PROPOSED AI ACT
GENERAL, DEFINITION, PROHIBITIONS

- Title I: General Provisions
- Title II: Prohibited AI Practices
- Title III: High-risk systems
- Title IV: Transparency obligations for certain systems
- Title V: Measures in support of innovation
- Title VI: Governance
- Title VII: EU database for stand-alone high-risk AI systems
- Title VIII: Post-market monitoring, information sharing, market surveillance
- Title IX: Codes of Conduct
- Title X: Confidentiality and penalties

Title I
General Provisions

- Art. 1 subject matter
- Art. 2 scope of application
- Art. 3 definitions

Subject matter art. 1

a) harmonised rules for the placing on the market, the putting into service and the use of artificial intelligence systems ('AI systems') in the Union;

b) prohibitions of certain artificial intelligence practices;

c) specific requirements for high-risk AI systems and obligations for operators of such systems;

d) harmonised transparency rules for AI systems intended to interact with natural persons, emotion recognition systems and biometric categorisation systems, and AI systems used to generate or manipulate image, audio or video content;

e) rules on market monitoring and surveillance.

Definition AI System
art. 3(1)

- ‘artificial intelligence system’ (AI system) means:

- software that
- is developed with one or more of the techniques and approaches listed in Annex I
- and can for a given set of human-defined objectives,
- generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with;

Definition AI System
ANNEX I

a) Machine learning approaches, including supervised, unsupervised and reinforcement learning, using a wide variety of methods including deep learning;

b) Logic- and knowledge-based approaches, including knowledge representation, inductive (logic) programming, knowledge bases, inference and deductive engines, (symbolic) reasoning and expert systems;

c) Statistical approaches, Bayesian estimation, search and optimization methods.

Definition AI System
art. 3(1) and ANNEX I

- Definition has a broad scope and is meant to provide broad protection
- It is not about what AI truly is (no metaphysical discussions)
- Meant to provide 'effective and practical protection'
- The discussion should be about:
  - *whether in concrete AI systems, applications or practices*
  - *the right level of protection has been implemented*

Definition Provider
art. 3(2)

- ‘provider’ means
  - *a natural or legal person, public authority, agency or other body*
  - *that develops an AI system or*
  - *that has an AI system developed with a view to placing it on the market or putting it into service under its own name or trademark,*
  - *whether for payment or free of charge;*

Definition User
art. 3(4)

- 'user' means
  - *any natural or legal person, public authority, agency or other body*
  - *using an AI system under its authority,*
  - *except where the AI system is used in the course of a personal non-professional activity;*

Definition Operator
art. 3(8)

- ‘operator’ means
  - *the provider,*
  - *the user,*
  - *the authorised representative,*
  - *the importer and*
  - *the distributor;*

Definition
Placing on the market
art. 3(9)

- ‘placing on the market’ means
  - *the first making available of an AI system on the Union market;*

Definition
Making available on the market
art. 3(10)

- ‘making available on the market’ means
  - *any supply of an AI system for distribution or use*
  - *on the Union market in the course of a commercial activity,*
  - *whether in return for payment or free of charge;*

Definition
Putting into service
art. 3(11)

- ‘putting into service’ means
  - *the supply of an AI system for first use*
  - *directly to the user or*
  - *for own use on the Union market for its intended purpose;*

Definition
Intended purpose
art. 3(12)

- ‘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;*

Definition
Reasonably foreseeable misuse
art. 3(13)

- (13) 'reasonably foreseeable misuse' means
  - *the use of an AI system*
  - *in a way that is not in accordance with its intended purpose,*
  - *but which may result from reasonably foreseeable human behaviour*
  - *or interaction with other systems;*

Definition
Performance of an AI system
art. 3(18)

- ‘performance of an AI system’ means
  - *the ability of an AI system to achieve its intended purpose;*

Definition
Performance of an AI system
art. 3(20)

- ‘conformity assessment’ means
  - *the process of verifying*
  - *whether the requirements set out in Title III, Chapter 2 of this Regulation relating to an AI system*
  - *have been fulfilled;*

Definition
Substantial modification
art. 3(23)

