Context & background

Package on AI April 2021

- **Communication:** *"Fostering a European approach to AI"*
- **Coordinated Plan** on AI 2021 review
- Proposal for **Artificial Intelligence Act**

Ecosystem of excellence

Ecosystem of trust

- R&D&I
- Testing and experimentation facilities
- Digital Innovation Hubs
- Skills and talent

through

- European programmes and national activities
- Creation of synergies in the Coordinated Plan on AI

- New regulatory proposal

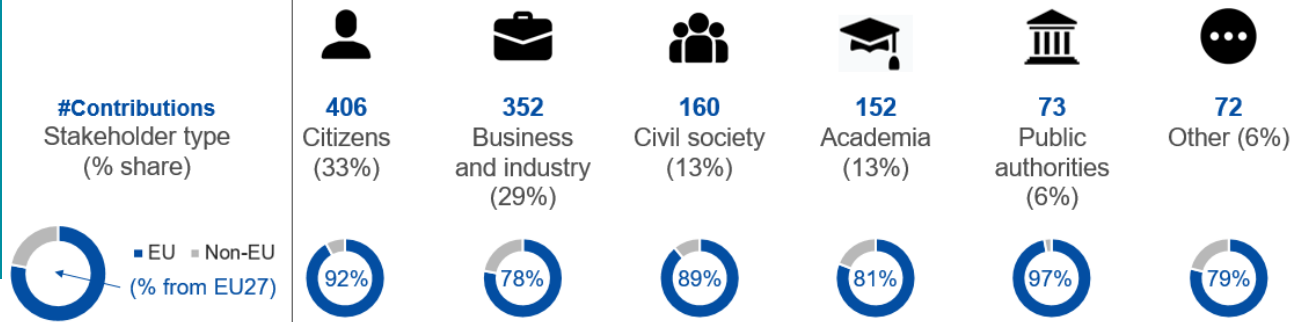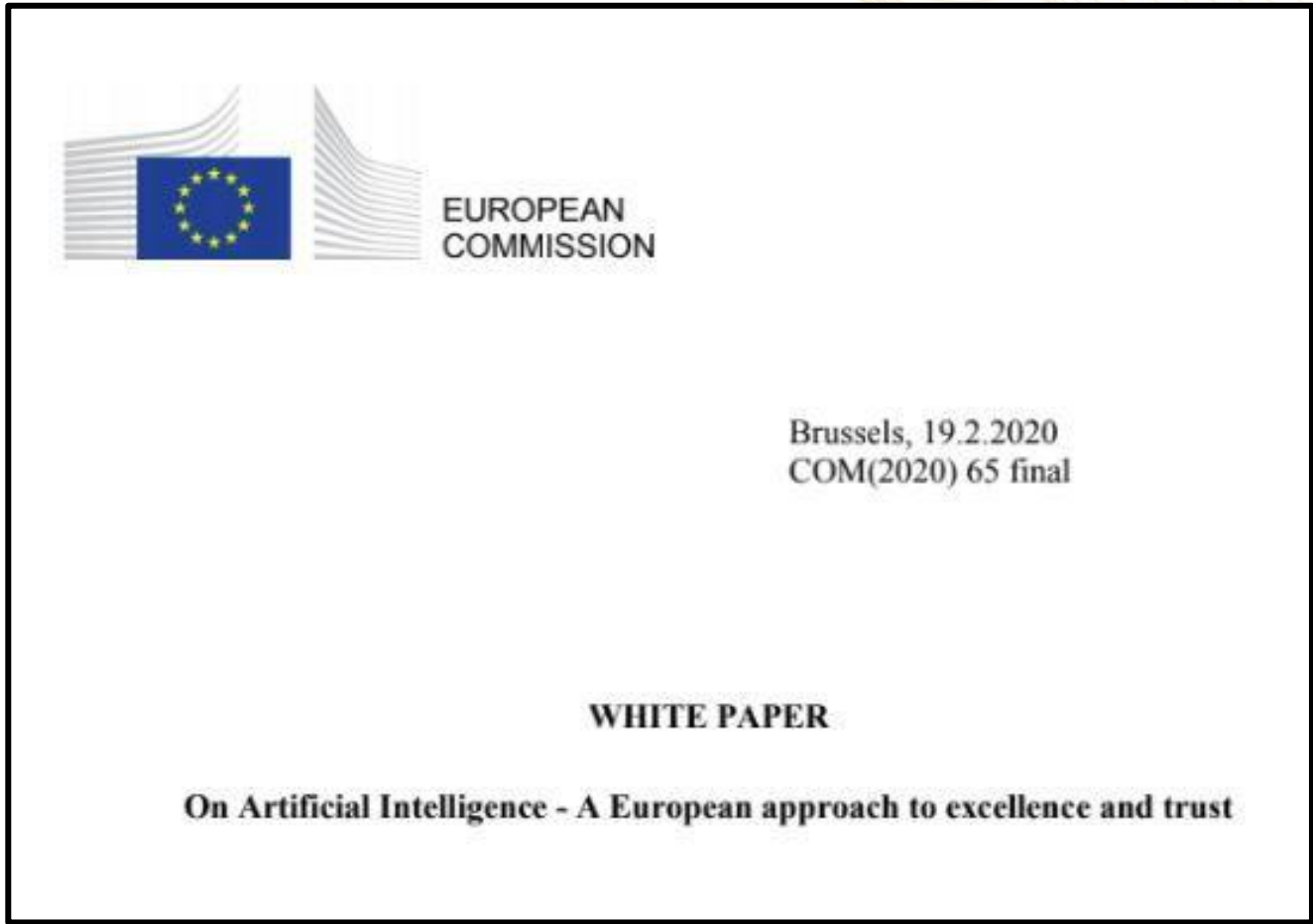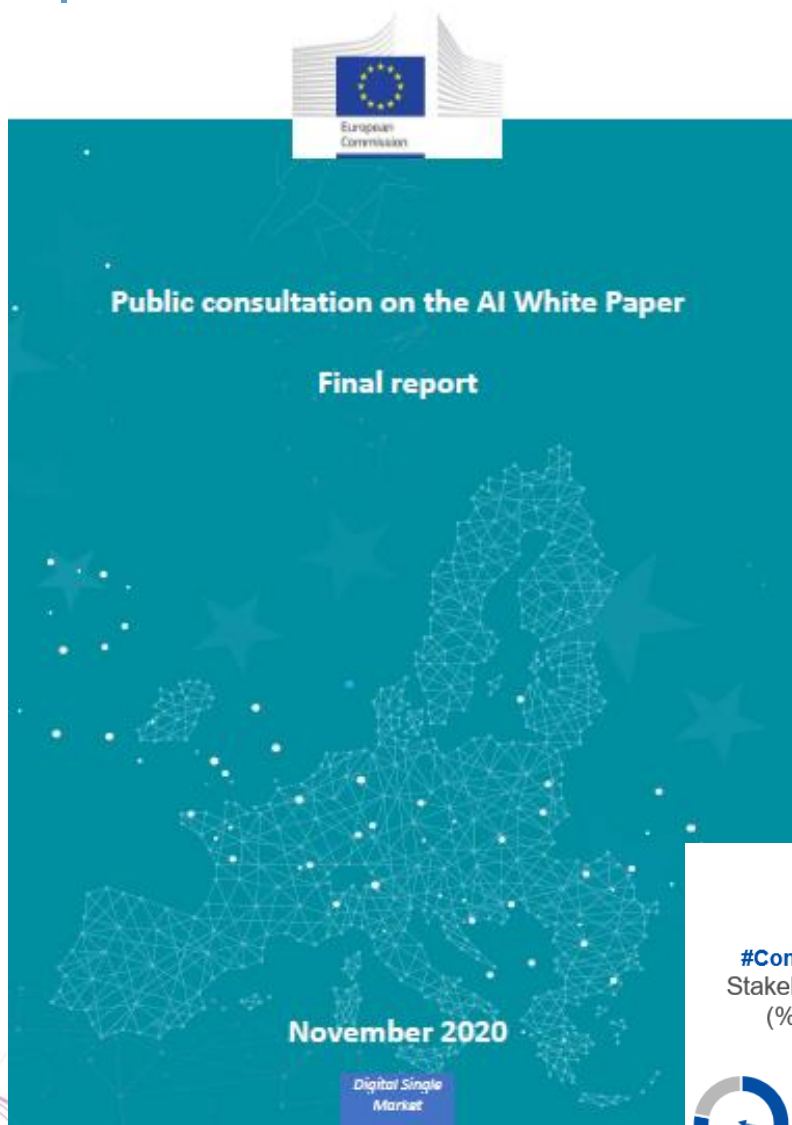*"..artificial intelligence will open up new worlds for us. But this world also needs rules."*

