

HARMONISED STANDARDS FOR THE EUROPEAN AI ACT

Artificial Intelligence Act

The European Union Artificial Intelligence Act ("EU AI Act") is the first legal framework about artificial intelligence ("AI"). It came into effect on 1 August 2024. The main objectives of the Act are to:

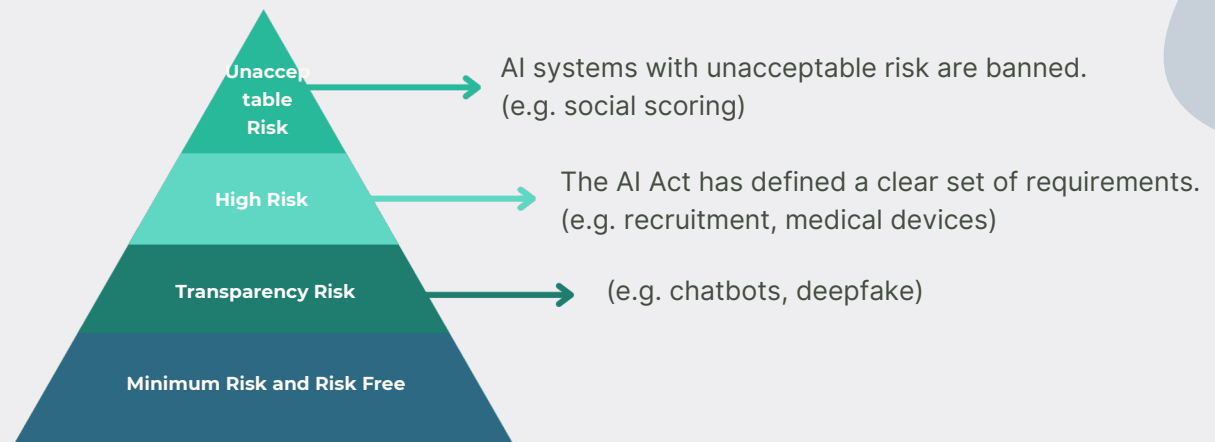
- Ensure that AI systems respect people's safety, health and fundamental rights.
- Addressing the risks of very powerful AI models.

A common approach to these issues across the European Union is provided by the EU AI Act.

The Role of Standards and High-Risk Artificial Intelligence Systems

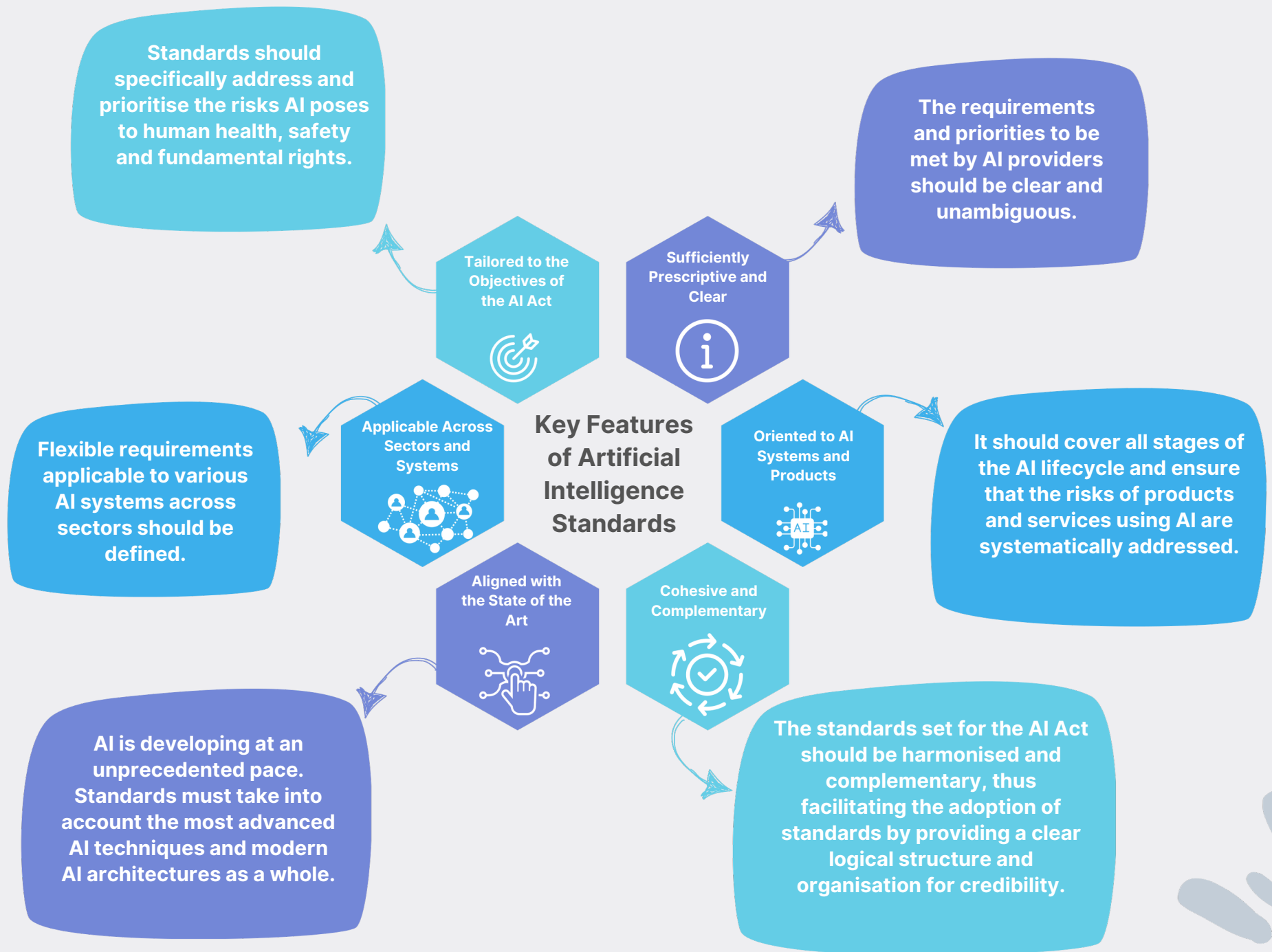
Standards are important tools to support the implementation of EU policies and legislation to ensure a high level of security for Union members and Member State citizens and to protect fundamental rights. Standards can also support the creation of equal competitive conditions and a level playing field for the design and development of AI systems, in particular for small and medium-sized enterprises developing AI solutions.

