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*Plenary sitting*

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**A9-0149/2021**

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## REPORT

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers (2020/2216(INI))

Committee on the Internal Market and Consumer Protection

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Geert Bourgeois, Committee on International Trade

Nicola Beer, Committee on Industry, Research and Energy

Kosma Złotowski, Committee on Transport and Tourism

Sabine Verheyen, Committee on Culture and Education

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(\* ) Associated committees – Rule 57 of the Rules of Procedure

**CONTENTS**

	<b>Page</b>
MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION.....	3
EXPLANATORY STATEMENT .....	22
OPINION OF THE COMMITTEE ON INTERNATIONAL TRADE.....	26
OPINION OF THE COMMITTEE ON INDUSTRY, RESEARCH AND ENERGY.....	32
OPINION OF THE COMMITTEE ON TRANSPORT AND TOURISM.....	43
OPINION OF THE COMMITTEE ON CULTURE AND EDUCATION .....	53
OPINION OF THE COMMITTEE ON LEGAL AFFAIRS .....	60
OPINION OF THE COMMITTEE ON CIVIL LIBERTIES, JUSTICE AND HOME AFFAIRS .....	67
OPINION OF THE COMMITTEE ON EMPLOYMENT AND SOCIAL AFFAIRS .....	72
OPINION OF THE COMMITTEE ON AGRICULTURE AND RURAL DEVELOPMENT	83
OPINION OF THE COMMITTEE ON WOMEN'S RIGHTS AND GENDER EQUALITY	93
INFORMATION ON ADOPTION IN COMMITTEE RESPONSIBLE.....	101
FINAL VOTE BY ROLL CALL IN COMMITTEE RESPONSIBLE .....	102

## MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

### **on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers (2020/2216(INI))**

*The European Parliament,*

- having regard to the Commission communication of 19 February 2020 entitled ‘Shaping Europe’s digital future’ (COM(2020)00067),
- having regard to the Commission white paper of 19 February 2020 entitled ‘Artificial Intelligence – a European approach to excellence and trust’ (COM(2020)00065),
- having regard to the Commission report of 19 February 2020 entitled ‘the safety and liability implications of Artificial Intelligence, the Internet of Things and robotics’ (COM(2020)00064),
- having regard to the Commission communication of 10 March 2020 entitled 'Identifying and addressing barriers to the Single Market' (COM(2020)00093),
- having regard to the Commission communication of 10 March 2020 entitled 'Long term action plan for better implementation and enforcement of single market rules' (COM(2020)00094),
- having regard to the Commission communication of 13 November 2020 entitled ‘New Consumer Agenda – Strengthening consumer resilience for sustainable recovery’ (COM(2020)0696),
- having regard to the Commission communication of 25 April 2018 entitled ‘Artificial Intelligence for Europe’ (COM(2018)0237),
- having regard to the working paper entitled ‘Shaping the digital transformation in Europe’ of February 2020, drawn up by McKinsey & Company for the Commission<sup>1</sup>,
- having regard to the Digital Economy and Society Index (DESI) reports of 2020 and to the Special Eurobarometer results “Attitudes towards the impact of digitalisation on daily lives”<sup>2</sup>,
- having regard to Council conclusions of 9 June 2020 on shaping Europe’s digital future,
- having regard to the Commission communication of 19 February 2020 entitled ‘A European Data Strategy’ (COM(2020)00066),

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<sup>1</sup> [https://ec.europa.eu/newsroom/dae/document.cfm?doc\\_id=64962](https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=64962)

<sup>2</sup>

<https://ec.europa.eu/commfrontoffice/publicopinionmobile/index.cfm/survey/getsurveydetail/instruments/special/surveyky/2228;jsessionid=0A2965AA1C68AA476CBA202BE3EE7448.cfusion07001?CFID=9498722&CFTOKEN=32cd2e310977224c-A882F889-08D5-0E55-6CDA27376F14C4BE>

- having regard to Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce')<sup>3</sup>,
- having regard to Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety<sup>4</sup>,
- having regard to Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications)<sup>5</sup>,
- having regard to Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council ('Unfair Commercial Practices Directive')<sup>6</sup>,
- having regard to Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market<sup>7</sup>,
- having regard to Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council<sup>8</sup>,
- having regard to Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)<sup>9</sup>,
- having regard to its resolution of 19 January 2016 on Towards a Digital Single Market Act<sup>10</sup>,
- having regard to Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018 on addressing unjustified geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market and amending Regulations (EC) No 2006/2004

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<sup>3</sup> [OJ L 178, 17.7.2000, p. 1](#)

<sup>4</sup> [OJ L 11, 15.1.2002, p. 4](#)

<sup>5</sup> [OJ L 201, 31.7.2002, p. 37](#)

<sup>6</sup> [OJ L 149, 11.6.2005, p. 22](#)

<sup>7</sup> [OJ L 376, 27.12.2006, p. 36](#)

<sup>8</sup> [OJ L 304, 22.11.2011, p. 64](#)

<sup>9</sup> [OJ L 119, 4.5.2016, p. 1](#)

<sup>10</sup> OJ C 11, 12.1.2018, p. 55.

- and (EU) 2017/2394 and Directive 2009/22/EC<sup>11</sup>,
- having regard to Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation (EU) No 1024/2012<sup>12</sup>,
  - having regard to Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC, and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union Consumer protection rules<sup>13</sup>,
  - having regard to Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services<sup>14</sup>,
  - having regard to Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC<sup>15</sup>,
  - having regard to Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services Regulation (EU) No 2019/1150<sup>16</sup>,
  - having regard to its resolution of 12 February 2020 on automated decision-making processes: ensuring consumer protection and free movement of goods and services<sup>17</sup>,
  - having regard to its resolution of 20 October 2020 with recommendations to the Commission on the Digital Services Act: Improving the functioning of the Single Market<sup>18</sup>,
  - having regard to its resolution of 20 October 2020 on intellectual property rights for the development of artificial intelligence technologies<sup>19</sup>,
  - having regard to its resolution of 20 October 2020 with recommendations to the Commission on a framework of ethical aspects of artificial intelligence, robotics and related technologies<sup>20</sup>,
  - having regard to its resolution of 20 October 2020 with recommendations to the

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<sup>11</sup> [OJ L 60, 2.3.2018, p. 1](#)

<sup>12</sup> [OJ L 295, 21.11.2018, p. 1](#)

<sup>13</sup> [OJ L 328, 18.12.2019, p. 7](#)

<sup>14</sup> [OJ L 151, 7.6.2019, p. 70](#)

<sup>15</sup> [OJ L 130, 17.5.2019, p. 92](#)

<sup>16</sup> [OJ L 186, 11.7.2019, p. 57](#)

<sup>17</sup> Texts adopted, P9\_TA(2020)0032.

<sup>18</sup> Texts adopted, P9\_TA(2020)0272.

<sup>19</sup> Texts adopted, P9\_TA(2020)0277.

<sup>20</sup> Texts adopted, P9\_TA(2020)0275.

Commission on a civil liability regime for artificial intelligence<sup>21</sup>,

- having regard to its resolution of 20 January 2021 on strengthening the single market: the future of free movement of services<sup>22</sup>,
  - having regard to Rule 54 of its Rules of Procedure,
  - having regard to the opinions of the Committee on International Trade, the Committee on Industry, Research and Energy, the Committee on Transport and Tourism, the Committee on Culture and Education, the Committee on Legal Affairs, the Committee on Civil Liberties, Justice and Home Affairs, the Committee on Employment and Social Affairs, the Committee on Agriculture and Rural Development and the Committee on Women’s Rights and Gender Equality,
  - having regard to the report of the Committee on the Internal Market and Consumer Protection (A9-0149/2021),
- A. whereas barriers in the digital single market still exist and they have to be removed in order to realise its full potential, and whereas a common human centric EU approach is essential for its success;
- B. whereas digitalisation has the potential to add significant value to the single market as a whole, and is important for both European consumers as well as traditional and non-traditional sectors and can be a competitive advantage on the global market;
- C. whereas the digital single market presents different challenges to traditional markets, the principle “what is illegal offline is illegal online” should be respected;
- D. whereas AI is, to a certain extent, already subject to existing legislative requirements;
- E. whereas there is a need to build public trust in AI by including by default the full respect of fundamental rights, consumer protection, data protection and security and fostering innovation in Europe;
- F. whereas the White Paper on Artificial Intelligence recognised agriculture as one of the sectors in which AI can increase efficiency and one of the general objectives of the future common agricultural policy (CAP) is to promote smart farming; whereas AI research and work in the field of agriculture and animal husbandry has the potential to increase the attractiveness of the sector for younger people and to improve agricultural performance in areas with natural constraints, as well as animal welfare and productivity; Whereas the farm to fork strategy and the biodiversity strategy set out to help farmers to cultivate quality produce and reduce nutrient losses and the use of pesticides and fertilisers by 2030;
- G. whereas the digital transition requires increased investment in key enablers of the digital economy and coordination with Green transition policies;
- H. whereas artificial intelligence (AI) offers many benefits but also presents certain risks;

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<sup>21</sup> Texts adopted, P9\_TA(2020)0276.

<sup>22</sup> Texts adopted, P9\_TA(2021)0007.

- I. whereas EU Member States and EU institutions have an obligation under the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights to ensure that each person's rights to privacy, data protection, free expression and assembly, non-discrimination, dignity and other fundamental rights are not unduly restricted by the use of new and emerging technologies;
- J. whereas the use of AI also poses risks and raises concerns regarding the ethics, scope and transparency of the collection, use and dissemination of personal data;

***Part 1: removing barriers to the functioning of the digital single market***

- 1. Believes the EU's digital policy should create and support the key foundations needed for the European public and private sectors to be world leaders in trustworthy, human-centric digital innovation; considers that the digital single market is one such foundation and is about ensuring the full potential of new technologies by removing unjustified national barriers, by establishing legal clarity for consumers and businesses, benefiting for European citizens and strengthening competition; believes that having a better organised and common European approach for market integration and harmonisation can contribute to that result; believes that further actions are needed at both Member State and EU level to achieve this;
- 2. Stresses the importance of a fully functioning digital single market for the benefit of consumers and enterprises and asks for SMEs to be supported in their digital transformation and expects the Commission to introduce a fitness check for SMEs before proposing legislation;
- 3. Believes that the EU's approach to digitalisation needs be fully compliant with fundamental rights, consumer protection, technological neutrality, net neutrality and data protection rules, inclusiveness and non-discrimination;
- 4. Believes that digitalisation and emerging technologies such as AI can contribute to achieving the objectives of the EU Industrial Strategy, Green Deal and to overcome some of the difficulties created by the COVID-19 crisis; further believes that a mutually reinforcing policy approach towards the Green Deal, the Industrial Strategy and digitalisation could help both the realisation of their objectives while also fostering the EU's technological leadership; points out the potential of digital solutions, such as teleworking and AI applications, to support the participation of people with disabilities in the Digital Single Market; considers that the COVID-19 crisis also offers an opportunity to speed up digitalisation, and that the digital transformation must serve the public interest overall; believes that the digital transformation could help to meet the needs of urban, rural and isolated regions in the EU;
- 5. Notes the potential of new technologies for the transition to a circular and sustainable economy, by facilitating the introduction of circular business models, promoting energy efficiency of data processing and storage systems and contributing to more sustainable value chains and optimising resource use;
- 6. Calls on the Commission to promote and support the uptake and development of sustainable technology in the realisation of the Green Deal including by assessing the environmental impact of data sharing and the infrastructures required to ensure a sustainable digital deployment;

7. Stresses that enabling sharing and access to essential and well-defined data sets will be key to fully unlock the potential of the Green Deal; calls on the Commission to assess which datasets are essential to that purpose;
8. Believes that practices that undermine consumer rights, data protection and labour rights should be eliminated;
9. Highlights that the Commission should adopt a balanced, future proofed and evidence based approach to legislation based on the subsidiarity principle that creates a digital single market that ensures the provision of public services, is competitive, fair, accessible, technologically neutral, innovation-friendly, consumer-friendly, human-centric and trustworthy, and that builds a secure data society and economy;
10. Underlines that equal conditions should prevail as regards the taxation of the digital economy and the traditional economy, by finding a shared understanding of where value is created;
11. Points out that where relevant SMEs and other economic actors could benefit by using cooperative models such as open source and open software, depending on different situations or context by taking into account the potential advantages, cybersecurity, privacy and data protection and without prejudice to applicable legislation; Believes that this can contribute towards achieving European strategic autonomy in digital;
12. Calls on the Commission to keep in line with its guiding principles in its future legislative proposals, and to avoid the fragmentation of the digital single market, remove any existing unjustified barriers and unnecessary administrative requirements, support innovation especially for SMEs, and use the appropriate incentives that create a level playing field, and equal access to investment opportunities;
13. Asks the Commission to ensure an effective and efficient enforcement of both current and any new legislative requirements; believes that enforcement needs to work effectively across borders and across sectors, with greater cooperation between authorities, and with due regard for the expertise and relevant competence of each authority; believes that the Commission should provide a guiding framework to ensure coordination for any new regulatory requirements on AI or related fields;
14. Calls on the Commission to aim at both an innovation and consumer friendly regulatory environment, strengthening the financial and institutional support for the European digital economy in close coordination with Member States and stakeholders through measures such as: investing in education, research and development, supporting innovations in Europe, providing increased and broader access to easily readable and interoperable high quality industrial and public data, building digital infrastructure, increasing the general availability of digital skills within the population, promoting technological leadership for the business environment, and creating a proportionate and harmonised regulatory environment;
15. Considers that smart public procurement, such as European GovTech platform, can play in supporting digital developments across the EU;
16. Considers that substantial investment and public-private cooperation are required in the field of AI and other key new technologies; Welcomes the use of EU funding



programmes to support the digitalisation of our society and industry insofar as they are based on the principles of efficiency, transparency and inclusiveness; calls for the coordinated implementation of the different funds to maximise the synergies between the programmes; suggests a strategic prioritisation of funds to build the necessary digital infrastructure; calls for NextGenerationEU, as well as public and private funding, to increase investment so as to reflect the EU's ambition of becoming a global technological leader, developing its research and knowledge and reaping the full benefits of digitalisation for all in society;

17. Considers that AI poses a special challenge for SMEs and that unnecessary complex regulatory requirements may disproportionately impact their competitiveness; The transition to AI solutions should help these companies and new legislation on the use of AI should not create unjustified administrative burdens jeopardising their competitiveness in the market;
18. Calls on the Commission to ensure wider coordination of investment in the NextGenerationEU recovery plan; calls on the Commission to propose concrete actions within this plan to support high impact technologies and infrastructure in the EU such as artificial intelligence, high performance computing, quantum computing, cloud infrastructure, platforms, smart cities, 5G and fibre infrastructure;
19. Recalls that SMEs are the backbone of Europe's economy and need special support from EU funding programmes to make the digital transition; Calls on the Commission and the Member States to strengthen their support to start-ups and Micro, Small and Medium Enterprises (MSMEs), via the Single Market Programme, Digital Innovation Hubs and the Recovery and Resilience Facility, in the development and application of digital technologies, in order to further drive digital transformation and thus enable them to fully develop their digital potential and competitiveness for growth and jobs in Europe;
20. Notes that there is a significant lack of European venture and seed capital, as well as of private equity funding, when compared to other markets; considers that this often leads European start-ups to scale-up in third country markets rather than expanding in the EU; believes that this prevents the wider European economy from gaining as many spill over benefits from ventures originating in Europe; Highlights the disproportionately large role of public entities in the innovation and research funding that currently exists and the significant differences in start-up ecosystems and available financing between Member States; calls on the Commission and the Member States to propose a comprehensive European approach to broaden the sources of capital for technological investments in the EU, including initiatives to support angel investing by European private sector leaders, as well as to ensure facilitate the availability of venture and seed capital for European companies and start-ups;
21. Underlines that the Digital Europe programme as well as the Horizon Europe and Connecting Europe programmes are necessary to drive the digital transformation of Europe and should receive adequate funding; urges the Commission to ensure that these programmes are deployed as soon as possible; recalls that the Member States must uphold their commitment under the Europe 2020 strategy to invest 3 % of their GDP in research and development;

22. Calls on the Commission to work to position the EU as leader in the adoption and standardisation process for new technologies, ensuring that AI is human-centric and consistent with European values, fundamental rights and norms ; highlights the need to work with standardisation organisations, industry and also with international partners on setting global standards, given the global nature of technology leadership and development; considers the use of CEN Workshops Agreement in specific areas, such as AI and new emerging technologies, as a way to increase efficiency in creating harmonised standards;
23. Supports the Commission's objective to increase the availability and sharing of non-personal data, to strengthen Europe's economy; considers that while fulfilling this objective, risks associated with an increased access to non-personal data such as de-anonymization should be taken into account;
24. Believes that there is a need to incentivise access to more data for SME's and calls for incentives meant to give SMEs access to non-personal data produced by other private stakeholders in a voluntary and mutually benefiting process, should comply with all necessary safeguards in line with Regulation EU 2016/679 as well as well as legal framework on intellectual property rights;
25. Notes that in the fulfilment of public services or in the course of public procurement contracts public undertakings generate, collect and process a significant amount of non-personal data, that represents a considerable value for its commercial reuse and benefit for society; encourages the Commission and the Member states to make such data more broadly available for the re-use in the general interest, in the furtherance of the objectives of the Open Data Directive;
26. Recalls that we need a data economy that works for the entire EU, as it is a key enabler of digitalisation; considers that a high level of data protection for trustworthy AI, could help improve consumer trust; believes that it is important for the EU to guarantee a high degree of customers and, where applicable, consumers' control over their data while ensuring the highest standards of protection for personal data, with clear and balanced rules on inter alia intellectual property rights (IPR), but considers it essential to maintain openness towards third countries, and that the free flow of non-personal data across borders is important;
27. Takes note of the Digital Services Act and the Digital Markets Act, and believes that they should contribute to supporting innovation, guaranteeing a high level of consumer protection and the improvement of users' rights, trust and safety online; stresses the need to ensure that European market stays active and highly competitive;
28. Outlines that consumer protection should play an important role in the Digital Services Act and is convinced that stronger transparency and due diligence for online marketplaces would enhance the safety of products and therefore strengthen the trust of consumers in online marketplaces;
29. Highlights, therefore, that clear responsibilities for online marketplaces based on the principle of proportionality are needed; outlines that the responsibility of content-hosting platforms for goods sold or advertised on them should be clarified in order for close the legal gap in which the buyers failed to obtain the satisfaction to which they are entitled according to the law or the contract for the supply of goods for example because

of the inability to identify the primary seller, for example, the Know Your Business Customer principle;

30. Welcomes the New Consumer Agenda proposed by the Commission, and encourages the Commission to update consumer protection legislation, where appropriate, to take better account of the impact of new technologies and potential consumer harm, especially for the most vulnerable groups and considering the impact of the COVID-19 pandemic; considers that European consumers should be empowered to play an active role in the digital transition and that consumer trust and the adoption of digital technologies depends on their rights being protected in all circumstances;
31. Recalls that the unjustified geo-blocking of online services constitutes a significant barrier to the Single Market, and an unjustified discrimination between European consumers; notes the Commission's first short-term review of the Geo-blocking Regulation and urges the Commission to continue its assessment, and to engage in stakeholder dialogue taking into account the increasing demand for cross-border access to audiovisual services with a view to fostering circulation of quality content across the EU;
32. Reiterates the EU fundamental rights to privacy, and protection of personal data including among others, the explicit informed consent as enshrined in the GDPR regulation; points out that consent should be based on understandable and easily accessible information on how the personal data will be used and processed and that this should also be respected then using algorithms;
33. Welcomes the New EU's Cybersecurity Strategy for the Digital Decade, which is indispensable to secure citizens' trust and fully benefit from innovation, connectivity and automation in the digital transformation, while safeguarding fundamental rights, and calls for the effective and speedy implementation of the measures outlined;
34. Calls on the Member States to implement without delay the European Accessibility Act, in order to effectively remove barriers for citizens with disabilities and ensure the availability of accessible digital services, as well as the suitability of the conditions under which they are provided, with the objective of achieving a fully inclusive and accessible Digital Single Market that ensures the equal treatment and the inclusion of people with disabilities; recalls the possibility of Member States and encourages the extension of the application of the Directive on the accessibility of the websites and mobile applications of public sector bodies to areas that are open for public use, especially in the health, transport, postal or telecommunications sector<sup>23</sup>;

## ***Part 2: improving the use of AI for European consumers***

35. Strongly believes that AI, if developed in accordance with the applicable legislation, has the potential to improve certain areas for European citizens, and offer significant benefits and value for the economy, safety, security, education, healthcare, transport and the environment; believes the safety, security, inclusiveness, non-discrimination, accessibility and fairness, especially for groups of consumers considered to be in vulnerable situations, of AI-driven products and services need to be ensured so that no-

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<sup>23</sup> Directive(EU) 2016/2102 of 26 October 2016 on the accessibility of the websites and mobile applications of public sector bodies, par. 34.

one is left behind and their benefits should be available across society;

36. Recognises that in order to benefit from AI, the Commission, the Member States, the private sector, civil society and the scientific community all need to collaborate effectively to create an ecosystem for safe human-centric AI that will benefit the whole society;
37. Notes that while AI offers good potential, it can also present certain high risks due to issues such as bias and opacity; believes that these risks can manifest themselves depending on the specific context and use-cases of AI; calls for the traceability processes of AI-based systems to be transparent and capable of being reviewed in the event of demonstrated serious harm;
38. Considers that aside from some of the barriers to the development, adoption and effective regulation of digital technologies in the EU, a lack of consumer trust and confidence can hold back the widespread adoption of AI; draws attention to the lack of citizens' understanding of the processes by which advanced algorithmic and artificial intelligence systems make decisions;
39. Notes that consumers need a clear and predictable legal framework in case of product malfunction;
40. Calls on the Commission and the Member States to continuously improve the part of the public administration that will be responsible for implementing future legislation on AI;
41. Welcomes the Commission's white paper on AI, and calls on the Commission to develop a common EU regulatory framework for AI that is human-centric, risk-based, clear and future-proof; believes this is needed to oversee automated decision making systems and that this should complement existing legislation relevant to AI and ensure it is proportionate according to the level of risk;
42. Stresses the need to ensure that there is an adequate degree of human control over algorithmic decision making and that proper and effective redress mechanisms are in place;
43. Stresses the importance of empowering consumers with basic training and skills on AI that would allow them to benefit more from these technologies and, at the same time, protect themselves from any possible threats;
44. Notes that, while to varying degrees, AI is already subject to current European legislation, AI raises new, so far unresolved, legal questions that affect consumers and thus calls on the Commission to issue clear guidance on the functioning and synergy between any current applicable legislation and any proposed new measures in order to fill the existing legal gaps and to achieve a proportionate and consistent legal framework; considers cooperation between Member States to be important to strengthen the digital single market;
45. Calls on the Commission and the Member States to ensure close cooperation when enforcing the regulatory framework in order to prevent a fragmented Single Market;
46. Considers that AI is a fast moving technology that requires effective legislation not only

guidelines, based on principles and proportionality; believes that to achieve this AI needs to be broadly defined so that any regulatory measures across different sectors can remain flexible and adaptable in order to take into account future developments, and adequately address the different risk levels of AI-uses to be further defined within the sectorial frameworks; Believes that the future regulation needs to adequately reflect the degree to which the perceived risks of AI arise in practice in the varying ways AI is used and deployed;

47. Points out that the use of self-learning algorithms enables businesses to gain a comprehensive insight about consumer's personal circumstances and behaviour patterns; thus calls on the Commission to comprehensively regulate AI technologies in order to prevent an unfair or abusive use of such systems;
48. Believes that the objective of a regulatory framework for AI should be to create an internal market for trustworthy and safe AI-enabled products, applications and services, and that this should be based on Article 114 of the TFEU;
49. Underlines the consumers right to be adequately informed in a timely and easily-accessible manner about the existence and possible outcome of AI systems, and about how the system's decisions can be checked, meaningfully contested and corrected;
50. Calls for a mandatory information provision to indicate whether consumers are interacting with AI systems;
51. Believes that explicability and transparency is crucial for building and maintaining users' trust in AI systems; considers that this means that processes need to be transparent, the capabilities and purpose of AI systems openly communicated, and decisions explainable to those directly affected;
52. Believes the regulatory framework needs to support the development of trustworthy AI systems and should ensure high consumer protection standards in order to strengthen consumer's confidence in AI enabled products; considers that a more gradual establishment of risks and corresponding legal requirements and safeguards against consumer harm are needed; believes also that the regulatory framework should ensure transparency, accountability and provide for clear communication of the relevant requirements to both consumers and regulatory authorities, and incentivise AI developers and deployers proactively to adopt trustworthy AI;
53. Calls on the Commission to promote the exchange of information related to algorithmic systems between the Member States' authorities and to support the development of a common understanding of algorithmic systems in the Single Market by issuing guidance, opinions and expertise;
54. Believes that such a framework should be based on an ethical, human-centric, fundamental rights based approach throughout the design, development and life cycle of AI products based on the preservation of fundamental rights and the principles of transparency, explainability (when relevant), accountability and the rights, obligations of the GDPR – including data minimisation, purpose limitation and data protection by design and by default;
55. Believes that the scope of new regulatory requirements should be scaled so that AI

applications in their specific context which are deemed to pose the highest risk are subject to the most stringent regulatory requirements and controls, including the possibility to prohibit harmful or discriminatory practices; calls on the Commission to develop an objective methodology for calculating the risk of harm, in addition to what already exists in current consumer legislation; believes that such a methodology should avoid a restrictive, binary approach that could quickly become obsolete, and instead focus on the context, application and specific use of AI;

