An EU framework for artificial intelligence

European Union (EU) lawmakers are reflecting on how to best legislate for the use of artificial intelligence (AI) technology, seeking to maximise EU citizens’ opportunities to benefit from the technology, while regulating against the risks. Parliament is due to vote in its October II plenary session on three own-initiative reports from the Legal Affairs Committee (JURI) in the areas of ethics, civil liability, and intellectual property (IP).

Background

Artificial intelligence (AI) is a promising technology combining machine-learning techniques, robotics and automated decision-making systems. It is anticipated that AI applications will deliver a wide range of positive impacts for society and the economy, including, for instance, in the healthcare sector to fight pandemics, or in the transport sector to guide autonomous vehicles. At the same time, AI characteristics, including operational opacity (‘black box-effect’) and partially autonomous behaviour, entail a number of potential risks for EU citizens’ fundamental rights (e.g. biased decision-making and discrimination) that may have negative consequences, for instance, in the context of law enforcement and product safety and liability. Against this background, lawmakers in the EU are looking at how to both foster and regulate AI.

European Commission proposal

The Commission set out an AI strategy in 2018, addressing the socio-economic aspects of AI, and agreed a coordinated plan with EU Member States to align strategies to promote the development of AI in Europe. The Commission wants to develop a 'human-centric' approach to AI that is respectful of European values and principles. In 2019, the Commission published its non-binding guidelines on ethics in AI, which sets out seven key requirements that AI developers should follow (i.e. human agency and oversight, technical robustness and safety, privacy and data governance, transparency, diversity, non-discrimination and fairness, societal and environmental well-being, and accountability). Furthermore, a Commission white paper, issued in 2020, stresses the need to avoid a fragmentation of national approaches, to support the development and uptake of AI across the EU economy, and prepares the ground for legislative proposals. The Commission held a public consultation on the white paper between February and June 2020. Stakeholders from the public and private sectors largely support revision of the Product Liability Directive and of national liability rules, to cover risks created by the use of AI systems and ensure compensation in case of damage. Furthermore, the view that a new regulatory framework for AI is needed, to complement the applicable legislation (e.g. consumer protection, data protection and privacy regimes), is widely shared. The Commission proposes, in particular, to set up a prior conformity assessment for 'high-risk' AI systems to verify they comply with a range of new requirements (i.e. robustness, accuracy and reproducibility, data governance, accountability, transparency and human oversight) before entering the EU internal market. In parallel, the Commission seeks to evaluate the IP framework to enhance access to and use of data, which is essential for training AI systems.

A key issue for lawmakers is to set clear criteria differentiating 'low risk' and 'high-risk' AI applications. The Commission proposes a risk-based approach, according to which a given AI application should be considered high risk if both the target sector (e.g. healthcare) and the intended use involve significant risk (e.g. injury, death). In addition, some AI applications, such as biometric recognition, would always be considered high risk. However, the Commission’s approach is controversial. Some academics stress that the definition of ‘high risk’ must be clarified, while others question the feasibility of a sound distinction between 'low-risk' and 'high-risk' applications based on the anticipated risk of given technologies and suggest adopting a risk-management approach instead, where the party best capable of controlling or mitigating the risks would be deemed legally responsible.
European Parliament position

The Parliament has already adopted a range of resolutions in the field of AI, including on civil law rules on robotics. Parliament has also set up a new Special Committee on Artificial Intelligence in a Digital Age (AIDA). The JURI committee adopted three reports on AI on 1 October 2020.

A framework of ethical aspects of artificial intelligence, robotics and related technologies

The JURI committee adopted its legislative-initiative report (Rapporteur: Iban García del Blanco, S&D, Spain), with 20 votes in favour, none against and 4 abstentions. The report, inter alia, recommends that the Commission establish a comprehensive and future-proof European legal framework of ethical principles for the development, deployment and use of AI, robotics and related technologies – including software, algorithms and data – in the Union. The Commission should also integrate a range of guiding principles on high-risk AI, robotics and related technologies in its forthcoming legislation, including human oversight, transparency, accountability, non-bias and non-discrimination, social responsibility and gender equality, environmental sustainability and privacy considerations. EU law should further impose a range of requirements on high-risk technologies, i.e. technologies that pose a significant risk to cause injury or harm and are in breach of EU fundamental rights and safety rules. The Commission should develop common guidance in this matter and draft a list of high-risk sectors (e.g. employment, healthcare) and high-risk uses (e.g. recruitment, automated driving, electoral processes) that should serve to identify the high-risk AI technologies subject to a compliance assessment. Parliament proposes that national authorities issue a European certificate of ethical compliance should such technologies comply with common guiding principles, including with regard to safety and right of redress.

Civil liability regime for artificial intelligence

The JURI committee adopted its legislative-initiative report (Rapporteur: Axel Voss, EPP, Germany), with 23 votes in favour, none against and 1 abstention. The report, inter alia, recommends adoption of a horizontal and harmonised legal framework for civil liability claims, with a new regulation listing the high-risk AI systems and the critical sectors in which they are used. The Commission should – with the help of the standing Technical Committee for high-risk AI systems – review and amend this list every six months, if necessary through a delegated act. The report proposes that operators of a high-risk AI system be subject to strict liability for any harm or damage caused by a physical or virtual activity, device or process driven by that AI system and be subject to a mandatory insurance regime. Similarly, strict liability would apply to AI systems that repeatedly cause incidents resulting in serious harm or damage (even to those not classified as high-risk). AI systems not listed as a high-risk AI system would, in principle, remain subject to fault-based liability, unless stricter national laws and consumer protection legislation is in force. The new civil liability regime should cover harm to life, health, physical integrity and property as well as significant immaterial harm that results in a verifiable economic loss. EU law should determine the amount and extent of compensation, as well as the limitation period for bringing forward liability claims. The need to amend the Product Liability Directive in parallel should be assessed.

Intellectual property rights (IPRs) for the development of artificial intelligence technologies

The JURI committee adopted its own-initiative report (Rapporteur: Stéphane Séjourné, Renew Europe, France), with 19 votes in favour, 3 against and 2 abstentions. The report, inter alia, recommends that the Commission conduct an impact assessment on the implications of AI and related technologies under the current system of patent law, trademark and design protection, copyright and related rights, including the legal protection of databases and computer programs, and ‘trade secrets’. EU laws must be amended as necessary. The Commission should support standardisation, which plays a key role in the development and dissemination of new AI and related technologies, and create a balanced European data space to foster the free flow, access, use and sharing of data, while protecting IPRs and trade secrets.

Legislative-initiative reports 2020/2012(INL), 2020/2014(INL) and own-initiative report 2020/2015(INI); Committee(s) responsible: JURI; Rapporteur(s): I. García del Blanco (S&D, Spain), A. Voss (EPP, Germany), S. Séjourné (Renew, France).