- ‘substantial modification’ means
  - *a change to the AI system following its placing on the market or putting into service*
  - *which affects the compliance of the AI system with the requirements set out in Title III, Chapter 2 of this Regulation or*
  - *results in a modification to the intended purpose for which the AI system has been assessed;*

Definition
Post-market monitoring
art. 3(25)

- ‘post-market monitoring’ means
  - *all activities carried out by providers of AI systems*
  - *to proactively collect and review*
  - *experience gained from the use of AI systems they place on the market or put into service*
  - *for the purpose of identifying any need to immediately apply any necessary corrective or preventive actions;*

Definition
Training, validation and test data
art. 3(29,30,31)

- 'training data' means data used for training an AI system through fitting its learnable parameters, including the weights of a neural network;
- 'validation data' means data used for providing an evaluation of the trained AI system and for tuning its non-learnable parameters and its learning process, among other things, in order to prevent overfitting; whereas the validation dataset can be a separate dataset or part of the training dataset, either as a fixed or variable split;
- 'testing data' means data used for providing an independent evaluation of the trained and validated AI system in order to confirm the expected performance of that system before its placing on the market or putting into service;

Definition
Input data
art. 3(32)

- input data' means
  - *data provided to or directly acquired by an AI system*
  - *on the basis of which the system produces an output;*

Definition
Serious incident
art. 3(44)

- ‘serious incident’ means
  - *any incident that directly or indirectly leads, might have led or might lead to any of the following:*

a) *the death of a person or serious damage to a person’s health, to property or the environment,*
b) *a serious and irreversible disruption of the management and operation of critical infrastructure.*

Title II
Prohibited AI practices
Art. 5.1

a) the placing on the market, putting into service or use of an AI system that

- *deploys subliminal techniques beyond a person's consciousness*
- *in order to materially distort a person's behaviour*
- *in a manner that causes or is likely to cause*
- *that person or another person physical or psychological harm;*

Title II
Prohibited AI practices
Art. 5.1

b) the placing on the market, putting into service or use of an AI system

- *that exploits*
- *any of the vulnerabilities of a specific group of persons*
- *due to their age, physical or mental disability,*
- *in order to materially distort the behaviour of a person pertaining to that group*
- *in a manner that causes or is likely to cause*
- *that person or another person physical or psychological harm;*

Title II
Prohibited AI practices
Art. 5.1

c) the placing on the market, putting into service or use of AI systems

- *by public authorities or on their behalf*
- *for the evaluation or classification of the trustworthiness of natural persons*
- *over a certain period of time*
- *based on their social behaviour or known or predicted personal or personality characteristics,*
- *with the social score leading to either or both of the following:*

Title II
Prohibited AI practices
Art. 5.1

c) the placing on the market, putting into service or use of AI systems

- *(...)*
- *with the social score leading to either or both of the following:*

i. detrimental or unfavourable treatment of certain natural persons or whole groups thereof in social contexts which are unrelated to the contexts in which the data was originally generated or collected;

ii. detrimental or unfavourable treatment of certain natural persons or whole groups thereof that is unjustified or disproportionate to their social behaviour or its gravity;

Title II
Prohibited AI practices
Art. 5.1

d) the use of 'real-time' remote biometric identification systems

- *in publicly accessible spaces*
- *for the purpose of law enforcement,*
- *unless and in as far as such use is strictly necessary for one of the following objectives:*

Title II
Prohibited AI practices
Art. 5.1

d) the use of 'real-time' remote biometric identification systems

- *(...)*
- *unless and in as far as such use is strictly necessary for one of the following objectives:*

