Union level.
- 5. The AI Office may invite all providers of general-purpose AI models to participate in the codes of practice. For providers of general-purpose AI models not presenting systemic risks this participation should be limited to obligations foreseen in paragraph 2 point a) of this Article, unless they declare explicitly their interest to join the full code.

- 6. The Commission shall aim to ensure that participants to the codes of practice report regularly to the Commission on the implementation of the commitments and the measures taken and their outcomes, including as measured against the key performance indicators as appropriate. Key performance indicators and reporting commitments shall take into account differences in size and capacity between different participants.
- 7. The AI Office and the AI Board shall regularly monitor and evaluate the achievement of the objectives of the codes of practice by the participants and their contribution to the proper application of this Regulation. The AI Office and the Board shall assess whether the codes of practice cover the obligations provided for in Articles C and D, including the issues listed in paragraph 2 of this Article, and shall regularly monitor and evaluate the achievement of their objectives. They shall publish their assessment of the adequacy of the codes of practice. The Commission may, by way of implementing acts, decide approve the code of practice and give it a general validity within the Union. Those implementing acts shall be adopted in accordance with the examination procedure set out in Article 93(2).
- 8. As appropriate, the AI Office shall also encourage and facilitate review and adaptation of the codes of practice, in particular in light of emerging standards. The AI Office shall assist in the assessment of available standards.
- 9. Codes of practices shall be drawn up at the latest nine months before the entry into application of the applicable provisions of this Regulation. The AI Office shall take the necessary steps, including inviting providers pursuant to paragraph 5. If, by the time the Regulation becomes applicable, a Code of Practice cannot be finalised, or if the AI Office deems it is not adequate following under paragraph 6, the Commission may intervene by means of implementing acts to cover the obligations provided for in Articles C and D, including the issues set out in paragraph 2.

[But instead, bracketed part in 4CD is un-bracketed.]

ANNEX XX

<u>TECHNICAL DOCUMENTATION referred to in Article C(1a): technical documentation for</u> providers of general-purpose AI models:

Section 1: Information to be provided by all providers of general-purpose AI models

The technical documentation referred to in Article X(b) shall contain at least the following information as appropriate to the size and risk profile of the model:

- 1. A general description of the general-purpose AI model including:
 - (a) the tasks that the model is intended to perform and the type and nature of AI systems in which it can be integrated;
 - (b) acceptable use policies applicable to the model;
 - (c) the date of release of the model;
 - (d) the description of the forms in which the model is placed on the market or put into service;
 - (e) general information about the model type and architecture, the type of inputs and outputs, the training dataset, and the license for the model;

- (f) instructions of use for the user and, where applicable installation instructions;
- 2. A detailed description of the elements of the model and of the process for its development, including:
 - (a) the technical means (e.g., underlying infrastructure, tools) required for the generalpurpose AI model to be integrated in AI systems;
 - (b) the design specifications; the key design choices including the rationale and assumptions made; what the model is designed to optimise for and the relevance of the different parameters;
 - (c) model architecture and number of parameters;
 - (d) modality (e.g., text, image, etc.) and format of the inputs and outputs and their maximum size (e.g., context window length, etc.);
 - (e) information on the data used for training, testing and validation, where applicable; such information shall be provided in the form of datasheets describing the training methodologies and techniques and the training data used, including the type and provenance of the data, the number of data points, their scope and main characteristics; how the data was obtained and selected; any data curation methodologies (e.g. cleaning, filtering, etc.), as well as all other measures to detect the unsuitability of data sources and methods to detect identifiable biases, where applicable;
 - (f) the computational resources used to train the model (e.g., number of floating point operations FLOPs-), training time, and other relevant details related to the training;

known or estimated energy consumption of the model; in case not known, this could be based on information about computational resources used;

Section 2: Additional information to be provided by providers of general-purpose AI model with systemic risk

- 3. Detailed description of the evaluation strategies, including evaluation results, on the basis of available public evaluation protocols and tools or otherwise of other evaluation methodologies. Evaluation strategies shall include evaluation criteria, metrics and the methodology on the identification of limitations.
- 4. Where applicable, detailed description of the measures put in place for the purpose of conducting (internal and/or external) adversarial testing (e.g., red teaming), model adaptations, including alignment and finetuning (e.g., reinforcement learning with human feedback).
- 5. Where applicable, detailed description of the system architecture explaining how software components build or feed into each other and integrate into the overall processing.

ANNEX XY

<u>TRANSPARENCY INFORMATION referred to in Article C(1b): technical documentation</u> for providers of general-purpose AI models to downstream providers that integrate the model <u>into their AI system</u>

The information referred to in Article X(c) shall contain at least the following:

- A general description of the general-purpose AI model including:
 - (a) the tasks that the model is intended to perform and the type and nature of AI systems in which it can be integrated;
 - (b) acceptable use policies applicable to the model;
 - (c) the date of release of the model;

1.