European Commission

Background -2018-2019

Background - 2020

Public consultation on the AI White Paper

Final report

November 2020

Digital Single Market

European Commission

Brussels, 19.2.2020
COM(2020) 65 final

WHITE PAPER

On Artificial Intelligence - A European approach to excellence and trust

	406 Citizens (33%)	352 Business and industry (29%)	160 Civil society (13%)	152 Academia (13%)	73 Public authorities (6%)	72 Other (6%)
#Contributions Stakeholder type (% share)						
■ EU ■ Non-EU (% from EU27)	92%	78%	89%	81%	97%	79%

European Commission

AI brings benefits to consumers, business and the society, but creates risks

Public consultation

Risks to fundamental rights

► 90% of respondents to the public consultation worry about AI breaching fundamental rights (ex. biometric identification)

► 87% about discriminatory outcomes

Risks to safety

► 82% of respondents to the public consultation are concerned that AI endangers safety (ex. AI in medical devices)

AI REGULATION

► 75% said that there is a need for new legislation or that current legislation may have gaps

European Commission

Main elements of the AI Act

Key choices

Internal market legislation

► "Classic" internal market rules for the placing on the market and putting into service of AI systems (**CE mark**)

► **New Legislative Framework "philosophy"**: harmonized standards to operationalize legal requirements

► **Horizontal approach**: across sectors within EU competence. No national security, military, defense.

    ► **Sectorial specificities/needs** considered (law enforcement, finance, product legislation acquis)

    ► **Without prejudice to other relevant EU acquis** (e.g. data protection, consumer protection, equality law, platforms legislation): *AI Act is not the only EU law applicable to AI*
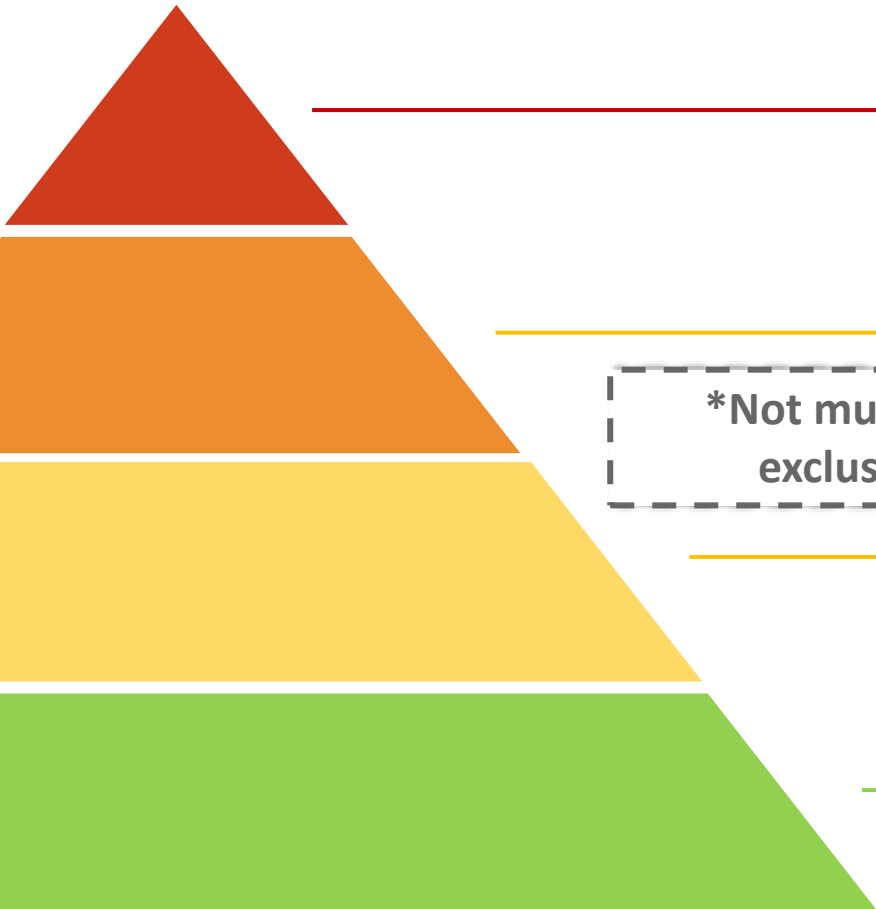
Risk-based approach