56. Stresses that EU-wide AI standardisation should foster innovation and interoperability, as well as guarantee a high level of consumer protection; acknowledges that, while a significant number of standards already exist, further promotion and development of common standards, such as those applicable to component parts and full applications, for AI is necessary;
57. Considers that once clear legal rules and enforcement mechanisms are in place, the role of a voluntary trustworthy label could be considered for AI, while at the same time it is important to bear in mind that the information asymmetry inherent to algorithmic learning systems, makes the role of labelling schemes very complex; considers that such a label could improve transparency of AI-based technology; underlines that any such labelling scheme must be understandable for consumers and be shown to provide a measurable benefit in consumer awareness with compliant AI applications, empowering them to make an informed choice, otherwise it will not achieve a sufficient level of adoption in real-world use;
58. Strongly believes that new regulatory requirements and assessments must be both understandable and implementable, and should be incorporated into existing sector specific requirements where possible and keep administrative burdens proportionate;
59. Calls on the Commission and the Member States to make use of innovative regulatory tools such as 'regulatory sandboxes' consistent with the precautionary principle, to help provide a clear path to scale-up for start-ups and small companies; believes that these tools should help encourage innovation if applied in a controlled environment; points out that creating a coherent environment for innovative testing and validating products based on technologies such as AI will help European businesses to overcome the fragmentation of the Single Market and to take advantage of the growth potential throughout the EU;
60. Points out that the most efficient way of reducing bias is to ensure the quality of the data sets used to train AI systems;
61. Believes that the use of AI in a high-risk context should be limited to specific purposes, in full respect of the applicable law and subject to transparency obligations; underlines that only a clear and legally certain legislative framework will be decisive for ensuring safety and security, data and consumer protection, public trust and support for the necessity and proportionality of the deployment of such technologies; calls on the Commission to carefully consider whether there are certain use cases, situations or practices for which specific technical standards, including underlying algorithms, should be adopted; deems necessary, should such technical standards be adopted, that these are regularly reviewed by competent authorities and re-evaluated, given the fast pace of technological development;

62. Believes that the establishment of review boards for AI products and services by organisations and businesses to assess the potential benefits and potential harm, notably the potential social impact, stemming from high-risk, impactful AI-based projects can be a useful tool to help organisations make responsible decisions about AI products and services, particularly when they include relevant stakeholders;
63. Highlights the importance of education and research for AI; underlines that EU has to build up its digital capacities, by encouraging more people to pursue careers in ICT-related sectors, by training more data professionals in the field of AI, as well as professionals in connected new domains such as AI-investing and AI safety; Calls for substantial investment in the European Network of Artificial Intelligence Excellence Centres and the creation of pan-European university and research networks focused on AI; believes that this network should help to strengthen the exchange of knowledge on AI, support AI related talent within the EU and attract new talent, foster the cooperation between innovative companies, higher education, research institutions and AI developers as well as provide specialised training and development for regulatory authorities, with the aim of ensuring the proper use of these technologies and protecting European citizens from potential risks and damages to their fundamental rights; furthermore stresses the importance of measures and information channels to help small and medium-sized enterprises and start-ups to effectively digitise and advance into ‘industry 5.0’; recognises that sharing and reusing AI application components increases the use and uptake of AI solutions; highlights the importance of fundamental research into the foundations of AI; emphasises the need to allow comprehensive research into all AI applications and technologies;
64. Calls for impact assessments on the consequences of digital divide on people and concrete action how to bridge it; calls for mitigation of negative impact through education, reskilling and upskilling; underlines that the gender dimension needs to be taken into account, given the insufficient representation of women in STEM and digital companies; believes that particular attention should be paid to AI literacy programmes;
65. Calls on the Commission to update the existing product safety and liability framework in order to address new challenges posed by emerging digital technologies such as artificial intelligence; and urges the Commission to update inter alia the General Product Safety Directive and the Product Liability Directive, in particular by considering reversing the concept of ‘burden of proof’ for harm caused by emerging digital technologies, in clearly defined cases and after a proper assessment, and adapting the terms ‘product’, ‘damage’ and ‘defect’ so that they reflect the complexity of emerging technologies, including products with AI, IoT and robotics embedded in them, standalone software and software or updates which entail substantial modification to the product leading to a de facto new product;
66. Stresses that adequate connectivity should be developed for the implementation of AI, as well as any new technology, including in regions facing demographic or economic challenges; calls for the unequal access to technology in rural areas to be taken into account in particular when Union funds are used for the deployment of 5G networks, to reduce blank spots, and for connectivity infrastructures in general; calls for an EU communication strategy that provides EU citizens with reliable information, as well as for awareness-raising campaigns regarding 5G;

67. Calls on the Commission to assess the development and use of distributed ledger technologies including blockchain, namely smart contracts in the digital single market, and to provide guidance and consider developing an appropriate legal framework in order to ensure legal certainty for businesses and consumers, in particular the question of legality, the enforcement of smart contracts in cross-border situations, and notarisational requirements where applicable;
68. Calls for the plurilateral World Trade Organization (WTO) negotiations on e-commerce to be concluded with a balanced outcome; calls on the Commission to carefully assess the impact of the source code clause currently being discussed in the e-commerce negotiations on future EU AI legislation at WTO level, including its impact on consumer rights, and to involve the European Parliament in this assessment; regrets that, in the absence of global rules, EU companies may be faced with non-tariff barriers to digital trade such as unjustified geo-blocking, data localisation and mandatory technology transfer requirements; notes that these barriers are particularly challenging for small and medium-sized enterprises (SMEs); highlights that global rules on digital trade could further increase consumer protection; supports making the WTO moratorium on electronic transmissions permanent and stresses that it is important to provide clarity regarding the definition of electronic transmissions; calls for the WTO Information Technology Agreement, its expansion and the WTO Telecommunications Services Reference Paper to be fully implemented and more widely adopted;
69. Recognises the ambition to make the EU a world leader in the development and application of AI; calls for the EU to work more closely with partners, for instance within the Organisation for Economic Co-operation and Development (OECD) and the WTO, to set global standards for AI in the interest of reducing trade barriers and promoting trustworthy AI in line with the EU's values; supports cooperation on international regulations and other forms of cooperation between OECD countries regarding the digital economy, including the Global Partnership on Artificial Intelligence; (9) encourages the EU to intensify its work with the UN and international standards bodies on this topic; Notes the conclusion of the rules-based Asian Regional Comprehensive Economic Partnership (RCEP) agreement, which has paved the way for the largest economic integration project in the world; believes that the EU should promote digital rules that are consistent with democratic principles, human rights and sustainable development; supports, in this regard, the proposal to establish the EU-US Trade and Technology Council;
70. Supports in this regard the work on a transatlantic AI agreement to build stronger and broader consensus on principles of ethical AI and the governance of data and, within the framework of these principles, to foster innovation and the sharing of data to develop AI and help facilitate trade and the development of compatible rules and common standards in digital trade, ensuring a central role for the EU in the setting of those standards; stresses that this transatlantic AI agreement should also have a chapter dedicated to data security and protection of the data of users and consumers in order to ensure the protection of EU rules; (13) calls on the Commission to continue working with the US, Japan and other like-minded partners on reforming the WTO rules on, inter alia, subsidies, forced technology transfers and state-owned enterprises; (12) underlines the importance of EU FTAs in promoting the interests and values of EU companies, consumers and workers in the global digital economy and sees them as being complementary to a competitive digital single market; notes that especially crucial is the



cooperation with the United Kingdom, which plays an important role in the global digital economy;

71. Urges the Member States to include in their recovery plans projects for the digitalisation of transport; stresses the need to ensure stable and adequate funding for the process of building transport and ICT infrastructure for intelligent transport systems (ITS), including the secure deployment of 5G, the development of the 6G networks and future wireless networks to allow for the full potential of digitalised transport to unfold while ensuring high transport safety standards; stresses in that regard the need to both develop new infrastructure and upgrade existing infrastructure; calls on the Member States to provide safe, resilient, high-quality transport infrastructures facilitating the deployment of connected and automated mobility services; points out that the upgrading of relevant transport and digital infrastructure in the Trans-European Transport Network (TEN-T) needs to be accelerated; calls, therefore, on the Commission to propose mechanisms in its revision of the TEN-T Regulation and the Rail Freight Corridors Regulation to ensure it;
72. Stresses the enormous potential of AI in the transport sector and its ability to increase automation for road, rail, waterborne and air transport; highlights the role of AI in fostering multimodality and the modal shift as well as the development of smart cities, thus improving the travel experience for all citizens by making transport, logistics and traffic flows more efficient, safer and more environmentally friendly, shortening journey times, reducing congestion, reducing harmful emissions and reducing costs ; stresses the enormous potential of systems that use AI in the transport sector in terms of road safety and the achievement of the objectives set out in Vision Zero; stresses that AI will contribute to further developing seamless multimodality, following the concept of Mobility as a Service (MaaS); invites the Commission to explore how to facilitate the balanced development of MaaS, especially in urban areas;
73. Welcomes the achievements of the Single European Sky ATM Research (SESAR) joint undertaking and calls for research and investments to be intensified so as to maximise the potential of AI in the aviation sector with regard to consumers through improvements in airline marketing, sales, distribution, pricing processes as well as in ground handling (safety checks, etc.); notes that AI can develop automated navigation in long and short-sea shipping and on inland waterways and improve maritime surveillance in a context of increasing ship traffic; calls for the deployment of AI and a higher level of digitisation on a large scale in all European ports so as to achieve enhanced efficiency and competitiveness highlights the paramount role that digitalisation, AI and robotics will play in the *tourism* sector, thus contributing to the sustainability of the industry in the long-run; notes that adequate funding and incentives for tourism establishments is required, particularly for micro, small and medium-sized enterprises, in order to enable them to reap the benefits of digitalisation and modernise their offer to consumers; notes that this will help promoting EU digital leadership in sustainable tourism through R&D, joint ventures and public private partnerships;
74. Recalls that AI may give rise to biases and thus to various forms of discrimination based on sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation; recalls, in this regard, that everyone's rights must be fully protected, and that AI initiatives must not be discriminatory in any way;

Emphasises that such bias and discrimination can arise from already biased data sets, reflecting current discrimination in society; stresses that AI must avoid bias leading to prohibited discrimination, and must not reproduce discrimination processes; underlines the need to take these risks into account when designing AI technologies, as well as the importance of working with AI technology providers to address persistent loopholes facilitating discrimination; recommends that teams designing and developing AI should reflect the diversity of society;

75. Highlights the importance of algorithms being transparent in order to fully protect fundamental rights; underlines the need for legislators, given the major ethical and legal implications, to consider the complex issue of liability, in particular for damages to persons and property, and that liability in all AI applications should always lie with a natural or legal person;

1376. Underlines the need for AI to be made widely available to the cultural and creative sectors and industries (CCSI) across Europe in order to maintain a level playing field and fair competition for all stakeholders and actors in Europe; Emphasises the potential of AI technologies for the CCSI, from better audience management, outreach and engagement to assisted content curation, the revalorisation of cultural archives, as well as assisted fact-checking and data journalism; emphasises the need to offer learning and training opportunities in order to enable European society to gain an understanding of the use, potential risks and opportunities of AI; reiterates, in this regard, its view that AI and robotics innovation needs to be integrated in education plans, and training programmes; recalls the special requirements of vocational education and training (VET) with regard to AI and calls for a collaborative approach at European level designed to enhance the potential offered by AI in VET across Europe; Emphasises that the transposition of the Audiovisual Media Services Directive<sup>24</sup> (AVMSD) into national law is crucial to achieving a genuine digital single market that promotes cultural diversity;

77. Highlights the lack of European venture capital funding, lack of access to finance and lack of data availability, further recognises external and internal barriers for the adoption of AI technologies, especially for less mature sectors and SMEs; calls for a comprehensive approach in the Union, based on promoting entrepreneurship through investor-friendly regulation, to ensure access to finance for promising European start-ups in all growth stages; calls on joint efforts to prevent and discourage exodus of young promising European businesses which often fall short on financing right after entering the market;

78. Recalls that current Union legislation does not provide for mandatory cybersecurity requirements for products and services in general; calls for essential requirements to be included in the design phase (security by design and also for the use of appropriate cybersecurity standards and processes both during the products and services' life cycles and across their supply chains;

79. Points out that the fourth industrial revolution will depend among other things on access to raw materials such as lithium and rare earths, and that the Union needs to reduce its dependence on importing them by limiting absolute consumption and through its own

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<sup>24</sup> Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities, OJ L 303, 28.11.2018, p. 69.

environmentally responsible mining and circular economy; considers that a stronger policy on the circular economy applied to digital devices and semiconductors could contribute at the same time to the Union's industrial sovereignty and to avoiding the negative impact of mining activities linked to raw materials;

80. Calls for a clearer strategy for the European Digital Innovation Hubs in order to promote the widespread uptake of new technologies by SMEs, mid-caps and start-ups; points out that the network of European Digital Innovation Hubs should ensure a broad geographical coverage across Europe, including remote, rural and island areas, as well as initiating cross-sectoral dialogue; Calls on the Commission to draw up an ambitious and comprehensive strategy to support the creation and growth of start-ups with the goal of having a new generation of European digital unicorns within 10 years, in particular, the strategy should look at measures such as tax incentives for start-ups and newly founded SMEs and the introduction of an EU Start-up Visa;
81. Welcomes the Commission's new cloud strategy and the European Cloud Initiative;
82. Welcomes the positive impact that AI could have on European labour markets, including job creation, safer and more inclusive workplaces, the fight against discrimination in recruitment and pay, and the promotion of better skill-matching and workflows, provided that risks are mitigated and regulatory frameworks are updated regularly as the digital wave progresses;
83. Calls on the Member States to invest in high-quality, responsive and inclusive education, vocational training and lifelong learning systems, as well as reskilling and upskilling policies for workers in sectors that may be severely affected by AI, including in the field of agriculture and forestry; underlines that special attention must be paid to the inclusion of disadvantaged groups in this regard;
84. Takes note of the skills gap in the European labour markets; welcomes the Commission's updated European Skills Agenda and the new Digital Education Action Plan (2021-2027), which will help workers to boost their digital skills and get qualified for the future world of work and will help to address the adaptation and acquisition of qualifications and knowledge in view of the digital and green transitions; underlines the need to include ethical aspects of AI and the development of skills for ethical purposes as an integral part of any education and training curricula for developers and people working with AI; recalls that developers, programmers, decision-makers and companies dealing with AI must be aware of their ethical responsibility; Highlights that access to the right skills and knowledge on AI can overcome the digital divide in society and that AI solutions should support the integration into the labour market of vulnerable groups such as persons with disabilities or those living in remote or rural areas;
85. Highlights that gender equality is a core principle of the European Union and should be reflected in all EU policies; calls to acknowledge the fundamental role of women to achieve the European digital strategy goals in line with the gender equality objectives; recalls that women's participation in the digital economy is crucial to shaping a flourishing digital society and to boosting the EU's digital internal market; calls on the Commission to ensure the implementation of the ministerial Declaration of Commitment on 'Women in Digital; Considers that AI can significantly contribute to overcoming gender discrimination and address the challenges faced by women in order

to promote gender equality, provided that an appropriate legal and ethical framework is developed, conscious and unconscious biases are eliminated and the principles of gender equality are respected;

86. Stresses that agriculture is a sector in which AI will play a key role in solving food production and supply issues and challenges; Stresses that IoT technologies and AI in particular present a significant opportunity for the modernisation, automation and improved efficiency and sustainability of the agri-food sector and for local development in rural areas, increasing crop production and improving crop quality; considers that the use of digital technologies and AI, and increasing research and development in the agri-food sector are necessary for improving sustainability, efficiency, accuracy and steering productivity; Stresses the potential of IoT and AI in precision agriculture, in particular in detecting weather conditions, soil nutrients and water needs, as well as in identifying pest infestations and plant diseases; underlines that monitoring through automated and digital tools can help minimising the environmental and climate footprint of agriculture; Calls on the Commission and the Member States to increase the resources and investments dedicated to the agricultural sector for these purposes, and to provide sufficient resources and developing tools for research on the use of AI in these areas in order to facilitate the better use of available resources by farmers concerned, increase efficiency and production, and to nurture the creation of innovation hubs and start-ups in this field;
87. Believes that the application of AI within the Union and the associated use of EU citizens' personal data should respect our values and fundamental rights as recognised by the EU Charter of Fundamental Rights, such as human dignity, privacy, data protection and security; 3. Underlines the fact that since AI, by definition, encapsulates data processing, it must respect EU law on data protection, in particular the General Data Protection Regulation (GDPR); 7. Reiterates the importance of providing independent public data protection authorities with the necessary resources to allow them to monitor and effectively enforce compliance with data protection law;
88. Highlights that investing in sciences, research and development in the areas of digital and AI, fostering better access to venture capital, developing a strong cybersecurity of critical infrastructures and electronic communication networks and access to unbiased high-quality data are the cornerstones of ensuring the digital sovereignty of the Union; calls on the Commission to study the different ways in which the Union is at risk of becoming dependent on external players; Notes that unclear, excessive or fragmented regulation will hamper the emergence of innovative high-tech unicorns, start-ups and SMEs or drive them to develop their products and services outside of Europe;
89. Emphasises that achieving a European gigabit society that is secure and inclusive, is a prerequisite of the Union's success in its digital transition; highlights the role of connectivity, powered in particular by 5G and fibre infrastructure, on transforming working and education modes, business models and whole sectors such as manufacturing, transport and healthcare, especially in conjunction with other technologies such as virtualisation, cloud computing, edge computing, AI, network slicing and automation, and has the potential to achieve greater productivity and more innovation and user experiences;
90. Calls on the Commission to incentivise European companies to start developing and

building technology capacities for next generation mobile networks; calls on the Commission to analyse the impact of unequal access to digital technologies and disparities in connectivity across the Member States;

91. Notes that investing in High-Performance Computing (HPC) is crucial to reap the full potential of AI and other emerging technologies; calls for bridging the connectivity investment gap to be bridged through Next Generation EU, as well as national and private funding, in order to compensate for the cuts in EU investments in future technologies in the 2021-2027 Multiannual Financial Framework (MFF);
92. Calls for a whole-of-society approach towards cybersecurity; highlights that new approaches to cybersecurity should be designed on the basis of resilience and adaptability to stresses and attacks; calls for a holistic approach towards cybersecurity, where the whole system is taking into account, from system design and usability to the education and training of citizens; stresses that the digital transformation, with the rapid digitalisation of services and the large scale introduction of connected devices, necessarily makes our society and economy more exposed to cyberattacks; highlights that advances in the field of quantum computing will disrupt existing encryption techniques; calls on the Commission to support research that would allow Europe to overcome this challenge, and highlights the need for strong, secure end-to-end encryption; calls on the Commission to explore the use of blockchain-based cybersecurity protocols and applications to improve the resilience, trustworthiness and robustness of AI infrastructures; emphasizes the need to include cybersecurity components in all sectorial policies; underlines that effective protection requires EU and national institutions to work together with the support of ENISA to ensure the security, integrity, resilience and sustainability of critical infrastructures and electronic communication networks; welcomes the Commission's proposal for a revision of the NIS Directive and its intention to enlarge the scope of it and reduce the differences of application by Member States calls for a cautious approach towards potential dependencies on high-risk suppliers, especially for the deployment of 5G networks;
93. Instructs its President to forward this resolution to the Council and the Commission.

## EXPLANATORY STATEMENT

### Overview.

The wider process of digitalisation, of both the economy and of society is progressing rapidly and creating significant changes in many aspects of people's lives. Whether this is in communications, shopping, travel or manufacturing, the digital revolution has been a catalyst for transformation, delivering a pace of change comparable to the industrial revolution that offers significant potential for the European economy and consumers, alike. Indeed, the Rapporteur believes that the digital single market now underpins the entirety of the internal market, so its well-functioning is paramount to the economic success of the EU.

For the Rapporteur, it is important that we are able to take full advantage of the potential benefits of using AI while taking account of and mitigating any inherent high risk being posed by these technologies and that in order to do so, concrete actions are needed.

In the context of the Commission making digital a priority policy area and its publication in February 2020 of the White Paper on AI and the Communication on Shaping Europe's Digital Future, this report will serve as an indication of some of the existing barriers in the digital single market and what can be done to improve the situation. The report will also serve to give an indication about the potential scope and content of any future specific regulatory proposal on AI and what issues need to be addressed in it.

The Rapporteur has undertaken to consult stakeholders widely and transparently while preparing this report in order to take account of different views on the existing barriers in the digital single market, how they could be addressed and how we should approach regulating AI in the future.

The Rapporteur believes that greater efforts are needed to remove existing barriers to the well-functioning of the digital single market, create concrete actions to develop an ecosystem for digital success in Europe and to create an innovative and trustworthy internal market for AI products, services and applications ensuring a high degree of consumer protection.

The Rapporteur is of the view that much of the existing legislation for digital services and other sector specific legislation can continue to be applied to AI and that, in general, they can be updated or adapted to better reflect and address new challenges posed by new and emerging technologies. Where there are additional uncertainties and challenges that cannot be addressed within existing EU legislative frameworks, a degree of new legislation is required.

### Digital Single Market barriers.

The Rapporteur believes that, fundamentally, the digital single market is about reducing fragmentation in the internal market by avoiding diverging national approaches and working to achieve greater market integration and harmonisation;

The Rapporteur believes that any future proposals from the Commission related to the Shaping Europe's Digital Future Communication should address any existing fragmentation of the digital single market, remove any existing unjustified barriers and support innovation

by reducing red tape. The Rapporteur takes the view that we must establish a digital single market that is competitive, accessible, technologically-neutral, innovation-friendly, human-centric, trustworthy and builds a secure data society and economy.

The Rapporteur believes that a lack of effective enforcement is one existing barrier and this is something that she would like to address in her report. The Rapporteur also stresses the need to support key enablers of the digital economy, to increase the amount and sources of investment, work to develop European standards for new and emerging technologies, have a competitive data economy and to empower consumers as a means to overcome existing barriers and to both increase consumer welfare and also European competitiveness.

The Rapporteur would like the report to address and suggest some concrete measures that can be taken by the Commission as a follow up to their communication of February 2020.

## **AI**

The Rapporteur welcomes the Commission's White Paper on AI published in February. Globally, there is significant competition in the industry and to set global standards for AI. The Rapporteur considers that, for the EU, it is important, if we wish for these standards to be developed in line with our values, that we act as one and have a proportionate and coherent EU approach to this technology. At present, there are many diverging national approaches and it is the view of the Rapporteur that this will only serve to hinder the EU as a whole.

The Rapporteur is positive about the potential benefits to be gained from the technology and takes note of the positive developments already witnessed in using AI to solve problems arising from the COVID crisis. The Rapporteur believes that the technology can play an important role in both the economic recovery from COVID but also in achieving our ambitious climate ambitions. However, the Rapporteur also fully acknowledges that AI presents a number of potential risks and harms such as a lack of transparency or accountability, biased decision-making and privacy concerns and that these concerns need to be addressed by any future Regulation to ensure consumer protection, increase trust in AI and consequently its uptake and widespread adoption. At the same time, the Rapporteur believes that this approach can help provide legal certainty to the industry in order to support innovation.

The Rapporteur is of the view that, in its approach to AI, the Commission should develop a principle-based framework based on fundamental rights and the values of transparency, accountability and where necessary, explainability. It is important that consumers know when they are dealing with an AI, that there is a degree of recourse for decisions made and that these decisions can be explained to the consumer when it is necessary to do so. To this end, the Rapporteur believes that a specific EU Regulation for AI is necessary and can complement existing relevant legislation.