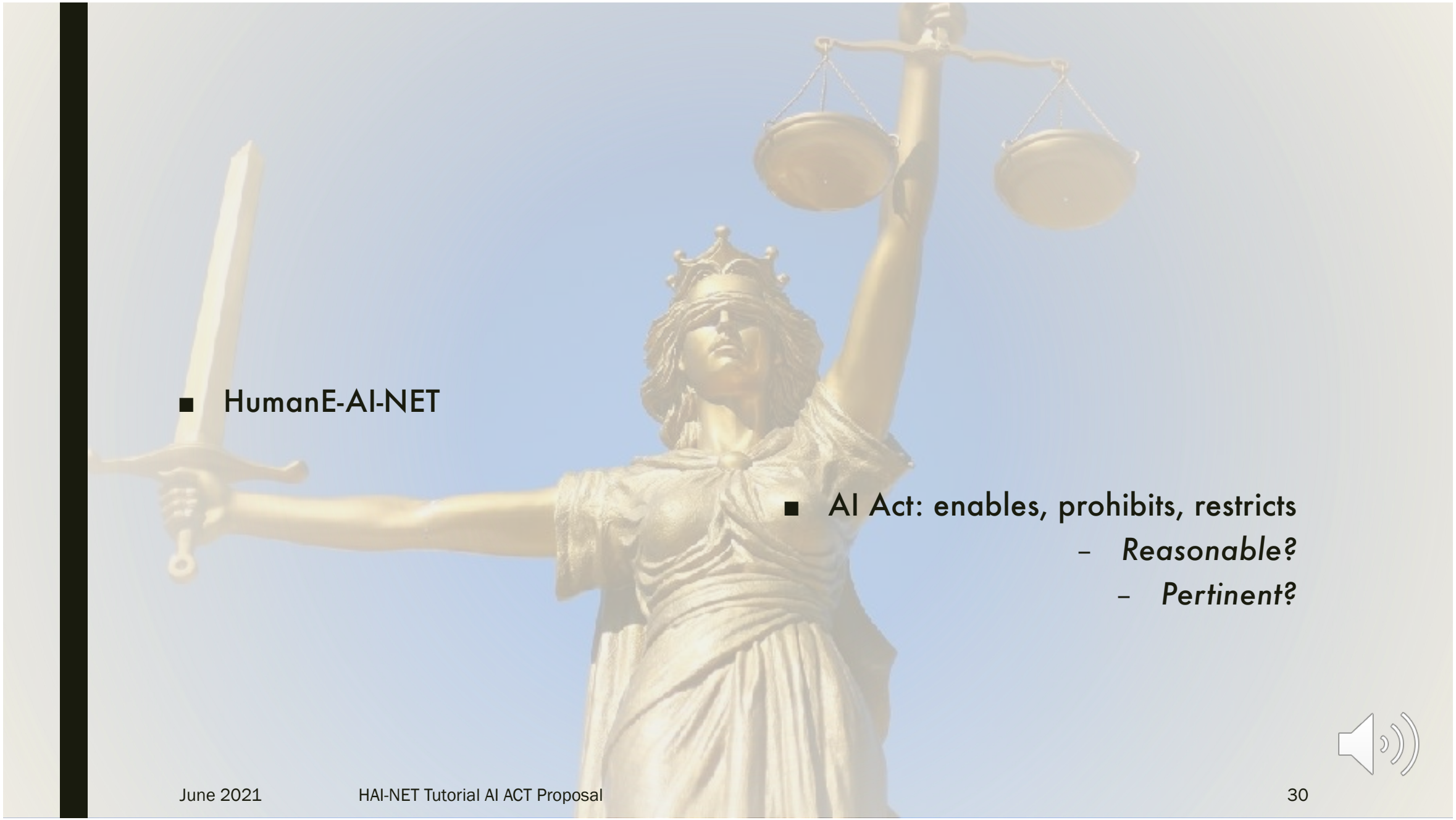
i. the targeted search for specific potential victims of crime, including missing children;

ii. the prevention of a specific, substantial and imminent threat to the life or physical safety of natural persons or of a terrorist attack;

iii. the detection, localisation, identification or prosecution of a perpetrator or suspect of a criminal offence referred to in (...) and punishable in the Member State concerned by a custodial sentence or a detention order for a maximum period of at least three years, as determined by the law of that Member State.

Title II
Prohibited AI practices
Art. 5.2,3,4

2. Conditions for exception to prohibition under 1.d
3. Requirement of prior authorisation by a judicial or independent administrative authority for each individual use under the exception to prohibition under 1.d
4. Requirement of Member State legislation for exception to prohibition under 1.d



- HumanE-AI-NET

- AI Act: enables, prohibits, restricts
  - *Reasonable?*
  - *Pertinent?*