

# Comprehensive European industrial policy on artificial intelligence and robotics

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The European Parliament adopted by 572 votes to 54 with 45 abstentions a resolution on a comprehensive European industrial policy on artificial intelligence (AI) and robotics.

Members pointed out that AI and robotics drive innovation, leading to new business models and playing a key role in transforming societies and digitising economies in many sectors, such as industry, health care, construction and transport. Parliament stated at the same time, that AI and robotics should be developed and deployed in a human-centred approach with the aim of supporting humans at work and at home.

It made a series of recommendations.

## Labour in the era of artificial intelligence and robotics

Automation combined with artificial intelligence will increase productivity and thus increase output. Some jobs will be replaced but new jobs will also be created. As citizens of all ages will be impacted, Members stressed that education curricula must be adapted, including through the establishment of new learning paths and the use of new delivery technologies. In particular the need for digital skills, including coding, should be included in teaching and training from the early school years to life-long learning.

Members recommended that Member States, alongside private sector actors, identify the risks and develop strategies to ensure that relevant retraining and reskilling programmes are developed for workers in the industries most affected by the automation of tasks.

## Malicious use of artificial intelligence

Parliament highlighted the fact that malicious or negligent use of AI could threaten digital security and physical and public safety, as it could be used to attacks on information society services and connected machinery,. It called on the Commission to:

- propose a framework that penalises perception manipulation practices when personalised content or news feeds lead to negative feelings and distortion of the perception of reality that might lead to negative consequences (for example, election outcomes, or distorted perceptions on social matters such as migration);
- take note of the social challenges arising from practices resulting from the ranking of citizens, who should not be subjected to discrimination on the basis of their ranking.

## The technological path towards artificial intelligence and robotics

Parliament welcomed the Commission's proposal for the Digital Europe Programme and the budget of EUR 2.5 billion pledged to Artificial Intelligence, as well as the increase in funding under the Horizon 2020 programme. It emphasised that AI research must invest not only in technology and innovation, but also AI-related social, ethical and liability areas, and any AI model deployed should have ethics by design.

Members recommended greater investment in this field in order to remain competitive and facilitate access to credible information addressing the main concerns about AI and robotics such as privacy, safety and transparency in decision-making. They also underlined that a rapid, safe and secure development of 5G is essential to guarantee that the Union can reap the full benefits of AI and protect against cyber security threats.

## Industrial policy

Members recommended the use and promotion of public-private partnerships to explore solutions to key challenges while emphasising the need to standardize the design and use of AI systems.

Parliament stressed the importance of concentrating public support for AI on the strategic sectors in which European industry has the greatest opportunities to play a leading role at a global level and which have added value in the general public interest such as public sector, health, energy, transport, agriculture and the food chain, cybersecurity and SMEs.

## Legal framework

In order to promote a regulatory environment conducive to the development of AI, Members asked the Commission to regularly re-evaluate existing legislation in order to ensure that it is fit for purpose with respect to AI while also respecting EU fundamental values. Parliament noted, at the same time, that AI is a notion encompassing a wide range of products and applications, from automation, algorithms and narrow artificial intelligence to general artificial intelligence. Accordingly, a comprehensive law or regulation on AI should be approached with caution, as sectoral regulation may provide policies that are general enough but also refined up to the level where they are meaningful for the industrial sector.

## Ethical aspects

Parliament called for the creation of an ethical charter of best practice for AI and robotics that companies and experts should follow. It called on the Commission to:

- ensure that applications based on AI should not use data collected from various sources without first receiving the consent of the data subject;
- create a framework that makes sure that consent given by the data subject will generate data only for the intended purposes;
- respect the right of citizens to an offline life and to ensure that there is no discrimination against citizens on whom no data has been recorded.

The resolution stressed that ethical rules must be in place to ensure human-centric AI development, the accountability and transparency of algorithmic decision-making systems, clear liability rules and fairness.

#### Governance

Members called on the Commission and the Member States to consider the creation of a European regulatory agency for AI and algorithmic decision-making tasked, *inter alia*, with: (i) establishing a risk assessment matrix for classifying algorithm types and application domains according to their potential for a significant negative impact on citizens; (ii) investigating the use of algorithmic systems where a case of infringement of human rights is suspected (with evidence provided by a whistle-blower, for example); (iii) enhancing the effectiveness of the tort liability mechanism; (iv) auditing the AIAs of high-level impact systems to approve or reject the proposed uses of algorithmic decision-making in highly sensitive and/or safety-critical application domains (private health-care, for instance).

Lastly, Parliament stressed the different models being developed in third countries, specifically in the US, China, Russia and Israel, and highlighted the values-based approach used in Europe and the need to work with international partners in bilateral and multilateral settings, for the ethical advancement and adoption of AI.