The Rapporteur believes that the Commission should encourage these principles throughout the development of AI products, services and applications. It is the view of the Rapporteur that, given the fast moving nature of the sector, the Commission should consider a functional and broad definition of AI, in order to capture the widest range of AI products, services and applications and to ensure that any proposed new Regulation is flexible enough to adapt to potential future developments.

The Rapporteur supports the risk-based approach of the Commission towards AI Regulation

and believes that the Commission should, however, avoid taking a binary approach to risk-categorisation and develop a robust objective methodology for determining when AI is high-risk based on the specific use-case and context. The Rapporteur considers it important not to over-regulate the sector and that any AI-use that has been clearly determined as having the highest risk should be subject to the most regulatory requirements.

The Rapporteur also feels it is important to note that a significant amount of existing legislation applies to AI and that this needs to be clearly mapped by the Commission in order to avoid red tape and be consistent with the “one in, one out principle”. Any new proposal should fit seamlessly into existing requirements.

The Rapporteur believes that it is important to develop common standards on AI a that further work should continue in the EU and in relevant international forums on developing common standards for AI.

To support the right ecosystem for AI development in the EU, The Rapporteur considers that new regulatory tools such as “regulatory sandboxes” should be utilised to safely develop innovative AI products, protecting consumers while helping SME’s and startups to scale up. The Rapporteur also believes that initiatives such as voluntary labeling for trustworthy AI consistent with the aforementioned principles could be a useful tool.

Finally, the Rapporteur believes that proper enforcement is essential to the EU’s success in this area. It is essential that enforcement works cross borders and between sectors and the Rapporteur believes that this can be facilitated via a workable framework provided by the Commission alongside clear and updated guidance once any Regulation enters into force. The Rapporteur considers that AI regulation will require a high degree of specialisation and knowledge on the side of regulatory bodies and that this may not exist at present, the Rapporteur believes that the establishment of an EU Centre of Excellence for AI could help ensure that Regulators have the tools to do their job and also that the regulatory approach is consistent across Member States.

#### **ANNEX: LIST OF ENTITIES OR PERSONS FROM WHOM THE RAPPORTEUR HAS RECEIVED INPUT.**

The following list is drawn up on a purely voluntary basis under the exclusive responsibility of the Rapporteur. The Rapporteur has received input from the following entities or persons in the preparation of the report, until the adoption thereof in committee:

<b>Entity</b>	<b>Person</b>
<b>BEUC</b>	David Martin
	Ernani Cerasaro
<b>European Digital Rights (EDRi)</b>	Sarah Chander
<b>Insurance Europe</b>	Arthur Hilliard
<b>DIGITALEUROPE</b>	Julien Chasserieau
<b>Allied for Startups</b>	Benedikt Blomeyer
<b>European Brands Association</b>	Razvan Antemir
<b>Centre for Information Policy Leadership (CIPL)</b>	Bojana Bellamy
<b>BSA</b>	Thomas Boué
<b>European Commission, DG CNCT</b>	Kilian Gross



	Martin Bailey
	Jorge Remuinan Suarez
	Mihail Adamescu

25.2.2021

## **OPINION OF THE COMMITTEE ON INTERNATIONAL TRADE**

for the Committee on the Internal Market and Consumer Protection

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers  
(2020/2216(INI))

Rapporteur for opinion: Geert Bourgeois

### **SUGGESTIONS**

The Committee on International Trade calls on the Committee on the Internal Market and Consumer Protection, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

1. Notes that production and trade are increasingly depending on digital information being transported, stored and used across borders; stresses that the EU needs to promote its digital transition in order to facilitate its recovery from the COVID-19 pandemic and increase its resilience with a view to overcoming challenges in the future; notes that the digital transition needs to be consistent with the UN sustainable development goals, the Paris Agreement and the EU climate and environmental objectives;
2. Believes that the European Union needs to take urgent steps to close the digital gap with the US and China to increase the number of globally successful technology companies in the EU and be a leader in setting standards for a sustainable digital data-driven global economy that ensures the respect of EU values, human rights, consumer protection, data security and data protection;
3. Emphasises the need to ensure that the digital transition reinforces open technologies, portability and interoperability; points out that the updated trade deal with China should cover such objectives;
4. Notes the risks of incompatibility between the approaches of different trading partners when it comes to the regulation of digital trade; strongly supports multilateral solutions for digital trade rules and for the sustainable opening of markets in order to deliver concrete benefits to companies, consumers and workers; calls for the plurilateral World Trade Organization (WTO) negotiations on e-commerce to be concluded as a matter of urgency, with a balanced outcome; regrets that, in the absence of global rules, EU companies may be faced with non-tariff barriers to digital trade such as unjustified geo-blocking, data localisation and mandatory technology transfer requirements; notes that these barriers are particularly challenging for small and medium-sized enterprises

- (SMEs); highlights that global rules on digital trade could further increase consumer protection; supports making the WTO moratorium on electronic transmissions permanent and stresses that it is important to provide clarity regarding the definition of electronic transmissions; calls for the WTO Information Technology Agreement, its expansion and the WTO Telecommunications Services Reference Paper to be fully implemented and more widely adopted;
5. Points out the importance of establishing disciplines prohibiting the forced transfer of intellectual property rights in the form of source codes; underlines in this regard that the EU should not make commitments in relation to algorithms; points out the importance of retaining EU public policy space for the auditing of high-risk AI systems, thus ensuring the protection of trade secrets; calls on the Commission to carefully assess the impact of the source code clause currently being discussed in the e-commerce negotiations on future EU AI legislation at WTO level, including its impact on consumer rights, and to involve the European Parliament in this assessment;
  6. Recognises the ambition to make the EU a world leader in the development and application of AI; calls for the EU to work more closely with partners, for instance within the Organisation for Economic Co-operation and Development (OECD) and the WTO, to set global standards for AI in the interest of reducing trade barriers and promoting trustworthy AI in line with the EU's values; supports cooperation on international regulations and other forms of cooperation between OECD countries regarding the digital economy, including the Global Partnership on Artificial Intelligence; encourages the EU to intensify its work with the UN and international standards bodies on this topic;
  7. Stresses that data flows are central to digital trade, and that apart from being a means of production, data itself has become a tradable asset; underlines, furthermore, that electronic data represents a key economic 'raw material' for the digital transitions; notes that data access and processing are often indispensable to providing competitive digital services, notably those that use AI; stresses, therefore, that researchers and businesses need to be given greater freedom to use data for AI development in line with the General Data Protection Regulation (GDPR); notes that the construction of 5G infrastructure, which is consistent with the goals of the EU toolbox on 5G Cybersecurity, must be rapidly accelerated in the EU; calls on the Commission to adopt digital trade rules that increase the competitiveness of EU businesses, ensure consumer trust and facilitate the free flow of data across borders, while ensuring EU data protection and privacy rules and consumer protection standards are respected; supports the principle that data should be allowed to flow across borders provided that appropriate legal transfer tools for the protection and security of personal data can be put in place by the parties involved; highlights that in line with the GDPR, personal data can be transferred to non-EU countries via adequacy decisions, standard contractual clauses and binding corporate rules; calls for data protection considerations to be raised in future trade agreements, with the aim to facilitate the adequacy decision process with trading partners and to add ambitious and flexible provisions on cross-border data flows; notes that bilateral and regional regulatory cooperation, such as on promoting mutual recognition, could complement the future WTO e-commerce agreement, taking into account the level of personal data protection under each domestic law; calls for unjustified data localisation practices to be robustly banned in the WTO e-commerce agreement and in EU free trade agreements (EU FTAs);

8. Reminds the Commission that any proposal on the digital single market should fully respect the EU's international obligations, including WTO and bilateral trade agreements; urges the Commission to fully assess the geopolitical and strategic implications of its proposals; considers that the EU should remain a role model in terms of building an open rules-based data economy and should promote the sharing of data between the EU and non-EU countries;
9. Notes the conclusion of the rules-based Asian Regional Comprehensive Economic Partnership (RCEP) agreement, which has paved the way for the largest economic integration project in the world; regrets, however, the lack of a robust sustainable development chapter including commitments on environmental preservation and social rights in the RCEP, which demonstrates the need for the EU to take the lead in setting global rules for the digital economy; believes that the EU should promote digital rules that are consistent with democratic principles, human rights and sustainable development; supports, in this regard, the proposal to establish the EU-US Trade and Technology Council; demands that the European Parliament be kept fully informed about progress on this proposal and be given the task of overseeing the negotiations and future work of the EU-US Trade and Technology Council in order to foster transatlantic cooperation on digital issues, including on export restrictions on technology and foreign direct investment screening; urges the Commission to ensure a high level of transparency; supports in this regard the work on a transatlantic AI agreement to build stronger and broader consensus on principles of ethical AI and the governance of data and, within the framework of these principles, to foster innovation and the sharing of data to develop AI and help facilitate trade and the development of compatible rules and common standards in digital trade, ensuring a central role for the EU in the setting of those standards; stresses that this transatlantic AI agreement should also have a chapter dedicated to data security and protection of the data of users and consumers; calls on both parties to use the momentum of the new Biden administration to begin working on these issues urgently, and to find an agreement at the OECD on fair taxation for the digital economy;
10. Underlines the role of digital trade and the use of blockchain, for instance in facilitating access to global value chains for SMEs, including in the least developed countries, and in making cross-border trade processes and commercial transactions more efficient and less costly; notes in this regard that SMEs are hardest hit by opaque regulatory bureaucracy and excessive burdens, and accordingly underlines the fact that legislation needs to be simplified and clarified in order to promote the development and use by SMEs of digital technologies, in particular AI; calls on the Commission to support SMEs in their digital transformation; highlights in particular the benefits this could bring in terms of contributing to women's economic empowerment and further inclusion; notes that using blockchain can facilitate due diligence for companies;
11. Notes that AI is embedded into a wide variety of systems and that it will therefore increase the number of available entry possibilities for malicious actors to exploit; stresses, in this respect, that it is necessary to promote cybersecurity by supporting industry-driven standards, guidelines and best practices to help companies to manage their cybersecurity risks, considering the increase in large-scale cyberattacks from non-EU countries aimed at misappropriating sensitive business information such as trade secrets and intellectual property, of which EU companies are often victims; notes that as a way to apply pressure on non-cooperative states, diplomatic action or economic

retaliation could be considered; is of the view that an agreement within the OECD not to engage in commercial espionage against other member countries would also discourage non-EU countries from taking such action;

12. Underlines the importance of EU FTAs in promoting the interests and values of EU companies, consumers and workers in the global digital economy and sees them as being complementary to a competitive digital single market; notes that especially crucial is the cooperation with the United Kingdom, which plays an important role in the global digital economy; welcomes the Digital Trade and Telecommunications chapters of the EU-UK Trade and Cooperation Agreement and considers them a benchmark for negotiations with other developed EU trading partners; calls on digital trade and telecommunications chapters to be included in all future EU FTAs; calls for digital trade to be a pillar of the EU's new trade strategy;
13. Underlines the importance of correcting existing imbalances and distortions in the global market that are hampering the growth of EU technology companies; calls on the Commission to continue working with the US, Japan and other like-minded partners on reforming the WTO rules on, inter alia, subsidies, forced technology transfers and state-owned enterprises; underlines the need to better enforce existing trade and investment agreements, move towards reciprocity in some areas of trade and investment policy, and develop new EU regulatory frameworks, including a new instrument on foreign subsidies; considers it necessary to develop supportive conditions for EU technology companies with appropriate financing measures and export credits; supports the development of safeguards in EU legislation and in trade agreements against anti-competitive behaviour of all actors in the digital value chain, including telecommunications.

## INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

<b>Date adopted</b>	25.2.2021						
<b>Result of final vote</b>	<table style="width: 100%; border: none;"> <tr> <td style="width: 100px;">+:</td> <td style="text-align: right;">36</td> </tr> <tr> <td>-:</td> <td style="text-align: right;">4</td> </tr> <tr> <td>0:</td> <td style="text-align: right;">3</td> </tr> </table>	+:	36	-:	4	0:	3
+:	36						
-:	4						
0:	3						
<b>Members present for the final vote</b>	Barry Andrews, Anna-Michelle Asimakopoulou, Tiziana Beghin, Geert Bourgeois, Saskia Bricmont, Udo Bullmann, Jordi Cañas, Daniel Caspary, Miroslav Číž, Arnaud Danjean, Paolo De Castro, Emmanouil Fragkos, Raphaël Glucksmann, Markéta Gregorová, Enikő Győri, Roman Haider, Christophe Hansen, Heidi Hautala, Danuta Maria Hübner, Herve Juvin, Karin Karlsbro, Danilo Oscar Lancini, Bernd Lange, Margarida Marques, Gabriel Mato, Sara Matthieu, Emmanuel Maurel, Carles Puigdemont i Casamajó, Samira Rafaela, Inma Rodríguez-Piñero, Massimiliano Salini, Helmut Scholz, Liesje Schreinemacher, Sven Simon, Dominik Tarczyński, Mihai Tudose, Kathleen Van Brempt, Marie-Pierre Vedrenne, Jörgen Warborn, Iuliu Winkler, Jan Zahradil						
<b>Substitutes present for the final vote</b>	Markus Buchheit, Jean-Lin Lacapelle						

## Results of roll-call votes

### 1. Shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers 2020/2216(INI) — Rapporteur: Geert Bourgeois (ECR) – Adoption of draft opinion

#### 1.1. Final vote

36	+
PPE	Anna-Michelle Asimakopoulou, Daniel Caspary, Arnaud Danjean, Eniko Gyori, Christophe Hansen, Danuta Maria Huebner, Gabriel Mato, Massimiliano Salini, Sven Simon, Jörgen Warborn, Iuliu Winkler
S&D	Udo Bullmann, Miroslav Číž, Paolo De Castro, Raphaël Glucksmann, Bernd Lange, Margarida Marques, Inma Rodríguez-Piñero, Mihai Tudose, Kathleen Van Brempt
RENEW	Barry Andrews, Jordi Cañas, Karin Karlsbro, Samira Rafaela, Liesje Schreinemacher, Marie-Pierre Vedrenne
ID	Roman Haider, Hervé Juvin, Markus Buchheit, Danilo Oscar Lancini, Jean-Lin Lacapelle
ECR	Geert Bourgeois, Emmanouil Fragkos, Dominik Tarczynski, Jan Zahradil
NI	Carles Puigdemont i Casamajó

4	-
VERTS/ALE	Saskia Bricmont, Markéta Gregorová, Heidi Hautala, Sara Matthieu

3	0
The Left	Emmanuel Maurel, Helmut Scholz
NI	Tiziana Beghin

#### Key to symbols:

+ : in favour

- : against

0 : abstention

23.3.2021

## **OPINION OF THE COMMITTEE ON INDUSTRY, RESEARCH AND ENERGY**

for the Committee on the Internal Market and Consumer Protection

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers  
(2020/2216(INI))

Rapporteur for opinion (\*): Nicola Beer

(\* ) Associated committee – Rule 57 of the Rules of Procedure

### **SUGGESTIONS**

The Committee on Industry, Research and Energy calls on the Committee on the Internal Market and Consumer Protection, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

1. Calls for the European institutions to have the ambition to make the Union the world leader in digital transformation and in artificial intelligence (AI), by setting the goal and mobilising the resources to become the most competitive and innovative region by 2030 based on EU rules and values, and by promoting international cooperation on AI with like-minded countries and global players; highlights the potential for European added value and the current cost of non-Europe in the field of AI and digital regulation; calls for a regulatory approach that is not based on a snapshot of what technological development looks like at the moment, but strives to ensure that the rules adopted will also be applicable to future technological breakthroughs and phenomena; calls for all AI and digital regulation to be balanced, proportionate and based on the principles of subsidiarity and technology-neutrality and thorough impact assessments; highlights that innovation, open markets, embedded fundamental rights-based European values and social acceptance are elements that would allow the Union to lead the way towards a digital society that benefits people and society as a whole, stimulates growth and competitiveness, ensures its digital sovereignty and resilience, and strengthens the geopolitical and strategic relevance of the Union; emphasises that European data and AI regulation should aim to build a borderless digital single market and a competitive, innovation-friendly, human-centric, trustworthy and secure data society and economy which support the development and deployment of AI, access to data, interoperability and data portability; stresses that the digital transformation must contribute to sustainable development while balancing the economic, social, ethical and environmental dimensions; emphasises that, of the three key objectives defined in the communication on Shaping Europe's Digital Future, digital competitiveness and economic growth are irreplaceable prerequisites for building an open, democratic and sustainable society, powered by technology that works for people; underlines that a common European approach respecting its fundamental principles and values, is needed



to reach this goal;

2. Recalls that digital sovereignty is necessary for the Union to develop in an unconstrained manner and on the basis of its values; highlights that investing in science, research and development, innovation in the areas of digital and AI, and better access to venture capital and bias-free high-quality data, are the cornerstones of ensuring the digital sovereignty of the Union; underlines that SMEs and European-based manufacturing will play a crucial role in this transformation process; points out that the fourth industrial revolution will depend, among other things, on access to raw materials such as lithium and rare earths, and that the Union needs to reduce its dependence on imported critical raw materials by limiting absolute consumption and through its own environmentally responsible mining and circular economy; considers that a stronger policy on the circular economy applied to digital devices and semiconductors could contribute at the same time to the Union's industrial sovereignty and to avoiding the negative impact of mining activities linked to raw materials; recalls that AI and other digital technologies are often developed in an international context; notes that unclear and fragmented regulation will drive innovative companies to develop their products and services outside of Europe; underlines the importance of the free flow of data across borders; supports the Commission's aim of addressing unjustified obstacles to international data flows, as well as the restrictions European companies are facing in third countries; underlines the importance of access to data and of EU-wide interoperability when using the exponentially increasing quantity of industrial and public data; warns against the use of AI in systems punishing and rewarding citizens based on their social behaviour; calls on the Commission to draw up a strategy on the financing of European start-ups to incentivise their growth in Europe, so that Europe can profit from the resulting jobs, ideas and innovative businesses, and that the loss of these companies to non-European countries can be prevented; calls on the Commission to study the different ways in which the Union is at risk of becoming dependent on external players; recalls that the Member States must uphold their commitment under the Europe 2020 strategy to invest 3 % of their GDP in research and development, in order to ensure the Union's strategic sovereignty in the digital field; recalls that the concept of greater sovereignty does not contradict the concept of free and fair trade;
3. Stresses that the current environmental and carbon footprint of the ICT sector remains considerable; points out that cost savings and improved management can also be achieved through the further sustainable development of digital technologies, AI and robotics, that machine learning could contribute to a decrease in emissions through a better understanding of the technological processes, improvements in energy efficiency, the integration of renewables and energy storage, by enabling sharing and access to essential and well-defined data sets and the inclusion of the environmental dimension in full accordance with the European Green Deal; notes that greater emission reductions and even full climate neutrality can be achieved by setting data centre efficiency standards for hosting sites, along with complementary requirements for high-performance computing hardware and software and heat reuse; underlines the importance of developing more energy-efficient high-performance computing such as the Green IT cube;
4. Welcomes the use of EU funding programmes to support the digitalisation of our society and industry insofar as they are based on the principles of efficiency, transparency and inclusiveness; calls for the coordinated implementation of the different

funds to maximise the synergies between the programmes; suggests a strategic prioritisation of funds to build the necessary digital infrastructure; highlights the success of the European High-Performance Computing Joint Undertaking; welcomes the recently published Commission proposal on its continuation in order to maintain and promote Europe's leading role in supercomputing and quantum computing, which is indispensable for the development of AI; recalls that SMEs are the backbone of Europe's economy and need special support from EU funding programmes to make the digital transition; welcomes the plans to further develop the European Innovation Council under Horizon 2021-2027 into a full Council, offering a 'one-stop shop' for start-ups, offering improved funding instruments and a Business Acceleration Service; calls on the Commission and the Member States to increase investments in research and to facilitate additional cooperation between innovative companies, higher education and research institutions; recognises that sharing and reusing AI application components increases the use and uptake of AI solutions; highlights the importance of fundamental research into the foundations of AI; notes that current commercial AI applications are based on research that was initiated decades earlier; emphasises the need to allow comprehensive research into all AI applications and technologies; calls for legislative solutions, such as regulatory sandboxes with a path to scale up for successful pilots, which would allow both public and private institutions to create a secure testing area for research and development of high-risk and non-high-risk AI use cases; calls for European initiatives concentrating on first-stage research; calls for massive investment in clusters of excellence for digital innovation and AI across the Member States, based on cooperation between innovative companies, higher education and research institutions in order to ensure capacity-building and the sharing of best practices, and to mobilise research and innovation along the entire value chain, thereby attracting and retaining the best talents and private investments; recalls that SMEs and start-ups have an increasing role in digital innovation; calls for measures to facilitate their innovations by reducing the administrative burden, making access to finance easier – including credits and risk capital – making information more accessible and providing education to fill the skills gap;

5. Regrets the fact that only 17 % of SMEs have so far successfully integrated digital technology into their businesses<sup>1</sup>; recalls that the uptake of digitalisation by SMEs is a necessary condition for taking advantage of this second wave of digitalisation; stresses that future legislation in the digital area should avoid unnecessary administrative or regulatory burdens for SMEs and be accompanied by clear guidelines such as a European framework on AI, robotics and related technologies, addressing ethical principles and, where appropriate, technical standards in order to enhance performance, interoperability, security and privacy for better governance of the use of new technologies, such as AI; points out that legal uncertainty hampers the emergence of high-tech unicorns, start-ups and SMEs; calls for the creation of a digital ecosystem in which SMEs can participate in the technological innovation centred around digitalisation and AI; calls for the reinforcement of, and a clearer strategy for, the European Digital Innovation Hubs in order to promote the widespread uptake of new technologies by SMEs, mid-caps and start-ups; points out that the network of European Digital Innovation Hubs should ensure a broad geographical coverage across Europe, including remote, rural and island areas, as well as initiating cross-sectoral dialogue;

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<sup>1</sup> 2018 report by the Digital Innovation Hubs Working Group  
[https://ec.europa.eu/futurium/en/system/files/ged/dihs\\_access\\_to\\_finance\\_report\\_final.pdf](https://ec.europa.eu/futurium/en/system/files/ged/dihs_access_to_finance_report_final.pdf)

calls on the Commission to draw up an ambitious and comprehensive strategy to support the creation and growth of start-ups with the goal of having a new generation of European digital unicorns within 10 years; points out that the strategy should look at measures such as less bureaucracy and excellent infrastructure, access to finance, the facilitation of spin-offs in universities and companies, better access to public procurement, tax incentives for start-ups and newly founded SMEs, support to access global markets from the outset, the introduction of an EU Start-up Visa, the reduction of regulatory burdens, the introduction of ‘regulatory sandboxes’ and special EU start-up ecosystems helping people to create companies, attract funding or license their inventions to existing companies as a model of technology transfer; notes that these measures should be developed in constant dialogue with the relevant stakeholders;

6. Highlights the lack of European venture capital funding, the lack of access to finance and the lack of data availability, the disproportionately large role of public entities in the funding that currently exists, and the significant differences in start-up ecosystems and available financing between Member States; further recognises the external and internal barriers, especially for less mature sectors, as well as a wider range of sectors, and by SMEs which find it harder to implement AI applications compared with large firms; calls for a comprehensive approach in the Union, based on improved and modernised taxation, which promotes entrepreneurship through fair and growth-oriented tax regimes and investor-friendly regulation, in order to ensure access to finance for promising European start-ups at all stages of growth; calls for joint efforts to prevent and discourage the exodus of young promising European businesses which often fall short on financing right after entering the market;
7. Stresses that Europe’s growth potential will be determined by the digital skills of its population and businesses; takes note of the skills gap currently visible in the European job market and the need to bridge this gap through up-skilling and re-skilling; calls for an increased focus on re-skilling and up-skilling of digital skills and competences in national education systems; demands measures to address the brain drain and to attract the best minds, without prejudice to the national labour market systems and the competencies of the social partners, making the Union a space that is attractive from a financial, intellectual and entrepreneurial point of view; stresses that such measures should be properly financed to enhance the conditions to attract leading researches, supporting the digital ecosystems of universities, research centres, business incubators and enterprises that are open to creativity, innovation and fostering state-of-the-art digital infrastructure; considers that the new skills agenda for Europe must address the challenges of adapting and creating new qualifications that reinforce the digital and green transitions; further stresses that skills shortages and mismatches can be prevented by improving and facilitating cooperation between the education, training and re-skilling systems and the need for companies to innovate; considers that the shaping of a fair digital sector must go hand in hand with educational aspects, socialisation, fair working conditions, work-life balance, democracy and good governance; underlines that in order to reap the full benefits of digitalisation, the Union must address digital literacy and skills for all; calls for measures aimed at increasing and supporting training projects and actions for more diversification in the digital sector, and recalls the need to address the gender gap in science, technology, engineering and mathematics (STEM) in which women are still under-represented;