(d) how the model interacts or can be used to interact with hardware or software that is not part of the model itself, where applicable;

- (e) the versions of relevant software or firmware related to the development and use of the general-purpose AI model, where applicable;
- (f) the description of the forms in which the model is placed on the market or put into service;
- (g) general information about the model type and architecture, the type of inputs and outputs, the training dataset, and the license for the model;
- (h) instructions of use for the user and, where applicable installation instructions;
- A description of the elements of the model and of the process for its development, including:
 - (a) the technical means (e.g., underlying infrastructure, tools) required for the generalpurpose AI model to be integrated in AI systems.
 - (b) modality (e.g., text, image, etc.) and format of the inputs and outputs and their maximum size (e.g., context window length, etc.);
 - (c) information on the data used for training, testing and validation, where applicable; such information shall be provided in the form of datasheets with targeted information on the training data used, including the type and provenance of the data, the number of data points, their scope and main characteristics; how the data was obtained and selected; any data curation methodologies (e.g. cleaning, filtering, etc.), where applicable.

ANNEX YY

For the purpose of determining that a general purpose AI model has capabilities or impact equivalent to those of points a) and b) in Article A, the Commission shall take into account the following criteria:

- a. number of parameters of the model;
- b. or quality or size of the data set, for example measured through tokens;
- c. the amount of compute used for training the model, measured in FLOPs or indicated by a combination of other variables such as estimated cost of training, estimated time required for the training, or estimated energy consumption for the training;
- d. input and output modalities of the model, such as text to text (large language models), text to image, multi-modality, and the state-of-the-art thresholds for determining high-impact capabilities for each modality, and the specific type of inputs and outputs (e.g. biological sequences);
- e. benchmarks and evaluations of capabilities of the model, including considering the (i.e. number of tasks without additional training, adaptability to learn new, distinct tasks), its degree of autonomy and scalability, the tools it has access to;
- 4. it has a high impact on the internal market due to its reach [which shall be presumed to be fulfilled when it has been made available to at least 10 000 registered business users established in the Union.
- f. registered end-users.

Additional recitals to clarify interplay with DSA (for the risk-management framework and the 'watermarking'):

2.

(x) This Regulation regulates AI systems and models by imposing certain requirements and obligations for relevant market actors that are placing them on the market, putting into service or use in the Union, thereby complementing obligations for providers of intermediary services that embed such systems or models into their services regulated by Regulation (EU) 2022/2065. To the extent that such systems or models are embedded into designated very large online platforms or very large online search engines, they are subject to the risk management framework provided for in Regulation (EU) 2022/2065. Consequently, the corresponding obligations of the AI Act should be presumed to be fulfilled, unless significant systemic risks not covered by Regulation (EU) 2022/2065 emerge and are identified in such models. Within this framework, providers of very large online platforms and very large search engines are obliged to assess potential systemic risks stemming from the design, functioning and use of their services, including how the design of algorithmic systems used in the service may contribute to such risks, as well as systemic risks stemming from potential misuses. Those providers are also obliged to take appropriate mitigating measures in observance of fundamental rights.

(x+1) Furthermore, obligations placed on providers and users of certain AI systems in this Regulation to enable the detection and disclosure that the outputs of those systems are artificially generated or manipulated are particularly relevant to facilitate the effective implementation of Regulation (EU) 2022/2065. This applies in particular as regards the obligations of providers of very large online platforms or very large online search engines to identify and mitigate systemic risks that may arise from the dissemination of content that has been artificially generated or manipulated, in particular risk of the actual or foreseeable negative effects on democratic processes, civic discourse and electoral processes, including through disinformation.

Compromise on environmental

Article 40

Harmonised Standards and Standardisation Deliverables

2. The Commission shall issue standardisation requests covering all requirements of Title II Chapter III and [...] of this Regulation, in accordance with Article 10 of Regulation EU (No)1025/2012 by... [six months after the date of entry into force of this Regulation]. The standardisation request shall also ask for deliverables on reporting and documentation processes to improve AI systems resource performance, such as reduction of energy and other resources consumption of the high-risk AI system during its lifecycle, and on energy efficient development of general-purpose AI models. When preparing standardisation request, the Commission shall consult the relevant stakeholders, including the Advisory Forum.

Article 84 Evaluation and review

New paragraph before Article 84(4):

By two years after the date of application of this Regulation referred to in Article 85(2)] and every four years thereafter, the Commission shall submit a report on the review of the progress on the development of standardization deliverables on energy efficient development of general-purpose models and asses the need for further measures or actions. The report shall be submitted to the European Parliament and to the Council and it shall be made public.

Additional procedural clarification for entry into force*

Article 85 Entry into force and application

3. By way of derogation from paragraph 2:

(c*new) Articles B [*procedure for GPAI models with systemic risks*] and Article E [*code of practice*] shall from nine months before [the entry into application for GPAI models]