Basic information

2020/2266(INI) INI - Own-initiative procedure Report on Artificial Intelligence in a Digital Age **Subject** 3.30.06 Information and communication technologies, digital technologies 3.40.06 Electronics, electrotechnical industries, ICT, robotics	Procedure completed

Key players

	Committee responsible	Rapporteur	Appointed
European Parliament	AIDA Special Committee on Artificial Intelligence in a Digital Age	VOSS Axel (EPP)	30/09/2020
		Shadow rapporteur BENIFEI Brando (S&D) ANSIP Andrus (Renew) BOESELAGER Damian (Greens/EFA) BOURGEOIS Geert (ECR) BARDELLA Jordan (ID) BARRENA ARZA Pernando (The Left)	

	Commission DG	Commissioner
European Commission	Communications Networks, Content and Technology	BRETON Thierry

Key events

Date	Event	Reference	Summary
17/12/2020	Committee referral announced in Parliament		
22/03/2022	Vote in committee		
05/04/2022	Committee report tabled for plenary	A9-0088/2022	Summary
03/05/2022	Decision by Parliament	T9-0140/2022	Summary
03/05/2022	Debate in Parliament	💬	

Procedure reference	2020/2266(INI)
Procedure type	INI - Own-initiative procedure
Procedure subtype	Special committee/Committee of inquiry
Legal basis	Rules of Procedure EP 213 Rules of Procedure EP 215
Other legal basis	Rules of Procedure EP 165
Stage reached in procedure	Procedure completed
Committee dossier	AIDA/9/04886

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Committee draft report		PE680.928	02/11/2021	
Amendments tabled in committee		PE703.073	21/12/2021	
Amendments tabled in committee		PE703.074	21/12/2021	
Amendments tabled in committee		PE703.075	21/12/2021	
Amendments tabled in committee		PE703.076	21/12/2021	
Amendments tabled in committee		PE703.077	21/12/2021	
Committee report tabled for plenary, single reading		A9-0088/2022	05/04/2022	Summary
Text adopted by Parliament, single reading		T9-0140/2022	03/05/2022	Summary

Meetings with interest representatives published in line with the Rules of Procedure

Rapporteurs, Shadow Rapporteurs and Committee Chairs

Transparency

Name	Role	Committee	Date	Interest representatives
VOSS Axel	Rapporteur	AIDA	10/06/2021	BlackRock Deutsche Bundesbank Hessian Center for AI
VOSS Axel	Rapporteur	AIDA	30/04/2021	Mozilla Corporation GCSP Europol eu-LISA FRA Interpol Central Office for Information Technology in the Security Sector in Germany Dutch National Police ALLAI EESC ONE.AI European AI Fund

Other Members

Transparency		
Name	**Date**	**Interest representatives**
GEESE Alexandra	10/03/2022	Fundacja Panoptykon
VOSS Axel	23/03/2021	Future of Life Institute SAP World Economic Forum DG-CONNECT TU Berlin Thousand Eyes On Me

Report on Artificial Intelligence in a Digital Age

2020/2266(INI) - 05/04/2022 - Committee report tabled for plenary, single reading

The Special Committee on Artificial Intelligence in a Digital Age adopted the own-initiative report by Axel VOSS (EPP, DE) on artificial intelligence in a digital age.

The report noted that the world stands on the verge of the fourth industrial revolution, one which draws on its energy from an abundance of data combined with powerful algorithms and computing capacity. Today's digital revolution has triggered a global competition as a result of the tremendous economic value and technological capabilities that have accumulated in economies that commit the most resources to the research, development and marketing of artificial intelligence (AI) applications. It is estimated that by 2030, AI is expected to contribute more than EUR 11 trillion to the global economy.

On the other hand, digital tools are increasingly becoming an instrument of manipulation and abuse in the hands of some corporate actors as well as in the hands of autocratic governments for the purpose of undermining democratic political systems. This report stressed that the digital transition must be shaped with full respect for fundamental rights and in such a way that digital technologies serve humanity.

Members also warned that the EU has fallen behind in digital investment. As a result, there is a risk that standards will be developed elsewhere in the future, often by non-democratic actors, while the EU needs to act as a global standard-setter in AI.

Clear regulatory framework

The report noted that a clear regulatory framework, political commitment and a more forward-leaning mindset, which are often lacking at present, are needed for European actors to be successful in the digital age and to become technology leaders in AI.