8. Notes with regret that up to 30 % of EU citizens lack basic digital skills<sup>2</sup> while up to 90 % of jobs require such basic competences; calls on the Commission to develop strategies in order to facilitate the digital transition by supporting re-skilling programmes, improving professional education, ensuring greater access to talent and providing lifelong training for current and future employees, with a particular focus on SMEs;
9. Recognises the opportunities and risks for the creation of new highly-qualified jobs and the loss of jobs due to the digital transition; calls on the Commission, in cooperation with the social partners, to develop the necessary strategies in order to minimise possible negative effects and explore the potential of digitalisation, data and AI to increase sustainable productivity, improve the well-being of employees, as well as to invest in awareness-raising and digital literacy schemes and guarantee continuous protection of their rights and freedoms; calls on the Commission to analyse both the possibility of introducing minimum standards, the protection of those working for digital platforms and the growing workplace surveillance facilitated by digitalisation;
10. Highlights that using biased data sets can inadvertently lead to biased AI applications and notes in particular the risk of reproducing gender, cultural, ethnic, social, disability or sexual orientation biases; underlines the need to acknowledge and address bias in data-based systems, both in their development and use; underlines that the gender dimension needs to be taken into account, given the insufficient representation of women in STEM and digital companies; fully supports the Commission's aim of increasing the number of women in tech by, inter alia, increasing and supporting training projects and actions; recalls that women are under-represented at all levels in the digital sector in Europe, from students (32 % at bachelor's and master's degree or equivalent levels) up to top academic positions (15 %), and that the gap is largest in ICT specialist skills and employment, where only 18 % of positions in the EU are held by women; calls on the Commission and the Member States to align the measures shaping the EU's digital transition with the Union's goals on gender equality;
11. Emphasises that achieving a European gigabit society that is secure and inclusive is a prerequisite of the Union's success in its digital transition; recalls that the success of the Union's data economy, as well as AI development and deployment, primarily depends on a wider ICT ecosystem, closing the social digital divide, the up-skilling and re-skilling of the workforce, and on developing the Internet of Things, fibre, quantum and blockchain technologies; recognises the role that 5G can have in achieving this goal; notes that very high capacity networks will allow Europe to take a quantitative leap benefiting an entire ecosystem of technologies; highlights the role of connectivity, powered in particular by 5G and fibre infrastructure, on transforming working and education modes, business models and whole sectors such as manufacturing, transport and healthcare, especially in conjunction with other technologies such as virtualisation, cloud computing, edge computing, AI, network slicing and automation, and has the potential to achieve greater productivity and more innovation and user experiences; recalls that the Union should work to overcome the rural digital divide, which should be taken into account in particular when Union funds are used for the deployment of 5G networks, to reduce blank spots and for connectivity infrastructures in general; calls on the Commission to incentivise European companies to start developing and building

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<sup>2</sup> [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_1196](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1196)

technology capacities for next generation mobile networks; calls on the Commission to analyse the impact of unequal access to digital technologies and disparities in connectivity across the Member States; notes that investing in high-performance computing (HPC) is crucial to reap the full potential of AI and other emerging technologies; calls for the connectivity investment gap to be bridged through Next Generation EU, as well as national and private funding, in order to compensating for the cuts in EU investments in future technologies in the 2021-2027 multiannual financial framework (MFF); calls for an EU communication strategy that provides EU citizens with reliable information, as well as for awareness-raising campaigns regarding 5G and electromagnetic fields, including counteracting the spread of disinformation;

12. Calls for coordinated actions in order to decrease and eliminate the digital gaps exposed by the pandemic between various Member States, their regions, societies, citizens, start-ups and other businesses, and other actors of the social economy and academia; calls for an inclusive digitalisation of our societies that will serve the interests of citizens by taking accessibility and affordability into account and allowing for a fair and cooperative digital modernisation of the public sector that would aim at a values-based digital transformation by promoting fundamental rights and democratic values so that no citizen is left behind in the transition towards a digitalised society;
13. Calls for a whole-of-society approach towards cybersecurity; highlights that new approaches to cybersecurity should be designed on the basis of resilience and adaptability to stresses and attacks; calls for a holistic approach towards cybersecurity, where the whole system is taken into account, from system design and usability to the education and training of citizens; stresses that the digital transformation, with the rapid digitalisation of services and the large-scale introduction of connected devices, necessarily makes our society and economy more exposed to cyberattacks; highlights that advances in the field of quantum computing will disrupt existing encryption techniques, a keystone for citizens' privacy, industrial intellectual property and national security; calls on the Commission to support research that would allow Europe to overcome this challenge while safeguarding citizens' privacy rights, and highlights the need for strong, secure end-to-end encryption; calls on the Commission to explore the use of blockchain-based cybersecurity protocols and applications to improve the resilience, trustworthiness and robustness of AI infrastructures; emphasises the need to include cybersecurity components in all sectoral policies; underlines that effective protection requires EU and national institutions to work together with the support of the European Union Agency for Cybersecurity (ENISA) to ensure the security, integrity, resilience and sustainability of critical infrastructures and electronic communications networks; welcomes the Commission's proposal for a revision of the NIS Directive<sup>3</sup> and its intention to enlarge its scope and reduce the differences in application by the Member States; points out the crucial importance of ensuring the security, integrity and resilience of critical infrastructures and electronic communications networks; highlights the link between strong cybersecurity for critical infrastructures and electronic communications networks, and the Union's digital sovereignty; calls for a cautious approach towards potential dependencies on high-risk suppliers, especially for the deployment of 5G networks; recalls that current Union legislation does not provide for

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<sup>3</sup> Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union, OJ L 194, 19.7.2016, p. 1.

mandatory cybersecurity requirements for products and services in general; calls for essential requirements to be included in the design phase (security by design) and also for the use of appropriate cybersecurity standards and processes both during the products' and services' life cycles and across their supply chains; calls for activities of strategic importance to the Union in relation to critical infrastructure to be reinforced, including cybersecurity technology and research, and risk prevention with reference to the deployment of 5G networks;

14. Recognises that AI deployment is key to European competitiveness in the digital era; highlights that in order to facilitate the uptake of AI in Europe, a common European approach based on a human-centric approach to trustworthy AI, transparency and clear liability rules is needed to avoid the fragmentation of the internal market; stresses that human control should always be possible when citizens interact with high-risk automated systems in order to ensure that an automated decision can be verified and corrected; is convinced that creating a clear European regulatory framework and long-term legal certainty will increase trust among consumers, the public sector, businesses, industries and research;
15. Recognises that AI is a data-driven technology; underlines that access to data is key to the development of AI in Europe; recognises that the increased usage of products and industrial devices connected to the internet will not only boost competitiveness, allow for new products and services to be developed and facilitate innovation, but will also give rise to new risks in terms of privacy, information and cybersecurity; calls on the Commission to revise and further develop access to data, ensuring that public data is produced in open data formats and is easily accessible, especially for start-ups and SMEs; calls for a new approach to data regulation that facilitates research, innovation and competitiveness by giving more rights to access and use data when it is deemed to be anonymised and non-sensitive data, along with clear and balanced rules primarily on the protection of fundamental rights and on intellectual property rights and business secrets; highlights that the current market imbalances between gatekeeper platforms and SMEs, as well as limited access to data, continue to pose challenges for European SMEs; emphasises the need to enhance SMEs' access to data; calls for an enabling approach to data sharing practices on a voluntary basis as an overarching principle, including the provision of incentives to enable data sharing; highlights the importance of clear market approval processes and EU-wide market access policies; welcomes the Commission's new cloud strategy and the European Cloud Initiative; takes note of the Court of Justice of the European Union's 'Schrems II' judgment which found that the EU-US Privacy Shield did not guarantee an adequate level of protection to that provided by the General Data Protection Regulation and the Charter of Fundamental Rights of the European Union; believes that the free flow of data across the internal market is needed to exploit the full potential of the data economy and stresses that preserving the flow of data must remain the foundation of Europe's objectives; reminds the Commission of the need to facilitate transatlantic data transfers and EU-US data flows while fully respecting EU and Member States' laws and standards, that the Cloud Strategy and Cloud Initiative do not replace the need for legal certainty for international data transfers and that the conditions on data protection, privacy, security and justified and non-discriminatory public policy interests must always be met; highlights the legal uncertainty currently faced by SMEs which predominantly rely on standard contractual clauses; notes the limited capacity of SMEs to comply with the current requirements, such as third-country self-adequacy assessments, and the negative impacts this has on

international data flows, innovation and growth; insists, therefore, that the Commission create a legally certain framework for transatlantic and international data transfers guaranteeing the fundamental personal data and privacy rights of European citizens; reminds the Commission of its commitments to the one-in-one-out principle and to reducing the regulatory burden;

16. Warns against overregulating AI and discourages the adoption of any ‘one-size-fits-all’ or ‘snapshot’ approaches to regulation, which can lead to a distorted overall picture or to potential loopholes; recalls that regulation must be proportionate and flexible, building on the existing legislative instruments and best practices, except for high-risk areas where the need for a new regulatory approach should be carefully examined, while leaving open the possibility for self-regulation and voluntary practices, as well as full respect for the principles of technological neutrality and proportionality;
17. Welcomes the signature by all EU Member States of the Berlin Declaration on Digital Society and Value-based Digital Government; subscribes to the recognition of the role of public administrations in driving a values-based digital transformation of our European societies and to the seven principles of the declaration; calls on the Commission to support the achievement of these seven principles and the implementation of the actions and measures by means of European funds; calls for the uptake by the public sector of advanced digital and related technologies with the goal of improving public services, making them more accessible and reducing administrative burdens, improving efficiency, transparency and accountability, and offering better and innovative services; underlines that interoperability facilitates cross-border cooperation, securing the emergence of new, or the consolidation of developing, common public services at Union level and enhancing the development of European digital citizenship; emphasises that the adoption and use of AI and data by the public sector can lead the way towards innovation based on European values; stresses that AI can help to break down silos by linking and streamlining public services in order to improve administration for the benefit of citizens and businesses, as well as to provide real-time data flows for services and decision-making; calls for the EU only to adopt AI that is trustworthy and ‘human-centric’; to always inform citizens when they interact with an automated system, or when an automated system is taking decisions that could affect their lives; and to ensure that the possibility of human control that can verify and correct any decision always exists; highlights the importance of collecting and making available public data by administrations as a way to enhance innovation, facilitate the evaluation of applied policies and to support data-based decision-making; stresses that common standards, modular architectures and the use of open-source software in the public sector facilitate the deployment and development of strategic digital tools and capacities while increasing trust and securing transparency; stresses that the software, data and tools generated by the public sector or which are fully publicly funded should be reusable and openly accessible as long as this is compatible with fundamental rights, as well as the rules on the protection of intellectual property rights, personal data and privacy; supports the creation of an ‘ecosystem of trust’ as stated in the Commission’s white paper on AI, which should give citizens sufficient confidence to take up AI applications and provide companies and public organisations with the legal certainty to innovate in AI deployment; takes note of the regulatory oversight agencies and mechanisms that are already in place in sectors such as healthcare, manufacturing, finance and transport; considers that both reinforcing sector-specific regulators and a complementary horizontal approach is needed; highlights the importance of industry-

specific strategies and approaches.



## INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

<b>Date adopted</b>	18.3.2021
<b>Result of final vote</b>	+:                72 -:                0 0:                4
<b>Members present for the final vote</b>	Nicola Beer, François-Xavier Bellamy, Hildegard Bentele, Tom Berendsen, Vasile Blaga, Michael Bloss, Manuel Bompard, Paolo Borchia, Markus Buchheit, Cristian-Silviu Buşoi, Jerzy Buzek, Carlo Calenda, Andrea Caroppo, Maria da Graça Carvalho, Ignazio Corrao, Ciarán Cuffe, Josianne Cutajar, Nicola Danti, Pilar del Castillo Vera, Martina Dlabajová, Christian Ehler, Valter Flego, Niels Fuglsang, Lina Gálvez Muñoz, Claudia Gamon, Jens Geier, Nicolás González Casares, Bart Groothuis, Christophe Grudler, Henrike Hahn, Robert Hajšel, Ivo Hristov, Ivars Ijabs, Romana Jerković, Eva Kaili, Seán Kelly, Izabela-Helena Kloc, Zdzisław Krasnodębski, Andrius Kubilius, Miapetra Kumpula-Natri, Thierry Mariani, Eva Maydell, Joëlle Mélin, Dan Nica, Angelika Niebler, Ville Niinistö, Aldo Patriciello, Mauri Pekkarinen, Mikuláš Peksa, Tsvetelina Penkova, Clara Ponsatí Obiols, Sira Rego, Robert Roos, Maria Spyrali, Jessica Stegrud, Beata Szydło, Riho Terras, Grzegorz Tobiszowski, Patrizia Toia, Evžen Tošenovský, Marie Toussaint, Isabella Tovaglieri, Henna Virkkunen, Pernille Weiss, Carlos Zorrinho
<b>Substitutes present for the final vote</b>	Matteo Adinolfi, Andrus Ansip, Damien Carême, Jakop G. Dalunde, Cyrus Engerer, Cornelia Ernst, Elena Kountoura, Elena Lizzi, Marian-Jean Marinescu, Sven Schulze, Nils Torvalds

## FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

72	+
PPE	François-Xavier Bellamy, Hildegard Bentele, Tom Berendsen, Vasile Blaga, Cristian-Silviu Buşoi, Jerzy Buzek, Maria da Graça Carvalho, Pilar del Castillo Vera, Christian Ehler, Seán Kelly, Andrius Kubilius, Marian-Jean Marinescu, Eva Maydell, Angelika Niebler, Aldo Patriciello, Sven Schulze, Maria Spyrali, Riho Terras, Henna Virkkunen, Pernille Weiss
S&D	Carlo Calenda, Josianne Cutajar, Cyrus Engerer, Niels Fuglsang, Lina Gálvez Muñoz, Jens Geier, Nicolás González Casares, Robert Hajšel, Ivo Hristov, Romana Jerković, Eva Kaili, Miapetra Kumpula-Natri, Dan Nica, Tsvetelina Penkova, Patrizia Toia, Carlos Zorrinho
Renew	Andrus Ansip, Nicola Beer, Nicola Danti, Martina Dlabajová, Valter Flego, Claudia Gamon, Bart Groothuis, Christophe Grudler, Ivars Ijabs, Mauri Pekkarinen, Nils Torvalds
ID	Matteo Adinolfi, Paolo Borchia, Elena Lizzi, Thierry Mariani, Joëlle Mélin, Isabella Tovaglieri
Verts/ALE	Michael Bloss, Damien Carême, Ignazio Corrao, Ciarán Cuffe, Jakop G. Dalunde, Henrike Hahn, Ville Niinistö, Mikuláš Peksa, Marie Toussaint
ECR	Izabela-Helena Kloc, Zdzisław Krasnodębski, Robert Roos, Beata Szydło, Grzegorz Tobiszowski, Evžen Tošenovský
The Left	Elena Kountoura, Sira Rego
NI	Andrea Caroppo, Clara Ponsatí Obiols

0	-

4	0
ID	Markus Buchheit
ECR	Jessica Stegrud
The Left	Manuel Bompard, Cornelia Ernst

Key to symbols:

+ : in favour

- : against

0 : abstention

1.3.2021

## **OPINION OF THE COMMITTEE ON TRANSPORT AND TOURISM**

for the Committee on the Internal Market and Consumer Protection

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers  
(2020/2216(INI))

Rapporteur for opinion: Kosma Złotowski

### **SUGGESTIONS**

The Committee on Transport and Tourism calls on the Committee on the Internal Market and Consumer Protection, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

1. Welcomes the approach that the Commission intends to adopt on the digital transition, which distinctly outlines the clear goals to be achieved in the next decade; considers that such a structured vision will be beneficial to the transport and tourism sector and will contribute to making the European Union a global digital leader; warns that several countries around the world are moving rapidly towards making automated mobility available on the market; calls, therefore, for the EU to respond much more proactively to the rapid developments in this sector through a tailored legal and financial framework for European start-ups and technological developers; stresses that the EU's strategic autonomy is at stake; emphasises the enormous global growth opportunity of artificial intelligence (AI) applications, of which the EU should secure a large market share on the basis of an intelligent mix of policies aimed at securing a fertile and attractive business environment for AI projects;
2. Urges the Member States to include in their recovery plans projects for the digitalisation of transport; stresses the need to ensure stable and adequate funding for European research programmes, for investments in AI blockchain, and the Internet of Things (IoT), and for the process of building transport and ICT infrastructure for intelligent transport systems (ITS), including the secure deployment of 5G, the development of the 6G networks and future wireless networks to allow for the full potential of digitalised transport to unfold while ensuring high transport safety standards; notes that the level of uptake of AI in the transport sector will depend on modern digitalised infrastructure;
3. Stresses that the deployment of AI in the transport sector will require both the development of new infrastructure and upgrading of existing infrastructure; underlines the fact that despite numerous calls, the funds allocated in the multiannual financial framework (MFF) 2021-2027 are insufficient for the needs of the transport sector;

warns about the significant gap between the lifetime of digital and physical transport infrastructures; calls on the Member States to provide safe, resilient, high-quality transport infrastructures facilitating the deployment of connected and automated mobility services;

4. Points out that the upgrading of relevant transport and digital infrastructure in the Trans-European Transport Network (TEN-T) needs to be accelerated; calls, therefore, on the Commission to propose mechanisms in its revision of the TEN-T Regulation<sup>1</sup> and the Rail Freight Corridors Regulation<sup>2</sup> to ensure this acceleration; expresses its regret, in this regard, at the European Council's decision to cut the budget of the digital envelope of the Connecting Europe Facility; calls on the Member States to ensure adequate support to the digitalisation of the sector in the framework of their national recovery and resilience plans; welcomes the ability of EU funding programmes to crowd in private investments that are essential to finance disruptive technologies and deploy automated mobility on a large scale;
5. Highlights that the transport sector is and will further be among the sectors where consumers and citizens will experience daily interactions with AI; shares the Commission's view, therefore, that a clear, transparent and coherent EU framework that promotes the development of a human-centric AI, comprises aspects related to safety, privacy and security in line with the EU's relevant legal framework, together with the respect of human autonomy, oversight and liability, would not only build trust in AI technology among consumers and businesses – thus encouraging the use of further emerging technologies in the transport sector – and ensure predictability and legal certainty, but also improve the social, economic and environmental components of transport; highlights the risks stemming from the failure to agree on an EU regulatory approach;
6. Stresses the enormous potential of AI in the transport sector and its ability to increase automation for road, rail, waterborne and air transport; highlights the role of AI in fostering multimodality and the modal shift as well as the development of smart cities, thus improving the travel experience for all citizens by making transport, logistics and traffic flows more efficient, safer and more environmentally friendly;
7. Points out that a regulatory framework is needed for AI in the transport sector, such as rules for pilot projects that, if successful, allow for further development on the mass market (using a regulatory sandbox); stresses that any regulation in the field of AI should take a technologically neutral approach and observe the principle of proportionality; notes the important role that tech clusters and Digital Innovation Hubs can play in helping the transport sector innovate and in boosting cooperation among enterprises, academic institutions and the public sector; underlines the need for data to be easily readable and interoperable, according to the FAIR principles, to create synergies among countries and sectors, to pool together knowledge and to create tech clusters;

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<sup>1</sup> Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/E, OJ L 348 20.12.2013, p. 1.

<sup>2</sup> Regulation (EU) No 913/2010 of the European Parliament and of the Council of 22 September 2010 concerning a European rail network for competitive freight, OJ L 276, 20.10.2010, p.22.

8. Stresses the enormous potential of systems that use AI in the transport sector in terms of road safety, including for pedestrians and cyclists, and the achievement of the objectives set out in Vision Zero; notes that in the absence of vast, high-quality, interoperable data the uptake of AI in transport infrastructure and vehicles will be limited, possibly damaging EU competitiveness and transport safety; calls for more research and development to enhance product safety and stresses the need for a new harmonised regulatory framework for automated driving;
9. Highlights the great potential for increasing transport system efficiency through the use of AI technology in vehicles and traffic management systems, which can, inter alia, shorten journey times, reduce congestion, reduce harmful emissions and reduce costs; stresses that AI will contribute to further developing seamless multimodality, following the concept of Mobility as a Service (MaaS); believes that the integration of transport services offers opportunities to better respond to the mobility needs of European citizens and to optimise the use of public transport while limiting the number of private vehicles on the road; invites the Commission to explore how to facilitate the balanced development of MaaS, especially in urban areas;
10. Notes that the use of AI in the aviation sector is currently focused on the management of traffic and airspace planning design; welcomes the achievements of the Single European Sky ATM Research (SESAR) joint undertaking, which has supported a number of research projects in relation to AI and air traffic management; calls for research and investments to be intensified so as to maximise the potential of AI in the aviation sector with regard to consumers through improvements in airline marketing, sales, distribution, pricing processes as well as in ground handling (safety checks, etc.); notes that AI can develop automated navigation in long and short-sea shipping and on inland waterways and improve maritime surveillance in a context of increasing ship traffic; notes further that AI can contribute to the improvement of energy efficiency and the connection between ports and the hinterland; highlights that ports will be essential actors for the deployment of AI in the shipping sector; calls for the deployment of AI and a higher level of digitisation on a large scale in all European ports so as to achieve enhanced efficiency and competitiveness;
11. Stresses that the need for clear and coherent rules on determining and sharing responsibility and liability in the event of a malfunction or accident is one of the crucial barriers to the practical deployment of AI-based technologies in the transport sector, as expressed in its report of 5 October 2020 with recommendations to the Commission on civil liability regime for artificial intelligence<sup>3</sup>; stresses the need for defining a clear and fair division of responsibilities between manufacturers, operators and users of autonomous vehicles based on the capacity to control risks, in order to, inter alia, ensure best possible product safety, the appropriate allocation of risks, responsibility and liability; highlights, therefore, that the European Union should make the best use of all the tools at its disposal to maximise both the safety of AI transport systems and the possibility to identify liabilities if necessary; calls for insurance companies to improve the way they incorporate new risks arising from connected and automated mobility into their underwriting policy;
12. Stresses that the opportunities presented by AI should be emphasised and that policy

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<sup>3</sup> Texts adopted, P9\_TA(2020)0276.

makers should strive to inform citizens and businesses to enable them to evaluate the potential and the implications of AI; highlights in this regard the importance of effective information and communication campaigns to ensure people's understanding and awareness; underlines that legal clarity will increase consumer trust, thus having a positive impact on EU businesses and small and medium-sized enterprises (SMEs) developing such technologies, and facilitating the expansion of a strong EU market;

13. Notes that the achievement of the objectives set by the Commission in its White Paper on Artificial Intelligence (COM(2020)0065) is contingent on ensuring that citizens and businesses have broad access to high-quality public and industrial data, generated not only from the transport sector, but from all sectors connected to it, and the provision of intelligent infrastructure and vehicles for its safe collection and processing; believes that there is an urgent need to incentivise access to the data that is currently locked in the private sector, stresses the need to ensure the freedom of exchange and processing of raw, non-personal and anonymised data by public and private entities, in full compliance with the EUs' data and privacy acquis; stresses the need for legislative action to remove barriers to the exchange and re-use of data, although stresses that an adequate level of protection of personal data and of privacy must be ensured; calls on the Commission to assess the impact the vast deployment of energy intensive data infrastructure (i.e. data centres and server farms) can have on the environment with the objective of promoting their sustainable deployment in line with the Green Deal;
14. Welcomes the Commission communication of 19 February 2020 on a European strategy for data (COM(2020)0066) and its proposal for a Regulation on European data governance (COM/2020/0767); stresses the need to create a genuine single market for data and specifically a European common mobility data space, which by enabling B2B, B2G and G2B data sharing, can, inter alia, facilitate access for and use of data by transport and travel micro, small and medium-sized enterprises and start-ups, without prejudice to data protection legislation; underlines the fact that access to data is of crucial importance for the development of AI technology, which will be increasingly important in the transport and tourism sectors; stresses, therefore, that researchers and businesses, especially SMEs, need to be given greater freedom to access and use data for AI development in order to be able to develop and deploy quality AI technologies; stresses that Europe needs a high-quality and cyber-secure digital infrastructure, as well as higher quality and better access to data, which is in line with the provisions laid down in the Charter of Fundamental Rights of the European Union and the General Data Protection Regulation<sup>4</sup> (GDPR);
15. Stresses the importance of incentivising voluntary data sharing and access, which will benefit the development of AI data centres that have an open and transparent European cloud infrastructure (e.g. Gaia-X) and the processing of data generated in network traffic; notes that this infrastructure should be based on the principles of portability, interoperability and encryption; emphasises that there needs to be better coordination with and between European companies to develop market-relevant technical standards that promote interoperability and technology transfer while boosting competition; believes that European standardisation organisations should lead the way and help

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<sup>4</sup> Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC, OJ L 119, 4.5.2016, p. 1.

identify gaps in international standards; highlights the fact that the single market freedoms constitute the main potential for increased digital competitiveness and innovation in Europe and, therefore, that any fragmentation and any unwarranted border barriers to data flows, collaborative research and exports of digital goods and services between the Member States must be immediately eliminated so as to ensure that society reaps the full benefits of the single market;

16. Notes that the increased connectivity and automation of transport will increasingly expose the sector to cyber threats and crime; highlights, in this regard, the fact that transport represents a critical infrastructure and that, as this sector becomes more digital, it should develop a solid culture focused on cybersecurity; stresses that such a culture needs to integrate, under the European Union Agency for Cybersecurity's supervision, cybersecurity systems relevant to each sector, but that all share the same overarching framework in an effort to enhance sharing of information and improve coordinated prevention and response to common threats; stresses the need to develop cyber skills in the EU and to maintain the 'cybersecurity by design' approach, in order to ensure the deployment of safe, resilient and robust AI-enabled and automated systems for both infrastructure and vehicles;
17. Calls on the Member States to correctly implement the Network and Information Security Directive<sup>5</sup> and on the Commission to supervise the process; welcomes the upcoming review of the directive, since it intends to improve the cyber resilience of transport infrastructure and respond more effectively to cyberattacks; stresses the need for full access to vehicle-specific data and software information for authorised inspection and approval organisations in an effort to detect tampering, manipulations and to ensure cybersecurity of vehicles; calls for the full respect of rules set by the EU data protection and privacy framework, including the e-Privacy Directive<sup>6</sup> and GDPR;
18. Stresses that the dynamic development of innovative digital services and business models in the transport and tourism sectors will not be possible without free-of-charge and unrestricted access to public data falling within the scope of spatial information infrastructure, such as geodetic and cartographic data, terrain models, orthophoto maps, data on the geometry of buildings and topographic objects used in mapping; stresses that the release of such a large amount of spatial data will have a very positive impact on the use of this data by European entrepreneurs operating in the new technology sector; calls on the Commission to create a system of incentives for the Member States to support the process of opening geodetic data resources and making them available free of charge;
19. Recognises the ambition to make the EU a world leader in the development and application of AI in the transport and tourism sectors and underlines the fact that the EU should position itself as a global leader in the development of a clear, effective, human-centric, uniform ethical and legal norms and standards for data sharing and the use of AI in the transport sector, potentially setting standards for the rest of the world; notes that a

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<sup>5</sup> Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union, OJ L 194, 19.7.2016, p. 1.

