# Requested by the AIDA committee



# Recent Studies on Artificial Intelligence

DG IPOL Policy Department for Economic, Scientific and Quality of Life Policies published the following documents to assist the Special Committee on Artificial Intelligence in a Digital Age (AIDA) in its parliamentary work.

# Identification and assessment of existing and draft EU legislation in the digital field



This study aims to deliver to the AIDA committee an overview of all existing and planned EU legislation in the digital field, together with an assessment of the interactions amongst these pieces of legislation. The analysis of the interplay between the legal acts, which regulate the development, placing on the



market, and use of AI systems, or other AI-related aspects, has revealed intended or inadvertent regulatory gaps that should be addressed.

#### **Artificial Intelligence diplomacy**



Artificial Intelligence (AI) has become a tool of power politics and an element of state diplomacy. The European Union (EU), however, approaches AI primarily from an economic, social, and regulatory angle. This study discusses the way that AI impacts the European Union's geopolitical power and its

relationship with other countries. It presents possible scenarios for how AI may change the international balance of power and recommends ways for the EU and its Member States to respond.



# The role of Artificial Intelligence in the European Green Deal



Artificial Intelligence (AI) can be deployed for a wide range of applications to promote the goals of the European Green Deal. However, the adverse environmental impacts of AI could jeopardise the attainment of these goals. The report describes the environmental potential, characteristics and causes of

environmental risks and recommends regulatory action to align design and deployment of AI with the goals of the European Green Deal.



## <u>Challenges and limits of an open source approach to Artificial Intelligence</u>



Al in open source comes with the potential for innovation capacity in both the public and private sector. Advantages include enhanced transparency and facilitation of Al auditing, enhancing citizen trust, while stimulating economic activities and expertise. Disadvantages include legal, technical, data, risk management, societal and ethical challenges. This analysis

examines all main open source artificial intelligence pro and cons and proposes seven recommendations to boost its uptake.





### Artificial Intelligence market and capital flows



This paper studies the transformation that Artificial Intelligence (AI) is bringing to the financial sector and how this sector can contribute to developments of AI applications. The study addresses the contribution of AI to a more efficient, open, and inclusive financial sector and the challenges of the AI

transformation, and it provides recommendations for policies and regulations of Al and financial services.



#### Improving working conditions using Artificial Intelligence



The analysis considers evidence on the expected impact of Artificial Intelligence (AI) on jobs, discusses the potential of AI to create decent jobs and explores the extent to which AI offers opportunities and poses risks to working conditions. The analysis examines current policies at the European Union (EU) and

Member State level and recommends some areas for action at the EU level, including increasing investment in digital education and examining the role of the GDPR in protecting privacy risks.



### Artificial Intelligence and public services



Artificial Intelligence (AI) is a key-enabling technology in public services. Its use has increased over the past two years, even if ensuring explainability of public service AI systems can be difficult for black-box algorithms. In public service AI applications, focus is on law enforcement, surveillance and process optimisation. The

public sector should lead the way in creating trustworthy Al, using regulatory sandboxing and pre-procurement to create trust in public service Al.



#### European Union data challenge



Data generated in industrial settings has attracted the attention of policymakers, with GDPR rules remaining of great relevance due to the difficulty of anonymising mixed datasets. However, the planned rules for B2B industrial data sharing also exhibit shortcomings, providing little additional value for B2B data briefing recommends, soft law to clarify the existing rules.

sharing. This briefing recommends soft law to clarify the existing rules, development of model terms and conditions and data standardisation and interoperability support.



#### Artificial Intelligence in smart cities and urban mobility



Artificial Intelligence (AI) enabling smart urban solutions brings multiple benefits, including increased efficient energy, water and waste management and reduced pollution, noise and traffic congestions. This briefing recommends EU-wide support for infrastructure and governance on digitalisation, the inclusion of

urban AI in EU research programs, the harmonisation of AI-related policies in the EU and the adoption of innovative procureme



**Disclaimer and copyright**. The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament. Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy. © European Union, 2022. © Images on pages 1 and 2 used under licence from Adobe Stock

IP/A/AIDA/2022-01; Manuscript completed: Month 2022; Date of publication: Month 2022 Administrators responsible: Fabian SOFSKY, Matteo CIUCCI; Editorial assistant: Irene VERNACOTOLA

Contact: Poldep-Economy-Science@ep.europa.eu

This document is available on the internet at: www.europarl.europa.eu/supporting-analyses

Print | ISBN 978-92-846-9025-1 | doi: 10.2861/289308 | QA-08-22-060-EN-C PDF | ISBN 978-92-846-9052-7 | doi: 10.2861/569 | QA-08-22-060-EN-N