EU Roadmap up to 2030

With a view to making the EU a global leader in AI, the report presents its EU Roadmap for AI with clear policy recommendations for the next years. These include:

Improving the regulatory environment

Members called on the Commission to only propose legislative acts in the form of **regulations** for new digital laws in areas such as AI, as the digital single market needs to undergo a process of genuine harmonisation. They called for consistent EU-wide coordination, implementation and enforcement of AI-related legislation.

Digital legislation should always be flexible, principle-based, technology-neutral, future-proof and proportionate, while adopting a risk-based approach where appropriate, based on respect for fundamental rights and preventing unnecessary additional administrative burden for SMEs, start-ups, academia and research.

The report highlighted that an underlying objective of the EU's digital strategy, as well as that of the AI strategy, is creating a 'European Way' in a digitalised world. This approach should be **human-centric**, trustworthy, guided by ethical principles and based on the concept of the social market economy. The individual and the protection of their fundamental rights should always remain at the centre of all political and legislative considerations.

Members are convinced that it is not always AI as a technology that should be regulated, but that the **level of regulatory intervention should be proportionate to the type of individual and/or societal risk** incurred by the use of an AI system. They underlined, in this regard, the importance of distinguishing between '**high-risk**' (which needs strict additional legislative safeguards) and '**low-risk**' (which may, in a number of cases, require transparency requirements for end users and consumers) AI use cases.

For their part, Member States are asked to review their national AI strategies, as the several of them still remain vague and lack clear goals, including regarding digital education for society as a whole as well as advanced qualifications for specialists. The Commission should help Member States to set priorities and align their national AI strategies and regulatory environments as much as possible in order to ensure coherence and consistency across the EU.

Improved research

The report called for the EU to increase investment in research into AI and other key technologies, such as robotics, quantum computing, microelectronics, the IoT, nano-technology and 3D printing. It urged the expansion of the digital Europe programme and considered that its allocated funding of EUR 7.6 billion should be increased. The structure of research funding, including grant application requirements, should also be simplified.

Ecosystem of trust

The report also identified further policy options that could **unlock AI's potential** in health, the environment and climate change, to help combat pandemics and global hunger, as well as enhancing people's quality of life through personalised medicine. AI, if combined with the necessary support infrastructure, education and training, can increase capital and labour productivity, innovation, sustainable growth and job creation. However, the EU and Member States should create **awareness raising campaigns** to inform and empower citizens to understand better the opportunities, risks and the societal, legal and ethical impact of AI to further contribute to AI trustworthiness and democratisation.

Mass surveillance, military concerns

The report noted with concern that such AI technologies pose **crucial ethical and legal questions**. Certain AI technologies enable the automation of information processing to an unprecedented scale, which paves the way for mass surveillance and other unlawful interference and poses a threat to fundamental rights, in particular the rights to privacy and data protection.

Members called on the Commission and Member States to prioritise funding AI research that focuses on sustainable and socially responsible AI, contributing to finding solutions that safeguard and promote fundamental rights, and avoid funding programmes that pose an unacceptable risk to these rights, including funding systems of mass surveillance, social scoring and other systems that have the potential to lead to negative social impacts.

The report concluded that the EU's AI strategy must not overlook the **military and security considerations** and concerns that arise from the global deployment of AI technologies. Members stressed the challenge of reaching a consensus within the global community on minimum standards for the responsible use of AI and expressed concern about military research and development on autonomous lethal weapons systems.

Report on Artificial Intelligence in a Digital Age

2020/2266(INI) - 03/05/2022 - Text adopted by Parliament, single reading

The European Parliament adopted by 495 votes to 34, with 102 abstentions, a resolution on artificial intelligence (AI) in the digital age.

The EU as a global reference

Parliament noted that the world is on the threshold of the fourth industrial revolution and that the ongoing digital transformation, in which AI plays a key role, has triggered a **global competition for technological leadership**. The EU has so far lagged behind, especially in comparison to China and the US, so that future technological standards risk being developed without sufficient EU input, often by undemocratic actors, which poses a risk to political stability and economic competitiveness. The EU should act as a global standard-setter on AI.

Members pointed out that by 2030, AI is expected to contribute more than EUR 11 trillion to the global economy. They stressed that the EU has the opportunity to shape the international debate on AI and to develop common global rules and standards, promoting a **human-centred, trustworthy and sustainable approach to AI,** in full respect of fundamental rights.

At present, the EU is still far from achieving its aspiration to become globally competitive in AI. Parliament therefore believes that the possibility of consolidating a distinctive European approach to AI on the international stage requires the Union to rapidly agree on a common strategy and regulatory framework for AI.