<sup>6</sup> Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications), OJ L 201, 31.7.2002, p.37.

fragmented digital traffic-data market in the EU, which runs counter to digital innovation, must be avoided;

20. Draws attention to the legal unpredictability faced by AI technology developers due to the evolving regulatory and institutional framework on issues relating to AI at EU level; asks, therefore, the European Data Protection Board to submit guidance for standardised data-usage procedures, including a list of criteria for effective anonymisation, in order to increase legal predictability for AI technology developers in the transport and tourism sectors in accordance with personal data protection rules; considers that the national authorities should follow that EU guidance when exercising their public authority, as a way of ensuring consistent regulatory compliance and removing obstacles to the functioning of the digital single market;
21. Stresses that the digitisation of transport will be an essential driver in its decarbonisation processes, thus contributing to the achievement of the EU net zero 2050 emission objectives; underlines the fact that the application of digital solutions to all modes of transport and infrastructure can decrease emissions through the deployment of connected mobility, the electrification of fleets, efficient management of logistics, and speed control;
22. Underlines that there is the risk of renewed bias and discrimination if AI is fed raw and dirty data; stresses that any decision taken in connection with the provision of a service must be validated by a human being, with AI being used to support that decision;
23. Notes the considerable potential of the European transport and tourism micro, small and medium-sized enterprises and start-ups operating in the digital single market; stresses the need for sufficient financial and organisational support, for innovation and to improve the digital skills of employees in this sector; highlights the fact that the regulatory and financial environment should enable the establishment and growth of AI start-up and joint ventures in Europe; stresses that the EU should make use of the tools at its disposal to screen foreign investments and prevent predatory acquisitions, thus enabling European companies to scale up and compete on the global market;
24. Stresses that limited competition in the market for digital services in transport and tourism sectors creates significant barriers for SMEs; notes that SMEs are hardest hit by opaque bureaucracy and excessive administrative obstacles; underlines, therefore, the fact that legislation needs to be simplified and clarified in order to promote the development and use of digital technologies, in particular AI, by SMEs and that it needs to take into account the differences in market positions of operators in the single market; highlights the fact that a transport specific data framework should be focused on boosting economic growth through the access of vast data sets, in particular for SMEs, which would help the EU's transport and tourism sectors to take advantage of the opportunities presented by today's market, consequently improving transport safety, protecting privacy and enhancing competitiveness;
25. Highlights the role of standard-essential patents in the full and successful deployment of AI technologies in the transport sector; calls on the Commission to review the EU's current legal framework on intellectual property rights in order to ensure adequate legal protection, fair and non-discriminatory licencing practices, while taking into account the peculiarities of research and development (R&D) when it comes to AI technologies;



26. Calls for incentives that give SMEs operating in the transport and tourism sectors access to non-personal data produced by other private stakeholders in a voluntary and mutually benefiting process;
27. Recalls that the EU is the main destination for tourism worldwide; stresses the need to facilitate the recovery of the sector in a sustainable manner; highlights the paramount role that digitalisation, AI and robotics will play in relaunching the sector, thus contributing to the sustainability of the industry in the long-run; notes that adequate funding and incentives for tourism establishments is required, particularly for micro, small and medium-sized enterprises, in order to enable them to reap the benefits of digitalisation and modernise their offer to consumers;
28. Calls on the Commission and the Member States to set up technology incubators and accelerators to provide support and enable the emergence and growth of new innovative tourism enterprises that make use of such technologies and to promote EU digital leadership in sustainable tourism through R&D, joint ventures and public private partnerships on issues such as crowd management, mobility and contactless services, and the valorisation of local SMEs involved in the tourism supply chain;
29. Stresses that the large-scale deployment of 5G networks will offer completely new job opportunities for the transport sector and will lead to a significant increase in productivity for European economies; underlines, however, that with the rapidly changing nature of the job market, certain jobs could become obsolete, making it essential to reskill and upskill employees working in these sectors, in terms of both their basic and advanced digital skills; calls on the Commission and the Member States to ensure dedicated means for the reskilling and upskilling of employees without digital skills; stresses the importance of guaranteeing the respect and enforcement of worker's rights in such an evolving work environment;
30. Is of the opinion that achieving digital leadership will depend on the EU producing and fostering digital talent and developing EU know-how; underlines in this regard the opportunities provided by European programmes, such as the upcoming Digital Europe Programme; urges the Member States to invest in education and provide students from an early age with the basic skills necessary to direct them towards Science, Technology, Engineering, and Math (STEM) careers;
31. Regrets the fact that the gender gap in STEM careers and studies still persists and calls on the Commission and the Member States to further develop mechanisms to achieve gender balance in this field; underlines the fact that bridging this gap is beneficial for the digitalisation of the transport sector as well; notes the positive long-term implications for European competitiveness and resilience in enhancing digital skills and cybersecurity expertise in European SMEs;
32. Stresses the huge potential of technological innovations and AI to adapt transport modes for people with disabilities, allowing for a more inclusive and accessible mobility for everyone; welcomes the fact that AI can further increase the participation of people with disabilities in the labour market;
33. Underlines the fact that technological developments in the field of transport and mobility, in particular AI applications and autonomous vehicles, offer great potential when it comes to simplifying the daily lives of people and businesses and providing

safer, more efficient and more affordable transport solutions; calls for a sound industrial policy, which is based on the digital and environmental transition, that is intended to develop an underlying EU infrastructural, logistical, computational and digital capacity, since it would help the EU achieve digital leadership in all sectors; urges the Union to secure its transport supply chain, through the diversification of supply and by increasing the EU's strategic autonomy for materials and services, as the interruption of the latter could have a negative impact on public health and security; calls on the Commission to take into consideration these elements in any update of the EU's industrial strategy;

34. Stresses that an innovative and competitive data economy is built on openness and interoperability; points out that transparency and fair business practices in transport and tourism platforms, specifically on AI-powered algorithms affecting service, pricing and advertising, is essential in order to ensure consumer protection and trust, as well as to foster a competitive environment.

## INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

<b>Date adopted</b>	25.2.2021
<b>Result of final vote</b>	+: 41 -: 1 0: 7
<b>Members present for the final vote</b>	Magdalena Adamowicz, Andris Ameriks, José Ramón Bauzá Díaz, Izaskun Bilbao Barandica, Marco Campomenosi, Massimo Casanova, Ciarán Cuffe, Jakop G. Dalunde, Andor Deli, Karima Delli, Anna Deparnay-Grunenberg, Ismail Ertug, Gheorghe Falcă, Giuseppe Ferrandino, João Ferreira, Mario Furore, Søren Gade, Isabel García Muñoz, Jens Gieseke, Elsi Katainen, Elena Kountoura, Julie Lechanteux, Bogusław Liberadzki, Peter Lundgren, Benoît Lutgen, Elżbieta Katarzyna Łukacijewska, Marian-Jean Marinescu, Tilly Metz, Giuseppe Milazzo, Cláudia Monteiro de Aguiar, Caroline Nagtegaal, Jan-Christoph Oetjen, Philippe Olivier, Rovana Plumb, Dominique Riquet, Dorien Rookmaker, Massimiliano Salini, Sven Schulze, Vera Tax, Barbara Thaler, István Ujhelyi, Petar Vitanov, Elissavet Vozenberg-Vrionidi, Lucia Vuolo, Roberts Zile, Kosma Złotowski
<b>Substitutes present for the final vote</b>	Clare Daly, Carlo Fidanza, Marianne Vind

## FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

41	+
ECR	Carlo Fidanza, Roberts Zīle, Kosma Złotowski
ID	Marco Campomenosi, Massimo Casanova, Julie Lechanteux, Philippe Olivier, Lucia Vuolo
PPE	Magdalena Adamowicz, Andor Deli, Gheorghe Falcă, Jens Gieseke, Elżbieta Katarzyna Łukacjewska, Benoît Lutgen, Marian-Jean Marinescu, Giuseppe Milazzo, Cláudia Monteiro de Aguiar, Massimiliano Salini, Sven Schulze, Barbara Thaler, Elissavet Vozemberg-Vrionidi
Renew	José Ramón Bauzá Díaz, Izaskun Bilbao Barandica, Søren Gade, Elsi Katainen, Caroline Nagtegaal, Jan-Christoph Oetjen, Dominique Riquet
S&D	Andris Ameriks, Ismail Ertug, Giuseppe Ferrandino, Isabel García Muñoz, Bogusław Liberadzki, Rovana Plumb, Vera Tax, István Ujhelyi, Marianne Vind, Petar Vitanov
The Left	Clare Daly, João Ferreira, Elena Kountoura

1	-
NI	Dorien Rookmaker

7	0
ECR	Peter Lundgren
NI	Mario Furore
Verts/ALE	Ciarán Cuffé, Jakop G. Dalunde, Karima Delli, Anna Deparnay-Grunenberg, Tilly Metz

Key to symbols:

+ : in favour

- : against

0 : abstention

16.3.2021

## **OPINION OF THE COMMITTEE ON CULTURE AND EDUCATION**

for the Committee on the Internal Market and Consumer Protection

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers (2020/2216(INI))

Rapporteur for opinion (\*): Sabine Verheyen

(\*) Associated committee – Rule 57 of the Rules of Procedure

### **SUGGESTIONS**

The Committee on Culture and Education calls on the Committee on the Internal Market and Consumer Protection, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

1. Recalls that AI should be developed, deployed and used by design in a fair and ethical manner, with a human-centric approach and in full compliance with Union values and principles, human rights, freedom of expression and information, the right to privacy, data protection, non-discrimination, media freedom and pluralism and cultural diversity; underlines that the legal framework on AI requires strict consideration of fundamental rights, ethical aspects and legal safeguards in order to protect our democratic societies and citizens as users and consumers of AI systems; emphasises that transparency and independent oversight are crucial in order to reduce bias and avoid all forms of discrimination or abuse as well as to ensure the rule of law;
2. Recalls that in order to be ethical, AI must be developed, deployed and used in a sustainable and socially responsible manner, following a gender equality strategy, respecting cultural diversity, promoting digital literacy, closing the digital gap and safeguarding intellectual property rights;
3. Stresses the crucial importance of a coherent vision and strategy at Union level in order to achieve a genuine digital single market within an AI-powered society that would fully benefit users; reiterates the importance of raising awareness about AI and of reinforcing the level of AI literacy; emphasises the need to offer learning and training opportunities in order to enable European society to gain basic digital skills as well as an understanding of the use, and potential risks of AI, with a view to using those technologies to their full advantage and empowering citizens to fully participate in the digital single market and society; reiterates, in this regard, its view that AI and robotics

innovation needs to be integrated in education plans, as highlighted in the recently adopted Digital Education Action Plan; reiterates its call on the Commission and the Member States to ensure the smooth implementation and assessment of this Plan;

4. Underlines that the digital transformation affects the field of education, which is about to undergo its most substantial change since the introduction of compulsory education; stresses that, according to some estimates, 65 % of children entering primary school today will ultimately end up working in new job types that do not yet exist; highlights that digital literacy is an essential skill and that there is a need to ensure equal access to these skills as well as to digital equipment, as has been highlighted by the COVID-19-related challenge of remote teaching and learning; reiterates its call on the Commission and the Member States to diligently address discrepancies created by the digital gap in access to information, education and jobs, including through adequate investments in infrastructure, equipment and resources;
5. Underlines the need for AI to be made widely available to the cultural and creative sectors and industries (CCSI) across Europe in order to maintain a level playing field and fair competition for all stakeholders and actors in Europe;
6. Emphasises the potential of AI technologies for the CCSI, from better audience management, outreach and engagement to assisted content curation, the revalorisation of cultural archives, as well as assisted fact-checking and data journalism; stresses further the potential of AI-based solutions such as text-to-speech and speech-to-text, and automated subtitling and translation to enhance access to culture, information and education for people with disabilities, including visually and hearing impaired people and other vulnerable groups; calls for the CCSI to be integrated as a policy priority in the field of AI at Union level and highlights that cooperation with those sectors could be invaluable in bringing AI innovation closer to the public and in finding creative solutions and possibilities for AI use;
7. Stresses that the Union should not fall further behind in the global AI race, especially in the commercial adoption and funding of AI; deplores the omission of culture from AI strategies and policy recommendations at both national and Union level; highlights that a better understanding of the risks and benefits of AI technologies will increase the societal demand for and therefore the development of these technologies; calls on the Member States, in this regard, to invest in awareness activities related to AI technologies; stresses the need to set up, in association with all the relevant stakeholders including small and medium-sized actors, a clear legal framework for ethical, sustainable and socially responsible AI that prioritises creativity and access to culture in order to bring the Union to the forefront of technological development, AI-driven innovation and value creation worldwide and to maximise its benefits, while assessing its potential risks for society;
8. Calls for the development, with Union and national funding, of training programmes in AI for teachers in all fields across Europe; recalls the special requirements of vocational education and training (VET) with regard to AI and calls for a collaborative approach at European level designed to enhance the potential offered by AI in VET across Europe;

9. Emphasises that the transposition of the Audiovisual Media Services Directive<sup>1</sup> (AVMSD) and the Copyright Directive<sup>2</sup> into national law is crucial to achieving a genuine digital single market that promotes cultural diversity; urges the Member States that have not yet done so to complete the transposition of these directives as soon as possible; stresses that the future Digital Services Act (DSA) and the Digital Markets Act (DMA), as well as Union data policies and any future regulation on AI, with particular regard to the CCSI, should be in line with the principles and obligations laid out in those directives;
10. Urges the Union to take steps to prevent or mitigate risks associated with the negative effects of AI and to set concrete and applicable baseline standards and rules, specifically in the sensitive area of AI systems in law enforcement, such as facial recognition software;
11. Highlights that the digital services sector is developing rapidly and therefore stresses the need to ensure that new regulations do not impede on the openness of its market; stresses that the principle of net neutrality must remain the cornerstone of the online sphere;
12. Believes that any AI framework should be based on transparency, explainability, when relevant, and accountability, and should uphold the rights and obligations laid down in the General Data Protection Regulation (GDPR), including data minimisation, purpose limitation and data protection by design and by default;
13. Points out that AI can be an effective tool in helping to enforce rules on online content, for example by identifying illegal or harmful content, disinformation or fake news, and can also be used to help implement the ‘notice and take down’ mechanism; stresses, however, that the use of AI, if not properly regulated, may pose challenges to fundamental rights, in particular freedom of expression, as well as access to information, cultural diversity and media pluralism; recalls, in this regard, the need for AI to respect fundamental rights and Union law when developed, deployed and used in the Union; emphasises that human intervention is necessary, as automated mechanisms that are used to enforce rules online cannot fully assess context, may lead to false positives and can inhibit legitimate and fair activity; stresses that any use of AI must strictly adhere to the principle of transparency and have clear rules for accountability, with an effective appeal mechanism guaranteed; points out that the digital single market should be driven by the principle that ‘what is illegal offline is also illegal online’; stresses, equally, that what is legal offline should remain legal online, with particular regard to fundamental freedoms such as freedom of expression;
14. Recalls that Article 13 of Charter of Fundamental Rights of the European Union (the Charter) on freedom of the arts and sciences states that the arts and scientific research must be free of constraint and that academic freedom must be respected; draws attention

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<sup>1</sup> Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities, OJ L 303, 28.11.2018, p. 69.

<sup>2</sup> Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC, OJ L 130, 17.5.2019, p. 92.

to the violations of artistic freedoms in Europe summarised in the report by Freemuse entitled ‘The State of Artistic Freedom 2020’;

15. Insists that comprehensive information that is understandable to the user be provided concerning when AI is used, how it works and how decisions based on its use can be challenged; points out, furthermore, that AI-delivered results, per se, should serve only as a pointer, but never as hard evidence;
16. Notes that large platforms have acquired a huge amount of data and replaced services in a diverse and decentralised system with open standards with ‘walled gardens’, locking in users; stresses that as a consequence, some markets are characterised by large platforms with significant network effects, which are able to act as de facto online gatekeepers of the digital economy; considers that it is necessary, therefore, to introduce additional obligations regarding data protection, transparency, user choice and interoperability in order to guarantee a level playing field and consumer welfare;
17. Stresses that the Union needs to strive for unified, unambiguous and up-to-date rules that do not hamper innovation in the internal market; calls, therefore, for a human-centric, balanced and careful approach to automated decision-making, one which is respectful and protective of fundamental rights and ethical considerations and in line with the applicable regulatory frameworks, such as the AVMSD, the Copyright Directive and the GDPR as well as the future DSA;
18. Recalls the urgent need for fairer competition for CCSI online services in Europe in order to counter the networking and concentration effects of the data market that tend to unfairly benefit large digital companies; welcomes, in that respect, the legislative proposals on the DSA and DMA, which should help to further shape the digital future of Europe;
19. Recalls that the Member States and the EU institutions have an obligation, under the Charter and the European Convention on Human Rights, to ensure that each person’s rights to privacy, data protection, free expression and assembly, non-discrimination, dignity and other fundamental rights are not unduly restricted by the use of new and emerging technologies;
20. Notes that the Union must pay attention to the way in which data is stored and processed; stresses that the integrity of data must also be protected and that the way in which data is interpreted by AI must not lead to oppression or discrimination;
21. Highlights that for the European digital market to flourish and to enable effective and ethical AI, vast amounts of quality, compatible data are needed; emphasises the importance of designing any future AI policy framework in such a way as to ensure high levels of protection and control of personal data, which must be processed fairly, in a non-discriminatory manner and on the basis of the consent of the person concerned, while upholding all data protection and privacy rules; recalls that any automated algorithmic decision-making must be transparent and accountable, with due respect for the rights and responsibilities of all relevant actors, in order to avoid flawed interpretation of data;
22. Stresses that in order for the Union to become a leader in the use of AI-related technologies that respect ethical standards and fundamental rights, and to remain



competitive in the global digital market and benefit from its full potential, the Union has to build up its capacities, including through the European Institute of Innovation and Technology (EIT), by encouraging more people to pursue careers in ICT-related sectors, for example by training more data professionals in the field of AI, as well as professionals in connected new domains such as AI-investing and AI safety; calls for stronger support, with this aim in mind, for the creation and strengthening of networks focused on AI, while continuing to explore the possibility of creating pan-European university and research networks focused on AI; emphasises that the lack of data specialists and professionals may, among other issues, lead to flawed interpretation of data, which can create biases and skewed results;

## INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

<b>Date adopted</b>	15.3.2021
<b>Result of final vote</b>	+: 29 -: 0 0: 0
<b>Members present for the final vote</b>	Asim Ademov, Isabella Adinolfi, Christine Anderson, Ilana Cicurel, Gilbert Collard, Gianantonio Da Re, Laurence Farreng, Tomasz Frankowski, Hannes Heide, Irena Joveva, Petra Kammerevert, Niyazi Kizilyürek, Ryszard Antoni Legutko, Predrag Fred Matić, Dace Melbārde, Victor Negrescu, Niklas Nienaaß, Peter Pollák, Marcos Ros Sempere, Domènec Ruiz Devesa, Monica Semedo, Andrey Slabakov, Massimiliano Smeriglio, Michaela Šojdrová, Sabine Verheyen, Theodoros Zagorakis, Milan Zver
<b>Substitutes present for the final vote</b>	Christian Ehler, Marcel Kolaja

## FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

<b>29</b>	<b>+</b>
ECR	Ryszard Antoni Legutko, Dace Melbārde, Andrey Slabakov
ID	Christine Anderson, Gilbert Collard, Gianantonio Da Re
NI	Isabella Adinolfi
PPE	Asim Ademov, Christian Ehler, Tomasz Frankowski, Peter Pollák, Michaela Šojdrová, Sabine Verheyen, Theodoros Zagorakis, Milan Zver
Renew	Ilana Cicurel, Laurence Farreng, Irena Joveva, Monica Semedo
S&D	Hannes Heide, Petra Kammerevert, Predrag Fred Matić, Victor Negrescu, Marcos Ros Sempere, Domènec Ruiz Devesa, Massimiliano Smeriglio
The Left	Niyazi Kizilyürek
Verts/ALE	Marcel Kolaja, Niklas Nienaaß

<b>0</b>	<b>-</b>
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<b>0</b>	<b>0</b>

Key to symbols:

+ : in favour

- : against

0 : abstention

25.2.2021

## OPINION OF THE COMMITTEE ON LEGAL AFFAIRS

for the Committee on the Internal Market and Consumer Protection

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers  
(2020/2216(INI))

Rapporteur for opinion (\*): Marion Walsmann

(\* ) Associated committee – Rule 57 of the Rules of Procedure

### SUGGESTIONS

The Committee on Legal Affairs calls on the Committee on the Internal Market and Consumer Protection, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

#### *General*

1. Stresses the importance of a fully functioning digital single market and the positive impact that the use of AI, robotics and related technologies can have on our markets and society, since they have the potential to effectively tackle the challenges societies face, as demonstrated in particular during the COVID-19 pandemic; considers, however, that socio-economic, legal and ethical impacts have to be carefully addressed in line with EU values in order to establish legal clarity for consumers and businesses;
2. Maintains that SMEs, start-ups and scale-ups need to be supported in their digital transformation as they are the backbone of Europe's economy and play an important role in the uptake of new technologies in Europe; calls on the Commission to pursue a proportionate approach to enable such companies to develop and innovate, including specific measures for the digitalisation of SMEs and start-ups in future legislation, to pursue a fitness check for SMEs before introducing legislation and to keep administrative burdens and obstacles to a minimum by, inter alia, taking into account their position at every step of the digital transformation, developing fair and effective standards, removing unnecessary legal barriers to access to data and improving cross-border access to digital content, while at the same time achieving the underlying policy objectives;
3. Highlights that SMEs face many challenges in the digital market, since many of their owners are not aware of the value of the data they create, lack the tools required to

process them and are not sufficiently prepared to operate in a digital economy, and that true access to justice for SMEs requires expertise in the area of law and technology, a combination that is scarce and expensive; calls on the Commission, therefore, to integrate the promotion of legal technological expertise in Europe into its digital skills strategy, underlines the need to increase investments and welcomes the launch of new financing instruments to support artificial intelligence companies across Europe, including SMEs and start-ups;

4. Points out that the digital single market and AI are developing rapidly and therefore highlights the importance of a flexible, future-proof, proportionate and harmonised European framework; urges the Commission to put forward proposals and initiatives based on the right balance which supports innovation and ensures consumer safety and protection, and thereby to avoid a one-size-fits-all approach on the one hand and the fragmentation of the digital single market through divergent national approaches, including unnecessary layers of sectoral barriers in the field of AI, on the other;

### *Improving the use of AI for European consumers*

5. Highlights that a new regulatory framework for AI is needed in order to deal with the potential risks of automated decision-making and to maximise the trust of and the benefit for users, while safeguarding the best interests of EU citizens and ensuring an adequate level of protection; invites the Commission, therefore, to present a thorough impact assessment which identifies legal gaps in existing laws, followed by a proposal for a risk-based, innovation-friendly, robust and future-proof legislative framework, inspired by a humanistic and human-centric approach, for the use of AI and automated decision-making systems that focuses on closing the legal gaps without prejudice to existing sector-specific legislation;
6. Is of the firm view that harmonised, future-proof definitions of ‘AI’ and ‘high-risk’ are crucial to providing legal clarity to consumers and businesses, including for the purposes of pursuing claims in connection with a malfunction or accident and within the framework of a risk-based approach; recalls that this approach should take into account the potential of these technologies to breach fundamental rights and to cause prejudice or harm to individuals or society as a whole, and recalls the need for full human oversight of the development, deployment and use of high-risk AI applications at all times;
7. Considers that the lack of clear European rules on the attribution of liability in the event of a malfunction or accident caused by AI applications is one of the key barriers to the implementation of AI-based technologies for widespread use and is therefore convinced that existing legislation needs to be modernised in line with technological developments, among which those enabled by AI; urges the Commission to update inter alia the Product Liability Directive<sup>1</sup>, in particular by redefining the terms ‘product’, ‘damage’ and ‘defect’ and considering adjustments to the concept of ‘burden of proof’, which should mirror the modifications to the General Product Safety Directive<sup>2</sup>, and by proposing a liability framework for AI operators based on the results of the impact assessment that takes account of the vulnerability of AI users and consumers by

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<sup>1</sup> OJ L 210, 7.8.1985, p. 29.