Level playing field for EU and non-EU players

► When AI is used in the EU market, same rules apply *(Brussels' effect?)*

Risk-based approach

The higher the risk the stricter the rules

No regulation of the technology as such

Unacceptable risk
e.g. social scoring

Prohibited

High risk
e.g. recruitment, medical devices

Permitted subject to compliance with AI requirements and ex-ante conformity assessment

*Not mutually exclusive

'Transparency' risk
'Impersonation' (bots), deep fake

Permitted but subject to information/transparency obligations

Minimal or no risk

Permitted with no restrictions

European Commission

High-risk AI systems

HIGH RISK

1 **SAFETY COMPONENTS OF REGULATED PRODUCTS**

(e.g. medical devices, machinery) which are subject to third-party assessment under the relevant sectorial legislation

ANNEX II

New Legislative Framework - Section A

'Old Approach'- Section B

2 **CERTAIN (STAND-ALONE) AI SYSTEMS IN THE FOLLOWING AREAS**

- ✓ Biometric systems

- ✓ Management and operation of critical infrastructure

- ✓ Education and vocational training

- ✓ Employment and workers management, access to self-employment

- ✓ Access to and enjoyment of essential private services and public services and benefits

- ✓ Law enforcement

- ✓ Migration, asylum and border control management

- ✓ Administration of justice and democratic processes

ANNEX III

European Commission

Obligations by operators

PROVIDER

▶ Ensure **compliance with requirements**

▶ **Conformity assessment procedure**, incl. affix CE marking and sign declaration of conformity

▶ Establish and implement **quality management** system in its organisation

▶ **Register AI system** in EU database

▶ **Keep documentation** and **logs**

▶ Conduct **post-market monitoring**

▶ **Collaborate** with market surveillance authorities

DEPLOYER

▶ Operate AI system in accordance with **instructions of use**

▶ Ensure **human oversight** when using of AI system

▶ **Monitor** operation for possible risks and **keep logs**

▶ **Report in case of serious incident**

▶ **Registration of use** in EU database for public authorities and EU bodies

▶ **Inform natural persons** if AI systems make or assist in making decisions related to them

▶ **FRIA** (governed by public law, providing public services and private operator creditworthiness/insurance)

▶ **Restrictions on ex-post RBI** (for law enforcement authorities)

European Commission

Non high-risk AI systems

Transparency obligations for certain AI systems (Art. 52)

▶ **Notify humans** that they are **interacting with an AI system** unless this is evident

▶ **Notify humans** that they are **exposed to emotional recognition or biometric categorisation systems**

▶ Apply **label to deep fakes**

▶ **Ensure that audio, image, video or text** content generated by an AI system is marked in a **machine readable format** and **detectable** as artificially generated

▶ **Label text** as artificially generated if it is published with the purpose of **informing the public on matters of public interest**

Possible voluntary codes of conduct (Art. 69)

▶ No mandatory obligations

▶ Requirements for high-risk AI systems or other requirements

General Purpose AI models

All GPAI
(lower tier)

- Technical documentation (incl. computational resources & energy consumption)
- Information downstream
- Copyright (policy & detailed summary of content)

GPAI with systemic risks
(higher tier)

- Evaluation of high-impact capabilities
  - at least 10^25 FLOPs
  - designated by the AI Office (e.g. based on certain criteria)
- All obligations from the lower tier <u>PLUS</u>
  - risk assessment and mitigation
  - incident reporting
  - adequate level of cybersecurity

- **Open-source models** in scope, except technical documentation and transparency as regards lower tier
- **Codes of Practice** for demonstrating compliance

European Commission

Enforcement/governance of the AI Act

National competent authorities

- **Notifying authorities**
- **Market surveillance authorities**

AI Office (COM)

