







Basic information	
2020/2012(INL)	Procedure completed
INL - Legislative initiative procedure	
Framework of ethical aspects of artificial intelligence, robotics and related technologies	
Subject	
3.30.06 Information and communication technologies, digital technologies	
3.30.16 Ethical information policy	
3.40.06 Electronics, electrotechnical industries, ICT, robotics	

Key players				
European Parliament	Committee responsible		Rapporteur	Appointed
	JURI	Legal Affairs	GARCÍA DEL BLANCO Ibán (S&D)	15/01/2020
			Shadow rapporteur DIDIER Geoffroy (EPP) SÉJOURNÉ Stéphane (Renew) LAGODINSKY Sergey (Greens/EFA) STANCANELLI Raffaele (ECR) LEBRETON Gilles (ID) MAUREL Emmanuel (GUE/NGL)	
	Committee for opinion		Rapporteur for opinion	Appointed
	AFET	Foreign Affairs (Associated committee)	PAET Urmas (Renew)	12/11/2019
	EMPL	Employment and Social Affairs	GÁLVEZ Lina (S&D)	11/02/2020
	ENVI	Environment, Public Health and Food Safety	JARUBAS Adam (EPP)	06/02/2020
	IMCO	Internal Market and Consumer Protection (Associated committee)	GEESE Alexandra (Greens/EFA)	18/02/2020

TRAN	Transport and Tourism (Associated committee)	FLEGO Valter (Renew)	15/01/2020
CULT	Culture and Education	KOHUT Łukasz (S&D)	03/02/2020
LIBE	Civil Liberties, Justice and Home Affairs (Associated committee)	KANKO Assita (ECR)	19/02/2020
AFCO	Constitutional Affairs	The committee decided not to give an opinion.	

Key events			
Date	Event	Reference	Summary
16/01/2020	Committee referral announced in Parliament		
16/01/2020	Referral to associated committees announced in Parliament		
01/10/2020	Vote in committee		
08/10/2020	Committee report tabled for plenary	A9-0186/2020	
19/10/2020	Results of vote in Parliament		
19/10/2020	Debate in Parliament		
20/10/2020	Decision by Parliament	T9-0275/2020	Summary
20/10/2020	Results of vote in Parliament		
20/10/2020	End of procedure in Parliament		
21/10/2020	Results of vote in Parliament		
22/10/2020	Results of vote in Parliament		
23/10/2020	Results of vote in Parliament		

Technical information	
Procedure reference	2020/2012(INL)
Procedure type	INL - Legislative initiative procedure
Procedure subtype	Request for legislative proposal
Legal basis	Rules of Procedure EP 47
Other legal basis	Rules of Procedure EP 165
Stage reached in procedure	Procedure completed

Documentation gateway				
European Parliament				
Document type	Committee	Reference	Date	Summary
Committee draft report		PE650.508	21/04/2020	
Amendments tabled in committee		PE652.504	02/06/2020	
Amendments tabled in committee		PE652.548	02/06/2020	
Committee opinion	AFET	PE650.401	24/06/2020	
Committee opinion	IMCO	PE648.496	08/07/2020	
Committee opinion	CULT	PE648.348	03/09/2020	
Committee opinion	EMPL	PE648.298	07/09/2020	
Committee opinion	TRAN	PE646.983	08/09/2020	
Committee opinion	ENVI	PE648.284	16/09/2020	
Committee opinion	LIBE	PE652.296	23/09/2020	
Committee report tabled for plenary, single reading		A9-0186/2020	08/10/2020	
Text adopted by Parliament, single reading		T9-0275/2020	20/10/2020	Summary

Additional information		
Source	Document	Date
European Commission	EUR-Lex	

Framework of ethical aspects of artificial intelligence, robotics and related technologies

2020/2012(INL) - 20/10/2020 - Text adopted by Parliament, single reading

The European Parliament adopted by 559 votes to 44, with 88 abstentions, with recommendations to the Commission on a framework of ethical aspects of artificial intelligence, robotics and related technologies.

Human-centric and human-made artificial intelligence

Parliament called on the Commission to propose a comprehensive regulatory framework of ethical principles and legal obligations relating to the development, deployment and use of artificial intelligence, robotics and related technologies within the Union, including the software, algorithms and data used or produced by these technologies.

This framework should be based on Union law, the Charter and international human rights law, and applicable, in particular, to high-risk technologies, in order to establish equal standards throughout the Union.

Such an approach should allow companies to introduce innovative products onto the market and create new opportunities, while ensuring the protection of Union values by leading to the development of AI systems which incorporate Union ethical principles by design. Such a values-based regulatory framework would represent added value by providing the Union with a unique competitive advantage.

Principles of the requested regulation

The 'Regulation on ethical principles for the development, deployment and use of artificial intelligence, robotics and related technologies' should be based on the following principles:

- human-centric, human-made and human-controlled artificial intelligence, robotics and related technologies;
- mandatory compliance assessment of high-risk artificial intelligence, robotics and related technologies and the issuing by the competent national supervisory body of a European certificate of ethical compliance when the assessment is positive;
- safety, transparency and accountability: technologies should be used in a secure manner, inform users that they are interacting with artificial intelligence systems and allow, in case of non-compliance with the stated safety features, temporary deactivation restoring safe functionality;
- safeguards and remedies against bias and discrimination;
- right to redress;
- social responsibility and gender equality in artificial intelligence, robotics and related technologies;
- environmentally sustainable artificial intelligence, robotics and related technologies;
- respect for privacy and limitations on the use of biometric recognition;
- good governance relating to artificial intelligence, robotics and related technologies, including the data used or produced by such technologies.

Institutional control

Each Member State should designate an independent public body to monitor the application of the Regulation and to carry out risk and compliance assessments and certification.

Coordination at Union level should be ensured by the Commission and/or the competent Union institutions, bodies, offices and agencies that may be designated for this purpose, in order to ensure consistent application of the Regulation. The Commission should thus: (i) ensure consistent risk assessment of AI, (ii) cooperate with national supervisory bodies; (iii) act as a centre of expertise by promoting the exchange of information on AI; (iv) host a working group on security and defence to examine strategic and investment issues specifically related to the ethical use of artificial intelligence in these areas.