<sup>2</sup> OJ L 11, 15.1.2002, p. 4.

guaranteeing their effective protection, ensures fair compensation to victims when damage occurs and is based on the proportion of control the operator holds over the risk of the operation, taking into account the development and deployment phases; underlines that the update of the legislation should be in line with the corresponding recommendations of the European Parliament;

8. Outlines that society, including consumers, should benefit from the responsible development, deployment and use of AI technologies that benefit citizens, generate opportunities for businesses and serve the good of society; asks the Commission, therefore, to define clear ethical norms for the development, deployment and use of AI, robotics and related technologies that fully respect fundamental rights and guarantee human dignity, fairness, safety, security, transparency, good governance and consumer protection rights, taking into account the principles of better regulation, and calls on the Commission to work closely with the Member States on the implementation and enforcement of ethical principles, to develop guidelines and to involve citizens and relevant stakeholders;
9. Underlines that, for the training of AI, the free flow of data within the functioning digital single market in line with applicable legislation such as the General Data Protection Regulation (GDPR)<sup>3</sup> is essential and that this should be underpinned by a solid underlying legal framework which promotes trust among businesses and includes, where necessary, appropriate, non-discriminatory and fair contractual rules addressing existing power or market imbalances, ensuring a consumer-friendly approach to data access and control, and limiting unnecessary barriers to the availability of data in line with European data protection rules, including, under appropriate conditions, data generated in connection with the provision of services of general interest in accordance with applicable Union law; welcomes the Commission's commitment to building a genuine European single market for data, allowing businesses to start up and scale up, to innovate and to compete or cooperate on fair terms;
10. Recalls the global dimension of the opportunities implicit in AI technologies and underlines that the EU should position itself as a global leader in the development of AI; calls on the Commission to promote consistent international cooperation with like-minded countries that contributes to creating synergies on AI between European entities and other multilateral forums, so as to align efforts and better coordinate the development of AI; urges the Commission to support multilateral efforts to discuss international standardisation processes in relevant forums in order to guide the development, deployment and use of AI; takes note, in this respect, of the ambition to introduce a global digital cooperation strategy and a transatlantic AI agreement;

### ***Functioning of the single market as regards digital elements***

11. Highlights that citizens, as users and consumers, should always be informed in a timely and intelligible manner about the existence of algorithmic systems and that they are already benefiting from strong data protection rules such as the GDPR and ePrivacy Directive<sup>4</sup>; calls for the swift adoption of a strong ePrivacy Regulation and the efficient enforcement of the GDPR and its principles, including privacy by design and by default;

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<sup>3</sup> OJ L 119, 4.5.2016, p. 1.

<sup>4</sup> OJ L 201, 31.7.2002, p. 37.

appreciates that the Commission foresees measures to empower individuals to exercise their rights and that it encourages consumer-centric systems based on fair and non-discriminatory practices, allowing consumers to have control over their choices by always safeguarding their consent, their right to have explanations and, where possible, their right to use a connected device and all its functions, even if consumers withdraw their consent to share data with the device manufacturer or third parties;

12. Asks the Commission to ensure that users and consumers are properly informed and that their rights are clearly defined and effectively guaranteed when AI systems personalise a product or service for its users and when they interact with automated decision-making systems or are subjected to autonomous processes and decisions, and that automatic decision-making systems do not harm consumers or generate subjective, unfair, unreasonable or illegitimate biased or discriminatory outputs for consumers in the single market;
13. Points out that the use of self-learning algorithms enables businesses to gain a comprehensive insight into consumer's personal circumstances and behaviour patterns, allowing them to tailor their advertising, and highlights the need to ensure a strong protection of the rights of users in the Digital Services Act (DSA), particularly in order to protect, inter alia, the freedom of expression and information and the freedom to provide services, and to protect users from harmful business practices based on non-consensual targeting or the exploitation of data; reiterates the need for transparency in contractual terms, allowing the user to make an informed choice, and conditions for the possibility and scope of data sharing with third parties;
14. Stresses the need to guarantee greater transparency in the consumer-related rules of internet platforms, as well as their compliance with European consumer protection standards, and that it is unacceptable that consumers are exposed to unsafe and counterfeit products; highlights, therefore, that clear responsibilities for online marketplaces based on the principle of proportionality are needed to reinforce the digital single market; outlines that the responsibility of content-hosting platforms for goods sold or advertised on them should be clarified in the DSA in order for the consumer safeguards, which should be observed at all times, and the concomitant redress measures for retailers and consumers to be considered in place, by inter alia closing the legal gap in which the buyers failed to obtain the satisfaction to which they are entitled according to the law or the contract for the supply of goods for example because of the inability to identify the primary seller ('know your customer' business principle); proposes consideration of the option of requiring digital service providers from third countries that provide their services in the EU to establish a representative within the Union;
15. Calls on the Commission to assess the development and use of distributed ledger technologies including blockchain, namely smart contracts in the digital single market, and to provide guidance and consider developing an appropriate legal framework in order to ensure legal certainty for businesses and consumers, in particular the question of legality, the enforcement of smart contracts in cross-border situations, and notarisational requirements where applicable;
16. Acknowledges that market imbalances exist in relation to digital businesses, since large platforms with significant network effects resulting from, for example, the data they

possess could impose their business practices on consumers and customers and therefore act as de facto ‘online gatekeepers’ of the digital economy, which creates significant barriers and unfair competition that has a disproportionate impact on SMEs; urges the Commission to introduce measures to protect the rights of consumers, start-ups and SMEs by restoring the level playing field in the internal market and through clear obligations for interoperability.



## INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

<b>Date adopted</b>	22.2.2021
<b>Result of final vote</b>	+: 24 -: 0 0: 0
<b>Members present for the final vote</b>	Manon Aubry, Gunnar Beck, Geoffroy Didier, Pascal Durand, Angel Dzhambazki, Ibán García Del Blanco, Jean-Paul Garraud, Esteban González Pons, Mislav Kolakušić, Gilles Lebreton, Karen Melchior, Jiří Pospíšil, Franco Roberti, Marcos Ros Sempere, Ernő Schaller-Baross, Stéphane Séjourné, Raffaele Stancanelli, Marie Toussaint, Adrián Vázquez Lázara, Axel Voss, Marion Walsmann, Tiemo Wölken, Lara Wolters, Javier Zarzalejos
<b>Substitutes present for the final vote</b>	Andrzej Halicki, Javier Nart, Emil Radev

## FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

<b>24</b>	<b>+</b>
EPP	Geoffroy Didier, Esteban González Pons, Jiří Pospíšil, Ernő Schaller-Baross, Axel Voss, Marion Walsmann, Juan Ignacio Zoido Álvarez
S&D	Ibán García Del Blanco, Franco Roberti, Marcos Ros Sempere, Tiemo Wölken, Lara Wolters
RENEW	Pascal Durand, Karen Melchior, Stéphane Séjourné, Adrián Vázquez Lázara
ID	Gunnar Beck, Jean-Paul Garraud, Gilles Lebreton
VERTS/ALE	Marie Toussaint
ECR	Angel Dzhambazki, Raffaele Stancanelli
GUE/NGL	Manon Aubry
NI	Mislav Kolakušić

<b>0</b>	<b>-</b>

<b>0</b>	<b>0</b>

Key to symbols:

+ : in favour

- : against

0 : abstention

15.2.2021

## **OPINION OF THE COMMITTEE ON CIVIL LIBERTIES, JUSTICE AND HOME AFFAIRS**

for the Committee on the Internal Market and Consumer Protection

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers  
(2020/2216(INI))

Rapporteur for opinion: Annalisa Tardino

(\* ) Associated committee – Rule 57 of the Rules of Procedure

### **SUGGESTIONS**

The Committee on Civil Liberties, Justice and Home Affairs calls on the Committee on the Internal Market and Consumer Protection, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

- A. whereas artificial intelligence (AI) technologies are being developed rapidly and being used in many sectors, presenting huge opportunities for the Member States, their citizens and the European economy;
- B. whereas, in the light of the crisis caused by the coronavirus and the considerable impact it has had on our lives in terms of increasing the use of digital tools, the need to create a trustworthy and secure framework for the application of AI is all the more urgent;
- C. whereas the use of AI also poses risks and raises concerns regarding the ethics, scope and transparency of the collection, use and dissemination of personal data;
- D. whereas the current EU legal framework, including on consumer protection, and product safety and liability rules are not always fit for effectively addressing the risks created by AI, robotics and related technologies;
  1. Stresses the need to build a trustworthy and secure framework for the application of AI that builds on existing legislation; believes that the application of AI within the Union and the associated use of EU citizens' personal data should respect our values and fundamental rights as recognised by the EU Charter of Fundamental Rights, such as human dignity, privacy, data protection and security;
  2. Highlights the importance of developing an AI environment capable of maximising the opportunities and minimising the risks of AI technologies, and above all of preventing their use for malicious purposes; stresses that in order to avoid legal uncertainty this

framework should clearly determine appropriate liability, accountability, security and traceability regimes;

3. Underlines the fact that since AI, by definition, encapsulates data processing, it must respect EU law on data protection, in particular the General Data Protection Regulation (GDPR);
4. Recalls that AI may give rise to biases and thus to various forms of discrimination based on sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation; recalls, in this regard, that everyone's rights must be fully protected, and that AI initiatives must not be discriminatory in any way;
5. Emphasises that such bias and discrimination can arise from already biased data sets, reflecting current discrimination in society; stresses that AI must avoid bias leading to prohibited discrimination, and must not reproduce discrimination processes; underlines the need to take these risks into account when designing AI technologies, as well as the importance of working with AI technology providers to address persistent loopholes facilitating discrimination; recommends that teams designing and developing AI should reflect the diversity of society;
6. Stresses that safeguarding the integrity and security of networks of interconnected AI and robotics is paramount, and that robust measures must be taken to ensure resilience against attacks and prevent security breaches, data leaks, data poisoning, cyberattacks and the misuse of personal data;
7. Reiterates the importance of providing independent public data protection authorities with the necessary resources to allow them to monitor and effectively enforce compliance with data protection law;
8. Highlights the importance of algorithms being transparent in order to fully protect fundamental rights; underlines the need for legislators, given the major ethical and legal implications, to consider the complex issue of liability, in particular for damages to persons and property, and that liability in all AI applications should always lie with a natural or legal person;
9. Notes that AI is often used to enable automated decision-making algorithms to disseminate and order the content displayed to users; stresses that these algorithms are a 'black box' for users; calls on the Commission to propose recommendations to increase user control over the content they see, and to require AI applications and internet platforms to give users the possibility to choose to have content displayed in a neutral order, in order to give them more control on the way content is ranked for them, including options for ranking outside their ordinary content consumption habits, and for completely opting out from any content curation;
10. Stresses that the development of AI systems must respect the principles of transparency and accountability, and allow for human understanding of the actions and decisions determined by the AI technology; underlines the importance of ensuring a human-centric approach when developing the regulatory framework for AI technologies to guarantee respect for fundamental rights; stresses, in this regard, that users must be aware of how their data is used, and of when they are communicating or interacting with

an AI system in order to build consumers' awareness, trust and confidence in new technologies;

11. Recalls that the GDPR includes a right to be informed about the logic involved in data processing;
12. Recalls that, according to Article 22 of the GDPR, individuals have the right to human intervention when a decision based on automated processing significantly affects them.

## INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

<b>Date adopted</b>	4.2.2021
<b>Result of final vote</b>	+: 48 -: 1 0: 4
<b>Members present for the final vote</b>	Magdalena Adamowicz, Malik Azmani, Fernando Barrena Arza, Nicolas Bay, Vladimír Bilčík, Vasile Blaga, Ioan-Rareş Bogdan, Patrick Breyer, Saskia Bricmont, Joachim Stanisław Brudziński, Jorge Buxadé Villalba, Damien Carême, Clare Daly, Marcel de Graaff, Anna Júlia Donáth, Lena Düpont, Cornelia Ernst, Nicolaus Fest, Jean-Paul Garraud, Andrzej Halicki, Balázs Hidvéghi, Sophia in 't Veld, Patryk Jaki, Lívia Járóka, Assita Kanko, Peter Kofod, Moritz Körner, Alice Kuhnke, Jeroen Lenaers, Lukas Mandl, Nuno Melo, Roberta Metsola, Nadine Morano, Maite Pagazaurtundúa, Nicola Procaccini, Emil Radev, Paulo Rangel, Terry Reintke, Diana Riba i Giner, Ralf Seekatz, Michal Šimečka, Tineke Strik, Ramona Strugariu, Annalisa Tardino, Dragoş Tudorache, Tom Vandendriessche, Jadwiga Wiśniewska, Javier Zarzalejos
<b>Substitutes present for the final vote</b>	Anne-Sophie Pelletier, Tomáš Zdechovský

## FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

48	+
ECR	Joachim Stanisław Brudziński, Jorge Buxadé Villalba, Patryk Jaki, Assita Kanko, Nicola Procaccini, Jadwiga Wiśniewska
ID	Nicolas Bay, Nicolaus Fest, Jean-Paul Garraud, Peter Kofod, Annalisa Tardino, Tom Vandendriessche
NI	Laura Ferrara, Martin Sonneborn, Milan Uhrík
PPE	Magdalena Adamowicz, Vladimír Bilčík, Vasile Blaga, Ioan-Rareş Bogdan, Lena Düpont, Andrzej Halicki, Balázs Hidvéghi, Livia Járóka, Jeroen Lenaers, Lukas Mandl, Nuno Melo, Roberta Metsola, Nadine Morano, Emil Radev, Paulo Rangel, Ralf Seekatz, Javier Zarzalejos, Tomáš Zdechovský
RENEW	Malik Azmani, Anna Júlia Donáth, Sophia in 't Veld, Moritz Körner, Maite Pagazaurtundúa, Michal Šimečka, Ramona Strugariu, Dragoş Tudorache
VERTS/ALE	Patrick Breyer, Saskia Bricmont, Damien Carême, Alice Kuhnke, Terry Reintke, Diana Riba i Giner, Tineke Strik

1	-
ID	Marcel de Graaff

4	0
The LEFT	Pernando Barrena Arza, Clare Daly, Cornelia Ernst, Anne-Sophie Pelletier

### Key to symbols:

+ : in favour

- : against

0 : abstention

22.3.2021

## **OPINION OF THE COMMITTEE ON EMPLOYMENT AND SOCIAL AFFAIRS**

for the Committee on the Internal Market and Consumer Protection

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers  
(2020/2216(INI))

Rapporteur for opinion: Konstantinos Arvanitis

### **SUGGESTIONS**

The Committee on Employment and Social Affairs calls on the Committee on the Internal Market and Consumer Protection, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

- A. whereas the Fourth Industrial Revolution, digitalisation and artificial intelligence (AI) are leading to fundamental and structural changes in the labour market, the workplace, work patterns and the work profile of workers, as well as in consumer behaviour and the way people live in general; whereas these changes are expected to benefit citizens and society by improving quality of life and creating new employment opportunities and more sustainable business models, while also posing a number of risks and challenges that will require constant and dynamic evaluation and adaptation of the relevant legislative frameworks in accordance with EU rules and principles such as the European Pillar of Social Rights, the Charter of Fundamental Rights of the EU and the European Social Charter, as well as the High-Level Expert Group on AI's Ethics Guidelines for Trustworthy AI<sup>1</sup>;
- B. whereas new opportunities brought by the digital transformation and the digital single market should empower all EU citizens and enable them to prosper;
- C. whereas digitalisation and AI have the potential to substantially change the way people receive information, communicate and think;
- D. whereas in view of the considerable challenges posed by its synergies with the labour market, the education system should better anticipate the future needs of the labour market and be able to adapt accordingly;
- E. whereas AI has the potential to provide safer and more inclusive workplaces and labour

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<sup>1</sup> European Commission, 'Ethics guidelines for trustworthy AI', 8 April 2019.



markets;

- F. whereas AI and digitalisation plausibly facilitate human-machine synergies and offer economic and societal benefits as well as new opportunities for businesses and workers, while also giving rise to a number of ethical, legal and employment-related challenges; whereas the use of AI in the workplace can contribute to inclusive labour markets and improve occupational health and safety, while also serving to monitor, evaluate, predict and guide the performance of workers with direct and indirect consequences for their careers; whereas AI should have a positive impact on working conditions and be guided by respect for human rights and the fundamental rights and values of the Union; whereas AI should be human-centric, enhance the well-being of people and society and contribute to a fair and just transition; whereas this can enable social groups that were previously excluded, such as persons with disabilities, to have greater access to the workforce and whereas the risks associated with the disappearance of certain employment sectors should be balanced by creating new employment opportunities and more and better jobs than those that are lost;
- G. whereas on average, 16 % of workers in the EU fear that digitalisation will render their skills outdated<sup>2</sup>;
- H. whereas AI is a strategic priority whose full potential can only be realised if users and consumers are aware of the possible benefits and challenges it can bring; whereas there have been cases of AI being applied in breach of existing regulations, such as on data protection;
- I. whereas it is necessary to incorporate potential opportunities and risks into the education process, including for combating digital exclusion, and to conduct European information campaigns to provide an adequate understanding of the key features of all aspects of AI development;
- J. whereas technology-enabled surveillance, monitoring and control in the workplace<sup>3</sup> can exert undue pressure on employees to be quicker and more efficient and track their behavioural patterns;
- K. whereas enterprises, workers and workers' representatives are seldom aware of AI applications or their underlying functions and data;
- L. whereas in view of the growing demand for specific AI skills and high-level expertise in the labour market, all EU citizens need to have the requisite understanding of AI to be able to conduct their everyday lives;
- M. whereas today's rapid technological change is often accompanied by the spread of false information, hoaxes and misinterpretations that can undermine the positive aspects and opportunities of technological development;

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<sup>2</sup> Cedefop, 'Artificial or human intelligence? Digitalisation and the future of jobs and skills: opportunities and risks', p. 3.

<sup>3</sup> Such as prediction and flagging tools, remote monitoring and time-tracking and algorithmic management. See Mateescu, A., Nguyen, A., 'Explainer: Workplace Monitoring & Surveillance', *Data & Society*, 6 February 2019.

- N. whereas the General Data Protection Regulation (GDPR) (recital 71) recognises the right to not be subject to e-recruiting practices without human intervention;
- O. whereas the digital divide has specific socio-economic gender, age, geographic and accessibility aspects which must be addressed;
- P. whereas the COVID-19 pandemic has underlined the importance of digital solutions, including teleworking, in addition to its technical and social implications; whereas there are no common provisions at EU level as regards the application of AI in the workplace, which could lead to market distortions and competition disadvantages; whereas AI should be subject to an appropriate regulatory framework;
- Q. whereas the algorithmic management of work, workplaces and workers can create imbalances in power and opacity about decision-making and must be transparent in order for workers to challenge these decisions through effective procedures; whereas AI – including high-risk AI<sup>4</sup> – is increasingly used not only in the workplace, but also for other administrative processes; whereas simple and intelligible information should be provided regarding the use of AI in work-related processes, as an understanding of the basic features of algorithms is a pre-condition for ethical usage;
- R. whereas the Organisation for Economic Co-operation and Development (OECD) has drawn up recommendations on AI<sup>5</sup>;
- S. whereas under Article 22(1) of the GDPR, workers have the right not to be subject to a decision based solely on automated processing, which means that there must be human oversight;
- T. whereas human oversight and transparency are an essential element in ensuring that AI systems conform with the relevant legislation;
- U. whereas the Council encourages the promotion of an ethical and human-centred approach with regard to AI<sup>6</sup>;
- V. whereas European social partners have concluded a framework agreement on digitalisation, which includes a chapter on AI and guaranteeing the human in control principle<sup>7</sup>;
- W. whereas efforts to tackle gender bias and inequality in the digital sector are insufficient; whereas the gender gap persists across all digital technology domains, not least with regard to AI, thereby cementing a male-biased trajectory for the digital sector in the foreseeable future;
- X. whereas in its resolution of 17 December 2020 on a strong social Europe for Just Transitions<sup>8</sup>, the European Parliament called for the prohibition of the use of AI in

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<sup>4</sup> Commission white paper of 19 February 2020 entitled ‘Artificial Intelligence – a European approach to excellence and trust’ (COM(2020)0065), p. 18.

<sup>5</sup> OECD Legal Instruments, ‘Recommendation of the Council on Artificial Intelligence’, 22 May 2019.

<sup>6</sup> Council conclusions of 16 June 2020 on shaping Europe’s digital future, OJ C 202 I, 16.6.2020, p. 1.

<sup>7</sup> European Social Partners Framework Agreement on Digitalisation, June 2020.