The AI Act divides AI systems into different categories according to risk and defines the basic requirements that high-risk AI systems must meet to ensure their safety.



Technical standards define, in parallel with other product legislation, concrete approaches that can be adopted to meet the requirements for ensuring the safety of high-risk AI systems. These are harmonised standards developed by the European Standardisation Organisations at the request of the European Commission to support compliance with EU legislation. The standards, once assessed and published in the Official Journal of the EU, will give providers of high-risk AI systems a presumption of compliance with the relevant legal obligations. Given the key role of standards, the European Commission has been working with European Standardisation Organisations since the AI Act proposal was first submitted in April 2021. In May 2023, well before the adoption of the AI Act by the European Parliament and the Council, the Commission adopted a formal standardisation request, which was accepted by CEN-CENELEC.

European standardisation for the AI Act can benefit from the international standardisation activities of ISO and IEC, which can be adopted and recognised in the European context. Shortly after the adoption of the final legislative text, most of the requested standards will be drafted.



Standardisation Outputs Requested by the European Commission

All components of operations and performance should be recorded to identify situations that may lead to risk and to monitor compliance with regulatory requirements.

In line with Article 13 of the AI Act, all transparency information necessary for safe and informed use should be defined to ensure an understanding of how high-risk AI systems work, their risks and performance.

Standards for the oversight of high-risk systems should define clear requirements and provide concrete monitoring measures to test and implement the effectiveness of human oversight measures.

In order to ensure compliance of high-risk AI systems with the AI Act and to establish an effective post-market monitoring system, requirements should be set and standards should be established for the institution and maintenance of a quality management system covering the entire life cycle of AI systems.

Before the systems are placed on the market or out into service, a framework should be defined that includes conformity assessment procedures, qualification criteria for the persons who will carry out these processes and is in line with legal requirements.

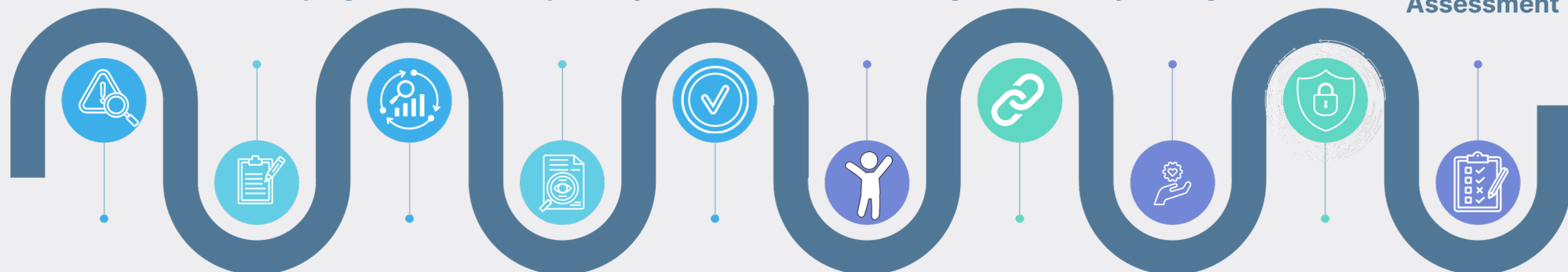
Record Keeping

Transparency

Human Oversight

Quality Management

Conformity Assessment



Risk Management

Data Governance and Quality

Accuracy

Robustness

Cybersecurity

It should aim to identify and minimise risks to the health, safety and fundamental rights of individuals.

The standards should cover data governance, data quality, risk management and technical methods to ensure compliance with the AI Act, and should also take into account the statistical characteristics of datasets and the risks in their lifecycle.

When selecting accuracy metrics for high-risk systems, it should be aimed to define appropriate methods, to measure this accuracy reliably and to report it in detail.

Establish comprehensive requirements for selecting, implementing and testing the effectiveness of robustness measures to ensure the resilience of high-risk systems in the face of operational errors, failures or inconsistencies.

For high-risk systems, security objectives should be determined with risk assessment and mitigation plans, including new threats that are constantly emerging, and methods for testing and verifying the objectives should be defined.



STANDARDISATION FOR THE EU AI ACT

With the obligations for high-risk AI systems coming into force in August 2026, it is critical to publish relevant standards in a timely manner and allow sufficient time for preparation.

Resource:

<https://publications.jrc.ec.europa.eu/repository/handle/JRC139430>



Content and Design:
Atty. Şerife Nur KİRAZLI

Translation:
Atty. Necati Alp ÇELEBİ