- Enforcing and supervising the rules for GPAI models
- Assist MS when necessary

European Artificial Intelligence Board

- High-level representatives by MS
- Advising and assisting the Commission

Advisory forum

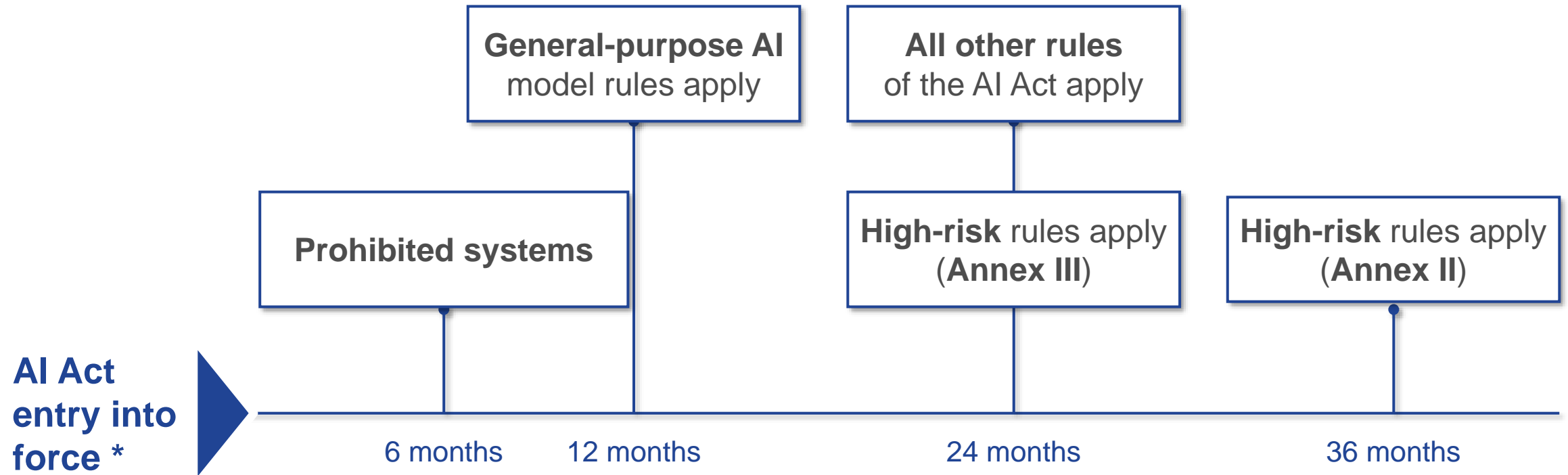- Balanced selection of stakeholders (industry, civil society, academia, etc.)

Scientific Panel

- Independent experts
- Support to enforcement of GPAI rules
- Access by MS

European Commission

Timelines & implementation

Progressive entry into application

General-purpose AI model rules apply

All other rules of the AI Act apply

Prohibited systems

High-risk rules apply (**Annex III**)

High-risk rules apply (**Annex II**)

AI Act entry into force *

6 months   12 months   24 months   36 months

*Following its adoption by the European Parliament and the Council, the AI Act shall enter into force on the twentieth day following that of its publication in the official Journal.

European Commission

Next steps (not exhaustive)

EU level

- Ensure **harmonized standards** are in place by time provisions on high-risk AI become applicable

- Facilitate/support establishment of **codes of practice, notably as regards GPAI**

- Set-up of all **relevant governance groups** (AI Board, Advisory forum, scientific panel)

- Staffing for **AI Office**

- Set up **EU data base** for high-risk AI systems

- Adopt a series of **guidelines documents** (requirements, prohibited AI, substantial modification, transparency obligations, consistency with other sectorial EU law, definition of AI) & **implementing/delegated acts**

- (…)

National level

- Review and possibly update relevant **national law** not in line with AI Act

- Appoint **national representative** to AI Board and ensure internal coordination

- Designate/set up **notifying authorities** and **market surveillance authorities**

- Lay down rules on **penalties for infringements**

- Set up **national sandboxes**

- (…)

European Commission

AI Office mission and tasks

- **Implementation of the AI Act**

  - enforcement of rules on GPAI (incl. developing evaluation tools/benchmarks, investigate infringements)

  - support enforcement by national authorities

  - support all COM responsibilities (e.g. guidance, delegated/implementing acts, secretariat to AI Board & its subgroups, admin. support to Advisory Forum & Scientific Panel of Experts)

- **International cooperation** on AI rules and governance

- **Support excellence**

  - Support AI innovation, in particular for AI with societal and economic benefits

- **Expertise and capabilities at Union level**

  - To foster understanding of AI capabilities, trends, and potential risks and support safe development and use in the EU

Thank you

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