<sup>8</sup> Texts adopted, P9\_TA(2020)0371.

recruitment processes;

1. Stresses the importance of a common European approach to the ethical aspects of AI; stresses the urgent need to apply the ethics-by-default principle as a leading principle for the design and use of AI; underlines that the EU's regulatory framework must ensure that AI is human-centric and that workers' human dignity and fundamental rights are fully respected in the digital economy; stresses, in addition, that the European AI framework<sup>9</sup> must respect EU rules and principles, such as the European Pillar of Social Rights;
2. Welcomes the positive impact that AI could have on European labour markets, including job creation, safer and more inclusive workplaces, the fight against discrimination in recruitment and pay, and the promotion of better skill-matching and workflows, provided that risks are mitigated and regulatory frameworks are updated regularly as the digital wave progresses;
3. Underlines that AI has to be human-centric, transparent, safe and secure and must comply with fundamental rights and applicable laws and regulations, including the GDPR, throughout the entire life cycle of the system, in particular when it is deployed in the workplace; calls for the development of a robust certification system based on test procedures and guided by the precautionary principle to enable businesses to demonstrate that their AI products comply with fundamental rights and EU standards;
4. Points out that the development, deployment and implementation of AI systems should be preceded by a comprehensive risk assessment to evaluate the impact on fundamental rights and working conditions, including in terms of occupational health and safety, as well as the social consequences; stresses that such assessments should cover risks related to human decision-making and social discrimination, as well as the evaluation of any occupational risks that may arise;
5. Underlines that competent authorities should have access to all the information concerning the data used for training, statistical models and theoretical principles related to AI solutions as well as the empirical validity of their outcomes;
6. Underlines that the digital transition must be better reflected in education and training systems and go hand-in-hand with improvements as regards democracy at work, good governance and good-quality public services;
7. Reiterates the importance of education and continuous learning to develop the qualifications necessary in the digital age and tackle digital exclusion; calls on the Member States to invest in high-quality, responsive and inclusive education, vocational training and lifelong learning systems, as well as reskilling and upskilling policies for workers in sectors that may be severely affected by AI; highlights the need to provide people with the necessary literacy, numeracy and digital skills as well as competences in science, technology, engineering and mathematics (STEM) and cross-cutting soft skills, such as critical thinking, creativity and entrepreneurship; underlines that special attention must be paid to the inclusion of disadvantaged groups in this regard;
8. Underlines that AI systems and algorithms must always be human-centric and serve

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<sup>9</sup> European Commission, 'Ethics guidelines for trustworthy AI', 8 April 2019.

above all as an aid to human development; stresses that AI should not be used to manipulate or undermine rational choice or behaviour or for undue surveillance;

9. Recognises the opportunities and challenges of the digital era and the wide-ranging impact of the digitalisation process on society, the economy and employment in the EU; stresses the need for a broad and democratic digital policy dialogue with citizens, social partners and other relevant stakeholders in order to develop principles, frameworks and instruments that address impacts on workers and society; underlines that new technologies including AI should foster a sustainable and inclusive labour market and help to improve skill-matching and fill vacant jobs;
10. Underlines that AI and any related legislation must in no way affect the exercise of fundamental rights as recognised in the Member States and at EU level, including the right or freedom to strike or to take other action covered by the Member States' industrial relations systems, in accordance with national law and/or practices, nor must it affect the right to negotiate, conclude and enforce collective agreements or to take collective action in accordance with national law and/or practices;
11. Underlines that AI can help to facilitate active and healthy ageing, enabling elderly people to remain active in our society and stay on the labour market for longer should they wish;
12. Calls on the Commission and the Member States to adopt information strategies on AI in order to prevent the spread of misinformation and hoaxes; stresses the need for social dialogue as regards the application of AI at company level; considers it essential that workers and their representatives be consulted and be given sufficient information before AI is deployed; underlines that the use of AI needs to be transparent and that AI systems in the workplace must respect workers' privacy and dignity; urges the Commission and the Member States to ensure that trade unions have access to the workplace and the workers themselves, including where work is carried out digitally; stresses the need to guarantee that all workers, including those in the digital economy, have the right to collective bargaining and to take collective action; recommends the use of digital solutions to promote collective bargaining;
13. Recalls the importance of cooperation between academics, industry, social partners and governments regarding the digital transition, including research and innovation in digital technologies, so that all social and human aspects are taken into account<sup>6</sup> and proper and rigorous testing schemes for AI systems and training frameworks for workers are rolled out with the deployment of AI; reiterates the importance of such cooperation for better and timely evaluation of data with the aim of anticipating new types of jobs and necessary skills and, more generally, the short and long-term impact of AI on the labour market; stresses the need to ensure stable and adequate funding for European research programmes on AI;
14. Stresses the need for users and workers to be informed whenever AI systems are employed in the workplace or for the purposes of personalised products or services, including the parameters applied by the algorithms and how AI is used; stresses the importance of a better understanding on how algorithms process and value data; highlights the need for the development of skills on AI in the workplace through training and education for workers and their representatives to enable them to better

understand the implications of AI solutions;

15. Calls on social partners at company level to work together to monitor the deployment of AI; underlines that special attention must be paid to data collected in the workplace with the help of AI, in particular if it is used for decisions on human resources; stresses that workers remain the owners of their data even after an employment relationship has ended; calls on the Commission, the Member States and social partners to analyse the need for special provisions on data protection in the workplace in the context of AI;
16. Recalls that the Union's employment and social *acquis* fully apply to AI and calls on the Commission and the Member States to ensure proper enforcement related to digital services in order to prevent the exploitation of workers and undeclared work, among other issues; notes that the Union can become a global leader in promoting a socially responsible use of AI;
17. Recalls that the use and management of AI applications, algorithms and process development affects all aspects of work and workers' rights, such as recruitment processes, people and workflow management, and must not discriminate against workers or vulnerable groups or reinforce inequalities based on criteria such as gender, age, health condition, disability, nationality, ethnicity, race or motherhood; underlines the need to provide simple and intelligible information regarding the use of AI in work-related processes; calls on the Commission to include adequate safeguards in the future AI regulatory framework to counter discrimination, including gender inequalities and stereotypes by AI, by ensuring that the information or datasets used to run or train AI used in the workplace reflect diversity on the basis of quality data and are not biased, including through tools such as consumer-sourced rating systems; underlines that AI must not reinforce inequalities and stereotypes by transforming analogue biases and prejudices into digital ones through algorithms;
18. Calls on the Commission and the Member States to analyse algorithmic systems and to carry out regular risk assessments in order to evaluate and classify algorithm types and application domains by impact on the workers; encourages the Commission, the Member States and companies to assess and weigh up the potential risks of algorithmic management of people and workers, in particular the lack of transparency, the potential feeling of loneliness and isolation, and the potential challenges to workers' right to privacy<sup>10</sup> against the potential benefits such as early identification of stress, health problems and fatigue, less exposure to harassment and violence, and the overall support of evidence-based prevention, risk assessment and targeted occupational safety and health and inspections<sup>11</sup>; calls on the Commission and the Member States to ensure appropriate protection for workers' rights and dignity and protection against the potentially harmful uses of algorithmic management tools, such as tools to predict employees' behaviour, remote real-time monitoring of performance and progress and time tracking software;
19. Calls for the application of the precautionary principle with regard to new technologies based on AI; underlines the fundamental principle that humans must always be in control of machines and accountable, and that AI decisions, including any managerial

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<sup>10</sup> van Rijmenam, M., *Algorithmic management: what is it (and what's next)?*, 12 November 2020.

<sup>11</sup> European Agency for Safety and Health at Work (EU-OSHA), policy briefing entitled 'Impact of Artificial Intelligence on Occupational Safety and Health', 2021.

decisions suggested by AI, must be contestable and reversible where relevant; stresses that safety and security standards for AI must be respected and highlights the importance of regular checks and controls in this regard to prevent erroneous AI output; recalls that liability with regard to the use of AI must be clearly defined, both in the event of occupational accidents and damage caused to third parties; reiterates that any use of AI at work must respect and adequately safeguard the right enshrined in Article 22(1) of the GDPR not to be subject to a decision based solely on automated processing;

20. Calls on the Commission and the Member States to invest in structurally targeted policies and programmes to support the digital transformation for workers and citizens through available EU funds; stresses that infrastructure and skills development are pre-conditions for the digital transition;
21. Highlights that access to the right skills and knowledge on AI can overcome the digital divide in society and that AI solutions should support the integration into the labour market of vulnerable groups such as persons with disabilities or those living in remote or rural areas;
22. Points out that access to AI solutions is closely linked to the availability of high-speed internet and that broadband coverage should therefore be a priority in order to prevent discrimination and unequal access to these technologies, especially in rural, sparsely populated, peripheral and border areas and islands;
23. Notes the potential for small and medium-sized enterprises (SMEs) operating in the digital economy; stresses the need for sufficient financial and organisational support for innovations for companies and for better digital skills for both employers and employees in all sectors and services;
24. Reiterates its call for legal protections for platform workers in order to ensure that their labour rights are respected and to guarantee them access to adequate social protection in line with the Council recommendation of 8 November 2019 on access to social protection for workers and the self-employed<sup>12</sup>; calls on the Member States to improve the working and employment conditions for platform workers and to guarantee decent working environments and lifelong training opportunities; calls on the Commission and the Member States to ensure that platform workers can effectively exercise their right to port their data, including consumer-sourced ratings;
25. Calls on the Commission to propose a legislative framework to regulate teleworking conditions across the EU and ensure decent working and employment conditions in the digital economy;
26. Calls on the Commission to improve labour conditions for platform workers in its upcoming legislative proposal in order to guarantee healthy and safe working environments, quality employment and wages, the right to disconnect, the obligation of employers to offer perpetual digital retraining, and full, transparent checks of employees' online identity;
27. Recalls that the flexibility and self-organisation of workers must not be synonymous with disproportionate surveillance or the misuse of digital technology in a way that

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<sup>12</sup> OJ C 387, 15.11.2019, p. 1.

causes or fuels discrimination or exploitation;

28. Takes note of the skills gap in the European labour markets; welcomes the Commission's updated European Skills Agenda and the new Digital Education Action Plan (2021-2027), which will help workers to boost their digital skills and get qualified for the future world of work and will help to address the adaptation and acquisition of qualifications and knowledge in view of the digital and green transitions; welcomes, moreover, the recently adopted Council recommendation on VET<sup>13</sup> and calls on the Member States to implement it swiftly by updating their national vocational and professional training and reskilling, upskilling and lifelong learning programmes with a view to enhancing digital literacy and promoting digital inclusion; underlines the need to include ethical aspects of AI and the development of skills for ethical purposes as an integral part of any education and training curricula for developers and people working with AI; recalls that developers, programmers, decision-makers and companies dealing with AI must be aware of their ethical responsibility; considers it equally important to ensure that end users and consumers are provided with comprehensive information and that there are regular exchanges between all the relevant stakeholders in this regard;
29. Recalls that women are underrepresented at all levels in the digital sector in Europe, from students (32 % at bachelor, master or equivalent level) to top academic positions (15 %), with the largest gap in the ICT sector; stresses that 90 % of jobs require basic digital skills<sup>14</sup> and that women only represent 17 % of people in ICT studies and careers in the EU<sup>15</sup> and only 36 % of STEM graduates<sup>16</sup>, despite the fact that girls outperform boys in digital literacy<sup>17</sup>; highlights the importance of education, skills and support for employment and career paths for women in order to address gender bias and support gender equality; calls for greater efforts at both national and EU level to tackle this gender imbalance, with particular regard to STEM, the ICT sector and digital education, by actively promoting the participation of girls and women through concrete policy action; calls on the Commission and the Member States to take robust action to tackle the digital gender gap; calls for the above actions and measures to be implemented so as to ensure that existing inequalities are not exacerbated or replicated;
30. Underlines the need to design education and training modules for mid-career professionals to enable them to reskill and prepare for job transitions;
31. Calls on the Commission and the Member States to improve occupational health and safety regulations in the context of human-machine synergies; calls on the Commission to safeguard workers' psychological and mental health through an EU legislative framework on work-related stress and the prevention of psychosocial risks; stresses the need for workers in the digital sector to have access to psychological support, in particular workers involved in content moderation; calls on the EU-OSHA to include psychological work-related aspects in the 2023 EU-wide Healthy Workplaces

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<sup>13</sup> Council recommendation of 24 November 2020 on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience, OJ C 417, 2.12.2020, p. 1.

<sup>14</sup> Study compiled for the European Commission entitled 'ICT for Work: Digital Skills in the Workplace', 10 May 2017.

<sup>15</sup> Eurostat, 'Girls and women underrepresented in ICT', 25 April 2018.

<sup>16</sup> European Commission, Directorate-General for Research and Innovation, 'She Figures 2018', February 2019.

<sup>17</sup> International Association for the Evaluation of Educational Achievement (IEA), *International Computer and Information Literacy Study 2018*.

Campaign dedicated to digitalisation and occupational safety and health;

32. Stresses the need to ensure that people from diverse backgrounds, including women, young people, people of colour and persons with disabilities, are involved in the development, deployment and use of AI; recalls that AI-based technologies in the workplace should be accessible for all, based on the design for all principle; highlights the potential of digital solutions such as teleworking and AI applications to support the integration and career paths of persons with disabilities in the labour market; calls on the Member States to invest in and facilitate the access of persons with disabilities to assistive devices and connectivity such as working aid tools, mobility solutions or intelligent sensor systems, with a view to fostering their social inclusion and ensuring a decent standard of living;
33. Calls on the European Labour Authority to take a leading role in facilitating the transformation process towards a social-digital economy;
34. Stresses the importance of mobilising EU funds for SMEs in order to boost the uptake of AI and address structural changes in all sectors and regions impacted by the digital transition.



## INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

<b>Date adopted</b>	17.3.2021
<b>Result of final vote</b>	+: 48 -: 2 0: 3
<b>Members present for the final vote</b>	Abir Al-Sahlani, Marc Angel, Dominique Bilde, Gabriele Bischoff, Vilija Blinkevičiūtė, Milan Brglez, Sylvie Brunet, Jordi Cañas, David Casa, Margarita de la Pisa Carrión, Jarosław Duda, Estrella Durá Ferrandis, Lucia Ďuriš Nicholsonová, Rosa Estaràs Ferragut, Nicolaus Fest, Loucas Foulas, Cindy Franssen, Heléne Fritzon, Alicia Homs Ginel, France Jamet, Radan Kanev, Stelios Kypouropoulos, Katrin Langensiepen, Miriam Lexmann, Elena Lizzi, Radka Maxová, Sandra Pereira, Kira Marie Peter-Hansen, Dragoş Pîslaru, Manuel Pizarro, Dennis Radtke, Elżbieta Rafalska, Guido Reil, Daniela Rondinelli, Mounir Satouri, Monica Semedo, Beata Szydło, Eugen Tomac, Romana Tomc, Marie-Pierre Vedrenne, Marianne Vind, Maria Walsh, Stefania Zambelli, Tatjana Ždanoka, Tomáš Zdechovský
<b>Substitutes present for the final vote</b>	Konstantinos Arvanitis, Marc Botenga, Johan Danielsson, Jeroen Lenaers, Pierfrancesco Majorino, Alin Mituța, Eugenia Rodríguez Palop, Anne Sander

## FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

48	+
ECR	Lucia Ďuriš Nicholsonová
ID	Dominique Bilde, France Jamet, Elena Lizzi, Stefania Zambelli
NI	Daniela Rondinelli
PPE	David Casa, Jaroslaw Duda, Rosa Estaràs Ferragut, Loucas Furlas, Cindy Franssen, Radan Kanev, Stelios Kypourouopoulos, Jeroen Lenaers, Miriam Lexmann, Dennis Radtke, Anne Sander, Eugen Tomac, Romana Tomc, Maria Walsh, Tomáš Zdechovský
Renew	Abir Al-Sahlani, Sylvie Brunet, Jordi Cañas, Radka Maxová, Alin Mituța, Dragoș Pîslaru, Monica Semedo, Marie-Pierre Vedrenne
S&D	Marc Angel, Gabriele Bischoff, Vilija Blinkevičiūtė, Milan Brglez, Johan Danielsson, Estrella Durá Ferrandis, Helène Fritzon, Alicia Homs Ginel, Pierfrancesco Majorino, Manuel Pizarro, Marianne Vind
The Left	Konstantinos Arvanitis, Marc Botenga, Sandra Pereira, Eugenia Rodríguez Palop
Verts/ALE	Katrin Langensiepen, Kira Marie Peter-Hansen, Mounir Satouri, Tatjana Ždanoka

2	-
ID	Nicolaus Fest, Guido Reil

3	0
ECR	Margarita de la Pisa Carrión, Elzbieta Rafalska, Beata Szydło

Key to symbols:

+ : in favour

- : against

0 : abstention

25.2.2021

## **OPINION OF THE COMMITTEE ON AGRICULTURE AND RURAL DEVELOPMENT**

for the Committee on the Internal Market and Consumer Protection

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers (2020/2216(INI))

Rapporteur for opinion: Ivo Hristov

### **SUGGESTIONS**

The Committee on Agriculture and Rural Development calls on the Committee on the Internal Market and Consumer Protection, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

- A. whereas climate change and biodiversity loss are already having a significant impact on agriculture and forestry, with immediate impacts on the production and availability of natural resources, affecting crop and livestock production and the entire food chain, and hence consumers; whereas these negative impacts could be mitigated through the use of artificial intelligence (AI) technologies and innovative tools;
- B. whereas our action to combat climate change requires important decisions to be taken in the field of agricultural and livestock production in the Union, and the raising of requirements for these sectors to contribute to greater environmental sustainability, also with the support of AI; whereas identical requirements should be imposed on products from third countries with which the EU concludes free trade agreements;
- C. whereas AI and other innovative tools have the potential to perfect production practices which, with a view to an increasingly efficient use of resources, are essential to achieving the Union's sustainability goals;
- D. whereas the world population is expected to reach 9.7 billion by 2050 and food demand will be substantially higher;
- E. whereas new technologies can boost the transition to a more sustainable agri-food sector in the EU, in line with the objectives of the European Green Deal;
- F. whereas the farm to fork strategy and the biodiversity strategy set out to help farmers to cultivate quality produce and reduce nutrient losses and the use of pesticides and fertilisers by 2030; whereas efforts towards this aim could be assisted through the digitalisation of the agri-food sector and the use of AI and internet of things (IoT)

technologies, which can enable the creation of new tools to replace those pesticides that could pose a risk to human health, as well as favouring their more limited use with precision agriculture, while also reducing costs for farmers;

- G. whereas one of the general objectives of the future common agricultural policy (CAP) is to promote smart farming;
- H. whereas technological sectors have grown exponentially in recent years, especially platforms specialising in data use and storage;
- I. whereas the White Paper on Artificial Intelligence recognised agriculture as one of the sectors in which AI can increase efficiency;
- J. whereas the proposal for the next multiannual financial framework (MFF) provides for EUR 10 billion of the Horizon Europe budget to be allocated to research and development (R&D) in agriculture and forestry, which should help to develop technological AI infrastructure for the sector; whereas the distribution of digital technologies in agriculture, forestry and the food industry can lead to the growing of sufficient raw materials, the production of sustainable and affordable food, improvements in plant protection, the protection of animal health and contributions to rural development, while reducing negative environmental impacts and input costs;
- K. whereas there are huge disparities in the take-up and coverage of next-generation access (NGA) broadband in rural areas<sup>1</sup>;
- L. whereas plant diseases and pests still cause the loss of around 30 % of annual harvests worldwide; whereas digital solutions can detect plant pests and nutrient deficiencies and suggest appropriate measures for specific diseases;
- M. whereas the process of setting up digital hubs for agriculture, which are expected to play an important role in the introduction and implementation of AI and digital solutions, has started in several Member States;
- N. whereas Parliament adopted a resolution on 20 October 2020 with recommendations to the Commission on a framework of ethical aspects of artificial intelligence, robotics and related technologies<sup>2</sup>;
- O. whereas the digital transition in agriculture requires increased investment in key enablers of the digital economy such as NGA broadband and training for farmers to unlock the full potential of digitalisation and AI in the agricultural sector;
- P. whereas some parts of the agricultural sector already apply AI technologies which have the potential to grow and be used at a larger scale across the sector; whereas the use of such technologies remains absent or limited in many other parts of the agricultural sector;
- Q. whereas education and training is crucial for the smooth and successful introduction of

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<sup>1</sup> European Commission. Digital Economy and Society Index. DESI individual indicators – 1b1 Fast BB (NGA) coverage.

<sup>2</sup> Texts adopted, P9\_TA(2020)0275.

AI technologies into the agricultural sector, both among the newer generation and the current members of the agricultural community;

- R. whereas information about good AI practices should be available to a broader range of experts and stakeholders in order to increase awareness and create opportunities for the sector across the whole of the Union, but also at regional and local levels, where applicable;
- S. whereas the agricultural sector, its digitalisation and the application of AI in the sector depend on reliable data and stable infrastructure from other sectors, including aero-spatial and meteorological tools, as well as tools for soil testing and the measuring of animal indicators, among others; whereas this might imply the need for technological upgrades and improvements in some regions and Member States;
- T. whereas AI technologies and digitalisation have the potential to improve agricultural performance in areas with natural constraints (ANC), which often suffer from access to limited resources and considerable seasonal variations; whereas because of their constraints, they often remain out of the scope of mainstream research;
- U. whereas AI research and work in the field of agriculture and animal husbandry has the potential to increase the attractiveness of the sector for younger people and thus contribute to solving the issue of generational renewal;
- V. whereas the demonstration or use of AI technologies that are not fully functional in the agri-food sector, or of studies which are not fully completed, risks jeopardising the trust of the agri-food community in AI;
- W. whereas agri-food start-ups play an important role for the sector in terms of the introduction of new technologies and techniques, which can benefit and facilitate the sector's uptake of AI technologies;
- X. whereas AI has the potential to contribute to collecting more accurate and up-to-date data with regards to animal welfare, which can improve both the quality of sectoral research and decision-making processes;
- Y. whereas the presence of landscape features in agricultural areas favours biodiversity, can contribute to the mitigation of extreme weather events, and protects soil from erosion and desertification; whereas high-resolution remote sensing data ensures that they are properly recorded and can improve auditing and prevent the unfair exclusion of parts of eligible areas covered by landscape features or the unfair assessment of wooded pastures or other agroforestry systems as non-agricultural areas;
- 1. Considers that issues related to wellbeing, improvement of working conditions, protection of livelihood of farmers, agricultural and forestry workers and/or operators, societal demands on food and health, including safe, nutritious and sustainable food, food security, producers' adaptability to new AI technologies, the reduction of high production costs for European farmers, animal welfare, and other ethical and social aspects should be a priority when it comes to assessing the applicability and impacts of AI and similar technologies in the sector and rural areas; stresses that the use of AI must be sustainable and ethical

2. Believes that workers have valid fears that the adoption of AI will lead to job losses, and that adoption must therefore follow the principles of the just transition, in particular the goal of creating new employment, rather than creating unemployment through technological advancement;
3. Calls on the responsible authorities in the Member States to prepare and publish analyses of the impact of introduction of AI technologies on work places and workers in the short, medium and long term in order to prepare and implement, in social partnership and dialogue with employers, employees and their unions or representatives, a smooth transition to any new AI-based model of agriculture by including socially responsible and just policies and solutions for the workers in the sector with the aim of helping the labour market adjust accordingly and avoiding social and economic exclusion;
4. Strongly believes that the benefits of AI and digitalisations should be accessible to all agricultural producers and breeders irrespective of the size or location of their farm or facility; stresses that agri-food SMEs need to be supported in their digital transformation owing to their limited resources;
5. Calls on the Commission to facilitate and guarantee, in as far as its remit allows, fair and equal funding for, and access and distribution of the benefits of AI among the various sectors, covering all regions of the Union, including remote, rural and island areas, with the aim of avoiding new divisions and a two-speed Union on issues such as AI; stresses the urgent need to strengthen digital capabilities and infrastructure with the aim of avoiding new divisions and a two-speed Union on issues such as AI;
6. Stresses that agriculture is a sector in which AI will play a key role in solving food production and supply issues and challenges, and therefore that in order to become a competitive player in the field of digital and AI technology, specifically agriculture-related technology, higher priority and more targeted investments should be made in digitalisation, connectivity in rural areas, AI, innovative and efficient tools, research, scientific and socio-economic analyses intended to improve the quality and sustainable use of natural resources such as soil and water for agriculture and forestry production in the Union, and soil conservation and biodiversity protection measures and climate change adaptation and mitigation, taking into account the increasing importance of digital solutions in the time of the COVID-19 pandemic and the significance of guaranteeing a functioning agriculture and food sector in the Union;
7. Affirms that the principle of ‘public money, public data’ should guide the research, development and implementation of artificial intelligence, where public funds are involved; stresses that any public financing of AI in agriculture should focus on holistic solutions to common environmental, climate and food security challenges, while also taking into account its socio-economic impact, in order to put innovation at the service of the common good;
8. Stresses that IoT technologies and AI in particular present a significant opportunity for the modernisation, automation and improved efficiency and sustainability of the agri-food sector and for local development in rural areas;
9. Considers that the digital divide is an obstacle to sharing the advantages of the AI sector and that many farms across Europe are not sufficiently prepared to apply innovations or

AI;