Reiterating the EU's call for a global agreement on common standards for the responsible use of AI, Members believe that the development of international technological norms and standards requires closer coordination and cooperation with like-minded democratic partners.

A clear regulatory framework

Parliament called for a regulatory environment for AI that ensures effective governance and protection of fundamental rights, while facilitating competitive access to digital markets for players of all sizes to promote innovation and economic growth for the benefit of all. It stressed that a competitive, accessible and fair data economy, based on common standards, is a prerequisite for the development of AI.

EU Roadmap up to 2030

With a view to making the EU a global leader in AI, Parliament presents its EU Roadmap for AI with clear policy recommendations for the next years. These include:

(1) Improving the regulatory environment

Members called on the Commission to only propose legislative acts in the form of regulations for new digital laws in areas such as AI, as the digital single market needs to undergo a process of genuine harmonisation. They called for consistent EU-wide coordination, implementation and enforcement of AI-related legislation.

Members called for consistent EU-wide coordination, implementation and enforcement of AI legislation. Digital legislation should always be flexible, principle-based, technology-neutral, future-proof and proportionate, while taking a risk-based and fundamental rights-based approach where appropriate and avoiding unnecessary additional administrative burden for SMEs, start-ups, academia and research.

The resolution highlighted that an underlying objective of the EU's digital strategy, as well as that of the AI strategy, is creating a 'European Way' in a digitalised world. This approach should be human-centric, trustworthy, guided by ethical principles and based on the concept of the social market economy. The individual and the protection of their fundamental rights should always remain at the centre of all political and legislative considerations.

Members are convinced that it is not always AI as a technology that should be regulated, but that the **level of regulatory intervention should be proportionate to the type of individual and/or societal risk** incurred by the use of an AI system. They underlined, in this regard, the importance of distinguishing between 'high-risk' (which needs strict additional legislative safeguards) and 'low-risk' (which may, in a number of cases, require transparency requirements for end users and consumers) AI use cases.

(2) Completing the digital single market

Parliament called on the Commission to continue its work to **remove the main unjustified barriers** to the full completion of the digital single market. Members are convinced that the current national and European competition and antitrust frameworks need to be reformed to better target abuses of market power and algorithmic collusion in the digital economy, as well as data accumulation issues, and to better address the risks of new emerging monopolies without compromising innovation.

(3) Digital green infrastructure

Parliament called on the Commission to follow through on its ambition of incentivising 75% of European businesses to adopt cloud computing, bigdata and AI services by 2030 in order to remain globally competitive and accelerate its climate neutrality goals. It stressed that a functional and rapid infrastructure for AI must be based on **fair and safe high-speed digital connectivity**, which calls for the deployment of 5G in all urban areas by 2030. The EU is invited to take the lead in making green digital infrastructure climate neutral and energy efficient by 2030.

(4) Ecosystem of excellence

Parliament called on the Commission to create an **AI skills framework** for individuals and called for investment in research to better understand the structural trends related to AI in the labour market. It called on the EU to increase investment in research into AI and other key technologies, such as robotics, quantum computing, microelectronics, the internet of things, nanotechnology and 3D printing. It called for the extension of the digital Europe programme, considering that its funding of EUR 7.6 billion should be increased.

(5) Ecosystem of trust

Parliament called for **awareness-raising campaigns** to help citizens better understand the opportunities, risks and societal, legal and ethical implications of AI in order to make AI trustworthy and promote its democratisation. It called on Member States to put citizens at the centre of the design of online public services. It also called for an evidence-based approach to AI in health that prioritises personalised, patient-centred, cost-efficient and quality healthcare, while upholding human oversight and decision-making.

(6) Mass surveillance, military concerns

Members noted with concern that such AI technologies pose crucial ethical and legal questions. Certain AI technologies enable the automation of information processing to an unprecedented scale, which paves the way for mass surveillance and other unlawful interference and poses a threat to fundamental rights, in particular the rights to privacy and data protection.

Members called on the Commission and Member States to **prioritise funding to AI research** that focuses on sustainable and socially responsible AI, contributing to finding solutions that safeguard and promote fundamental rights, and avoid funding programmes that pose an unacceptable risk to these rights, including funding systems of mass surveillance, social scoring and other systems that have the potential to lead to negative social impacts.

The resolution concluded that the EU's AI strategy must not overlook the military and security considerations and concerns that arise from the global deployment of AI technologies. Members stressed the challenge of reaching a consensus within the global community on minimum standards for the responsible use of AI and expressed concern about military research and development on autonomous lethal weapons systems.