10. Stresses the importance of developing technological applications which correspond to the real needs of farmers, in a bottom-up participatory process; stresses that appropriate training that provides farmers with the necessary digital skills and expertise must be given at regional/local level, for instance by digital farming advisors, especially for small and medium-sized farms, where the use of digital technologies is not always viewed as profitable, in order to help them acquire, implement, use and benefit from the right applications, which is essential for the realisation of benefits in the agri-food sector;
11. Calls on the Member States to consider the inclusion of more AI training and courses both as part of their general and specialised agri-food focused higher education, and also as part of the informal education;
12. Highlights that data of collected from farmers by AI technologies should remain the property of the farmers; stresses that there is currently no EU legal framework to control the use of data collected and assessed by agribusiness companies and that misuse of farm data may lead to anti-competitive practices, including price discrimination and speculations in commodity markets which can negatively affect farmers' incomes;
13. Highlights that further research into how to harness signals from the Galileo satellites to produce high-resolution maps of soil moisture or carbon content could help farmers make decisions about water and input management, and could also be deployed to monitor compliance with good agricultural and environmental conditions (GAECs) regarding the protection of peatlands and grasslands;
14. Stresses the need for further investments in data infrastructure for the agricultural sector and connectivity in rural areas;
15. Notes that the application of existing IoT technologies in the agricultural sector can result in increased crop production and improved crop quality; considers that the use of digital technologies and AI in the agri-food sector are necessary for improving sustainability, efficiency, accuracy and productivity;
16. Stresses the potential of IoT in precision agriculture, in particular in detecting weather conditions, soil nutrients and water needs, as well as in identifying pest infestations and plant diseases; underlines that monitoring through automated and digital tools can lead to a substantial decrease of pesticide use, thus further minimising the environmental and climate footprint of agriculture;
17. Stresses that investment in AI is a major financial risk and can exacerbate farmers' over-indebtedness, thus increasing their dependence on other actors in the agricultural sector and contributing to a shift of the value produced by farms to agro-equipment suppliers;
18. Stresses that the interoperability of AI systems is critical in offering farmers free choice when using applications and digital devices;
19. Stresses that small and medium-sized farms in particular need to be supported in the transition to and the implementation of digital and AI technology since they represent

the family model of European agriculture, which must be preserved and supported and that the introduction of accessible new digital and AI technologies could help to steer this production model in particular and help to strengthen the maintenance of and sustain traditional practices that now generate low profitability, and, for their future survival, help to attract young generations into farming, develop local markets and short supply circuits, and safeguard local cultural and biological heritage, while finding sustainable solutions to data protection and data security issues;

20. Stresses the need to reinforce synergies between the different structural and investment funds with the objective of helping the agri-food sectors improve their economic resilience and environmental sustainability;
21. Underlines the importance of bridging the digital and generational divide that exists in many agricultural regions in the Union; stresses the need for stable and adequate funding for the building of digital infrastructure for the agricultural sector;
22. Calls on all Member States to mobilise Union funds in order to ensure the sustainability and growth of the pan-European ecosystem of agriculture-related digital innovation hubs, as mechanisms to promote and accelerate the adoption of IoT and AI technologies in agriculture;
23. Points out that in order for agriculture to benefit from new digital and AI technologies, among other things, universal broadband need to be completed in all rural areas as soon as possible
24. Underlines that the quality of data collection and data sets used has a major impact on efficiencies that can be achieved; calls on the Commission to ensure standardisation of datasets and a high-quality review with the aim of eliminating biases and incorporating Green Deal values in AI products; stresses that added value in the chain generated by this data must return to farmers;
25. Highlights that AI technologies, through the optimisation of the whole chain, can also contribute to a reduction in food losses;
26. Stresses that the digital transition and approach, as well as the provision and implementation of AI technologies, should not discriminate among agricultural workers, including hired hands and self-employed workers, and should provide proper targeted support for reskilling and upskilling in quality jobs and professions;
27. Believes that the potential of AI and related technologies can and should be used to improve the traceability and labelling of agri-food and forestry products and to guarantee high food security standards, including on issues such as origin or production methods, as well as aspects like product sustainability, integrity, authenticity and prevention of food-related fraud, and measures to ensure fair competition between the various actors concerned and on market outlets, and thus to provide greater transparency to European consumers; notes that solutions offered by blockchain systems should be explored in this regard;
28. Considers that AI should be promoted in order to maintain and improve agricultural productivity and sustainability, also in relation to the impact of climate change on agricultural practices;



29. Calls on the respective authorities in the Member States to present and promote only AI technologies and studies which are fully functional and completed, so that the agri-food community can enjoy their greatest benefits without prejudice or assumptions vis-à-vis AI on a larger scale;
30. Considers that digital innovation in agriculture can be a factor that contributes to generational renewal in the sector, attracting young people to the industry, which in turn could address rural depopulation and brain drain;
31. Calls on all Member States to include in their CAP strategic plans and rural development plans measures to support the possibilities offered by agricultural research and development as well as the introduction and wider use of safe and reliable AI and innovative tools at affordable rates for beneficiaries;
32. Calls on the Member States to reduce administrative burdens and any obstacles to the implementation of IA investments by developing fair and effective standards and to provide independent advice, information and training needed, including for young and small-scale farmers and those in less advantaged regions;
33. Calls on the Commission to take into full account the different level of preparedness of Member States by evaluating the CAP strategic plans;
34. Calls on the Member States to provide resources for technological and material upgrade and renewal in the scientific bases, which work on or with AI, such as agricultural institutes, universities or other specialised bodies, with the aim of collecting more up-to-date and accurate data about the effect of AI on plants, animals, soils and water, among others;
35. Calls on the Commission to integrate precision farming as a key component in the farm to fork strategy to enable full use of its potential for the sustainable management of resources and efficient food production;
36. Invites the Member States to develop specific data analysis tools, with a special focus on costs/benefits, to provide farmers with the information they need on digital technologies;
37. Believes that the Union should enable more investments in order to become a competitive player in the field of digital and AI technology, specifically agriculture-related technology;
38. Calls on the Commission to conduct extensive consultations with Member States, industry and academia on concrete proposals for an approach to the development and deployment of AI;
39. Calls on the Commission to include at least two representatives with an agricultural background and one representative with a forestry background in the High-Level Expert Group on Artificial Intelligence (HLEG AI);
40. Calls on all Member States to include at least one expert from the following sectors: agriculture, forestry and land management in the innovation hubs with a high degree of specialisation in AI, as proposed by the Commission in its White Paper of 19 February

2020 entitled ‘On Artificial Intelligence – A European Approach to excellence and trust’ (COM(2020)0065);

41. Calls on the Commission to furnish the resources needed to establish and maintain a database, in all the official Union languages, of good practices relating to AI in agriculture, so as to enable a quicker and more comprehensive exchange of experiences and improve processes in this area;
42. Calls on the Member States with ANC to provide sufficient resources for research on the use of AI in these areas in order to facilitate the better use of available resources by farmers concerned;
43. Calls on the Commission to design and put in place a digital platform or a website dedicated to AI developments in the Union’s agri-food sector;
44. Notes the limited competition in the agriculture market for advanced digital services using AI technology; believes that agriculture technology and knowledge must be shared within the Member States in order to tackle challenges ahead together;
45. Calls on the Commission to conduct thorough analyses on the use of data collecting and measuring devices, and magnetic- and wave-based devices on the most commonly bred agricultural animals such as cattle, sheep, goat, pigs, poultry and bees, which will be crucial for the design and use of AI at Union level; stresses that agri-food SMEs need to be supported in their digital transformation owing to their limited resources, reducing digital imbalances in terms of capabilities and infrastructure, especially in smaller cities and rural and remote areas;
46. Calls on the competent national, regional and local authorities in the Member States to help initiate national and, where appropriate, regional and local digital agriculture hubs;
47. Draws attention of the exorbitant cost of different digital solutions available on the market for farming; notes that open source platforms make such solutions more affordable, resulting in rapid adoption and higher penetration among farmers; calls for all Union public procurement processes and funding programmes to include open data access requirements, as well as to promote the use of open source software and hardware.

## INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

<b>Date adopted</b>	24.2.2021
<b>Result of final vote</b>	+: 40 -: 5 0: 0
<b>Members present for the final vote</b>	Mazaly Aguilar, Clara Aguilera, Atidzhe Alieva-Veli, Eric Andrieu, Attila Ara-Kovács, Carmen Avram, Adrian-Dragoş Benea, Benoît Biteau, Mara Bizzotto, Daniel Buda, Isabel Carvalhais, Asger Christensen, Angelo Ciocca, Ivan David, Paolo De Castro, Salvatore De Meo, Herbert Dorfmann, Luke Ming Flanagan, Dino Giarrusso, Martin Häusling, Martin Hlaváček, Pär Holmgren, Krzysztof Jurgiel, Jarosław Kalinowski, Elsi Katainen, Gilles Lebreton, Norbert Lins, Chris MacManus, Colm Markey, Alin Mituța, Ulrike Müller, Maria Noichl, Juozas Olekas, Pina Picierno, Maxette Pirbakas, Bronis Ropè, Bert-Jan Ruissen, Anne Sander, Petri Sarvamaa, Simone Schmiedtbauer, Annie Schreijer-Pierik, Veronika Vrecionová, Sarah Wiener, Juan Ignacio Zoido Álvarez
<b>Substitutes present for the final vote</b>	Petros Kokkalis

## FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

40	+
ECR	Mazaly Aguilar, Krzysztof Jurgiel, Bert-Jan Ruissen, Veronika Vrecionová
ID	Mara Bizzotto, Angelo Ciocca, Ivan David, Gilles Lebreton, Maxette Pirbakas
NI	Dino Giarrusso
PPE	Daniel Buda, Salvatore De Meo, Herbert Dorfmann, Jarosław Kalinowski, Norbert Lins, Colm Markey, Anne Sander, Petri Sarvamaa, Simone Schmiedtbauer, Annie Schreijer-Pierik, Juan Ignacio Zoido Álvarez
Renew	Atidzhe Alieva-Veli, Asger Christensen, Martin Hlaváček, Elsi Katainen, Alin Mituța, Ulrike Müller
S&D	Clara Aguilera, Eric Andrieu, Attila Ara-Kovács, Carmen Avram, Adrian-Drașoș Benea, Isabel Carvalhais, Paolo De Castro, Maria Noichl, Juozas Olekas, Pina Picierno
The Left	Luke Ming Flanagan, Petros Kokkalis, Chris MacManus

5	-
Verts/ALE	Benoît Biteau, Martin Häusling, Pär Holmgren, Bronis Ropė, Sarah Wiener

0	0
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Key to symbols:

+ : in favour

- : against

0 : abstention

30.3.2021

## **OPINION OF THE COMMITTEE ON WOMEN'S RIGHTS AND GENDER EQUALITY**

for the Committee on the Internal Market and Consumer Protection

on shaping the digital future of Europe: removing barriers to the functioning of the digital single market and improving the use of AI for European consumers  
(2020/2216(INI))

Rapporteur for opinion: Maria da Graça Carvalho

## SUGGESTIONS

The Committee on Women's Rights and Gender Equality calls on the Committee on the Internal Market and Consumer Protection, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

- A. whereas the use of the full potential of women's digital skills can contribute significantly to boosting the European economy, especially given that there are around one million vacancies in Europe for digital experts, that 70 % of companies are delaying investments because they are unable to find people with the right digital skills<sup>1</sup> and that in some job categories, more than 90 % of jobs require specific types of digital skills<sup>2</sup>;
1. Recalls that women are under-represented in the information and communication technologies (ICT) sector and that a digital gender gap exists across digital technology, putting women at a disadvantage; recalls, furthermore, that women account for 36 % of science, technology, engineering and mathematics (STEM) graduates, 30 % of the technology workforce, including 22 % in the domain of AI, and 17 %<sup>3</sup> of ICT specialists in Europe, that the predicted boost to the EU economy would be EUR 16 billion<sup>4</sup> a year if women technology graduates were not hindered from following through to digital jobs at the same rate as men, and that, in order to confront the gender stereotypes that greatly influence study and career choices and the gender bias in AI and products, which is manifested through the design, input and use of AI systems, the promotion of gender equality within the digital single market will contribute to bridging the digital gender divide;
  2. Takes note of the fact that 30 % of entrepreneurs in the EU are women, but they only receive 2 % of the non-bank financing available<sup>5</sup>, making it harder for them to participate in the digital economy;
  3. Recalls that the ICT sector is the sector with the highest percentage of all-male company boards and welcomes the Commission's intention to encourage the adoption of the 2012 proposal for a Directive on improving the gender balance among non-executive directors of companies listed on stock exchanges and related measures (the Women on Boards Directive);
  4. Stresses that the Fundamental Rights Agency's survey on violence against women shows that high incidences of sexual harassment have been reported in STEM education sites, including in schools, universities and workplaces, which further excludes women from the sector;
  5. Highlights that gender equality is a core principle of the European Union and should be

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<sup>1</sup> Commission report of 17 June 2020 on the impact of demographic change (COM(2020)0241).

<sup>2</sup> Commission communication of 1 July 2020 on the European Skills Agenda for sustainable competitiveness, social fairness and resilience (COM(2020)0274).

<sup>3</sup> Commission communication of 5 March 2020 entitled 'A Union of Equality: Gender Equality Strategy 2020-2025' (COM(2020)0152).

<sup>4</sup> <https://ec.europa.eu/digital-single-market/en/women-digital-0>

<sup>5</sup> Fackelmann, S. and De Concini, A., *Funding women entrepreneurs: How to empower growth*, Innovation Finance Advisory for the European Commission and the European Investment Bank, 29 June 2020.

reflected in all EU policies; calls for the fundamental role of women in achieving the European digital strategy goals to be acknowledged in line with the gender equality objectives; recalls that women's participation in the digital economy is crucial to shaping a flourishing digital society and to boosting the EU's digital internal market; underlines the importance of ensuring gender mainstreaming and developing indicators in digital education at all levels, in the Digital Single Market Strategy and in the AI industry and in raising awareness among women of training and positions related to the digital economy and the opportunities they represent;

6. Calls on the Commission to continue addressing the gender gap through a multi-level approach within the ICT sector and to establish policies to fully assess the causes and factors behind such phenomena as gender stereotypes, discrimination or creating suitable working and learning environments, to increase the participation of women in STEM and AI and to advocate measures at all levels of education and employment in the digital sector, in particular by setting up mentoring schemes with women role models from an early age onwards, by supporting lifelong learning, training and schemes to boost their e-skills, paying particular attention to elderly women, by facilitating access to services, as well as access to research funding, facilities and teleworking, especially in certain rural areas where the COVID-19 pandemic has underlined the lack of access to the internet, digital technologies and infrastructures; calls for AI to be taken into account from a gender perspective when developing policy and legislation, and, if necessary, for current legislation, including EU programmes, to be adapted;
7. Calls on the Commission and the Member States to increase financing opportunities for female entrepreneurs so that they have equal opportunities to compete in the digital single market, for policies which unlock and support female entrepreneurial potential and the expansion of the European Business Angels Network and the European Network of Mentors for Women Entrepreneurs; calls on the Commission to ensure the full implementation of the ministerial Declaration of Commitment on 'Women in Digital';
8. Calls on the Commission to assist the Member States in taking the necessary steps to ensure that women can benefit from the opportunities telework can provide by allowing them to work from home and to strike an effective balance between paid professional and caregiving responsibilities by ensuring the efficient implementation of the Work-Life Balance Directive<sup>6</sup> in order to ensure a more equal distribution of caregiving responsibilities in families, as well as ensuring that women have access to the necessary social protection systems and childcare; calls for an evaluation of the impact of teleworking, in particular regarding working hours, social isolation, the separation between work and private life, and psychological pressure;
9. Asks, in relation to measures in employment, for the Council to unblock and adopt the Women on Boards Directive; urges the Member States to fully transpose and implement the Work-Life Balance Directive; calls on the Commission and the Member States to reduce the gender gap in the digital economy through targeted measures, including European funds to finance female-led projects in the digital sector, the

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<sup>6</sup> Directive (EU) 2019/1158 of the European Parliament and of the Council of 20 June 2019 on work-life balance for parents and caregivers and repealing Council Directive 2010/18/EU, OJ L 188, 12.7.2019, p. 79.

promotion of a minimum number of women researchers participating in ICT projects, training courses for human resources departments on ‘unconscious gender-discriminatory bias’ to promote gender-balanced recruitment, the adoption of public procurement policies and/or guidelines on the purchase of ICT services from providers that apply a gender balance in the composition of their companies and boards, and facilitating the distribution of European funds to companies that take into account gender balance criteria;

10. Strongly supports the Commission’s initiatives in raising awareness on digital opportunities such as the ‘no women, no panel’ approach, the EU Code Week, the Digital Skills and Jobs Coalitions, the EU Prize for Women Innovators, #SaferInternet4EU initiatives across Europe, the New Skills Agenda for Europe and lifelong learning perspectives;
11. Considers that AI can significantly contribute to overcoming gender discrimination and address the challenges faced by women in order to promote gender equality, provided that an appropriate legal and ethical framework is developed, conscious and unconscious biases are eliminated and the principles of gender equality are respected; stresses the lack of diversity in the AI sector within teams of developers and engineers, and the importance of using gender-disaggregated data when developing products, AI standards, algorithms and applications; calls for the Commission and the Member States to ensure that AI is developed in a way that respects and promotes equality; encourages the relevant actors to work on preventing gender and cultural biases and stereotypes, to provide training for employers, workers and teachers, and to promote the participation of women together with diverse teams of key societal actors in the design, development and implementation of algorithms, machine learning, natural language processing and AI applications;
12. Calls on the Commission to put forward a regulatory framework to address the bias, unjustified discrimination and inequalities inherent in high-risk AI systems, including biometric systems; calls for greater diversity through an intersectional approach and gender balance among AI designers, and for sufficient and quality training for AI designers on transparency, discrimination, gender stereotypes, racial and ethnic origin, and cultural bias;
13. Expresses concern that the gender gap in digital skills puts women at a disadvantage in the emerging digital markets; stresses the importance of empowering consumers, particularly women, through teaching basic ICT skills and launching awareness-raising campaigns in order to enable them to take full advantage of the benefits of the digital single market;
14. Highlights that the structural gender bias present in academia, research and business in the digital sectors slows down career progression for women, reduces their career opportunities and results in an under-representation of women in the digital economy; calls on the Commission to ensure that such biases are countered, to the greatest extent possible, during the funding, application and decision-making processes through their design, and calls further on the Commission to allocate more funding to support female academics, researchers and entrepreneurs;
15. Highlights that a high level of STEM skills is critical to the process of innovation in



cutting-edge ICT areas such as AI or cybersecurity, and will therefore be increasingly important to the future competitiveness of the European Union on global markets;

16. Calls for special attention to be paid to the needs of women and girls as targets of harassment and to the rise in cybercrime and cyber-violence in the digital world, that, in consequence, is also deterring women, girls and minorities from inclusive participation in digital markets, and asks for the Commission's proposal on the digital services act (COM(2020)0825) to address these issues; calls for campaigns to raise awareness and educate women in how to protect themselves online in order to combat gender-based violence and gender stereotypes; urges the Commission and the Member States to develop training tools for digital services and the AI industry, to recognise workers' right to disconnect and to work closely with and involve women's civil society organisations in order to better respond to and alleviate the concerns that exist in the everyday lives of women and girls when designing and implementing consumer and public tech policies, paying special attention to vulnerable groups, such as women and girls from minorities;
17. Calls on the Commission to exploit and better target the Digital Agenda and the Digital Single Market Strategy with a view to addressing the serious gender gap within the ICT sector and fostering the full integration of women into the sector, particularly in relation to technical and telecommunications professions, and to foster the education and training of women and girls in ICT and other STEM subjects;
18. Considers it essential for the achievement of gender equality in the development, production and marketing, and in the use of digital services and AI consumer products, applications and online-platforms that comprehensive education in schools and workplaces be created and that they recognise and eliminate gender biases in their own behaviour and work;
19. Calls on the Commission and the Member States to recognise the online harassment towards individual entrepreneurs who are women and to take action to tackle this issue.

## INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

<b>Date adopted</b>	25.3.2021
<b>Result of final vote</b>	+ : 28 - : 2 0 : 4
<b>Members present for the final vote</b>	Simona Baldassarre, Robert Biedroń, Vilija Blinkevičiūtė, Annika Bruna, Margarita de la Pisa Carrión, Rosa Estaràs Ferragut, Frances Fitzgerald, Cindy Franssen, Helène Fritzon, Lina Gálvez Muñoz, Arba Kokalari, Alice Kuhnke, Elżbieta Katarzyna Łukacijewska, Karen Melchior, Andżelika Anna Możdżanowska, Maria Noichl, Sandra Pereira, Pina Picierno, Sirpa Pietikäinen, Samira Rafaela, Evelyn Regner, Diana Riba i Giner, Eugenia Rodríguez Palop, María Soraya Rodríguez Ramos, Christine Schneider, Sylwia Spurek, Jessica Stegrud, Isabella Tovaglieri, Ernest Urtegas, Hilde Vautmans, Elissavet Vozemberg-Vrionidi, Marco Zullo
<b>Substitutes present for the final vote</b>	Aušra Maldeikienė, Irène Tolleret

## FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

28	+
ECR	Andželika Anna Mozdzanowska
PPE	Rosa Estaràs Ferragut, Frances Fitzgerald, Cindy Franssen, Arba Kokalari, Aušra Maldeikienė, Sirpa Pietikäinen, Christine Schneider, Elissavet Vozemberg-Vrionidi, Elżbieta Katarzyna Lukacijewska
Renew	Karen Melchior, Samira Rafaela, María Soraya Rodríguez Ramos, Irène Tolleret, Hilde Vautmans, Marco Zullo
S&D	Robert Biedroń, Vilija Blinkevičiūtė, Helène Fritzon, Lina Gálvez Muñoz, Maria Noichl, Pina Picierno, Evelyn Regner
The Left	Eugenia Rodríguez Palop
Verts/ALE	Alice Kuhnke, Diana Riba i Giner, Sylwia Spurek, Ernest Urtaşun

2	-
ID	Simona Baldassarre, Isabella Tovaglieri

4	0
ECR	Jessica Stegrud, Margarita de la Pisa Carrión
ID	Annika Bruna
The Left	Sandra Pereira

### Key to symbols:

+ : in favour

- : against

0 : abstention



## INFORMATION ON ADOPTION IN COMMITTEE RESPONSIBLE

<b>Date adopted</b>	14.4.2021
<b>Result of final vote</b>	+:               39 -:               0 0:               5
<b>Members present for the final vote</b>	Andrus Ansip, Pablo Arias Echeverría, Alessandra Basso, Adam Bielan, Biljana Borzan, Vlad-Marius Botoș, Markus Buchheit, Anna Cavazzini, Dita Charanzová, Deirdre Clune, Carlo Fidanza, Evelyne Gebhardt, Alexandra Geese, Maria Grapini, Svenja Hahn, Virginie Joron, Eugen Jurzyca, Arba Kokalari, Marcel Kolaja, Kateřina Konečná, Jean-Lin Lacapelle, Maria-Manuel Leitão-Marques, Morten Løkkegaard, Adriana Maldonado López, Antonius Manders, Beata Mazurek, Leszek Miller, Dan-Ștefan Motreanu, Anne-Sophie Pelletier, Miroslav Radačovský, Christel Schaldemose, Andreas Schwab, Tomislav Sokol, Ivan Štefanec, Róza Thun und Hohenstein, Kim Van Sparrentak, Marion Walsmann, Marco Zullo
<b>Substitutes present for the final vote</b>	Clara Aguilera, Jordi Cañas, Claude Gruffat, Sylvie Guillaume, Jiří Pospíšil, Barbara Thaler

## FINAL VOTE BY ROLL CALL IN COMMITTEE RESPONSIBLE

39	+
ECR	Adam Bielan, Carlo Fidanza, Eugen Jurzyca, Beata Mazurek
ID	Alessandra Basso, Markus Buchheit, Virginie Joron, Jean-Lin Lacapelle
NI	Miroslav Radačovský
PPE	Pablo Arias Echeverría, Deirdre Clune, Arba Kokalari, Antonius Manders, Dan-Ștefan Motreanu, Jiří Pospíšil, Andreas Schwab, Tomislav Sokol, Ivan Štefanec, Barbara Thaler, Róza Thun und Hohenstein, Marion Walsmann
Renew	Andrus Ansip, Vlad-Marius Botoș, Jordi Cañas, Dita Charanzová, Svenja Hahn, Morten Løkkegaard, Marco Zullo
S&D	Clara Aguilera, Biljana Borzan, Evelyne Gebhardt, Maria Grapini, Sylvie Guillaume, Maria-Manuel Leitão-Marques, Adriana Maldonado López, Leszek Miller, Christel Schaldemose
The Left	Kateřina Konečná, Anne-Sophie Pelletier

0	-

5	0
Verts/ALE	Anna Cavazzini, Alexandra Geese, Claude Gruffat, Marcel Kolaja, Kim Van Sparrentak

### Key to symbols:

+ : in favour

- : against

0 : abstention