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| European Parliament  2014-2019 |  |

<Commission>{IMCO}Committee on the Internal Market and Consumer Protection</Commission>

<RefProc>2015/2103(INL)</RefProc>

<Date>{12/10/2016}12.10.2016</Date>

<TitreType>OPINION</TitreType>

<CommissionResp>of the Committee on the Internal Market and Consumer Protection</CommissionResp>

<CommissionInt>for the Committee on Legal Affairs</CommissionInt>

<Titre>Civil Law Rules on Robotics</Titre>

<DocRef>(2015/2103(INL))</DocRef>

Rapporteur: <Depute>Dita Charanzová</Depute>

(Initiative – Rule 46 of the Rules of Procedure)

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SUGGESTIONS

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

A. whereas robotics is not new; whereas robotics can, and does, play a role in transforming our society for the better; whereas robotics and artificial intelligence can play an active part in the digitisation of the economy in many sectors, such as industry, healthcare, construction and transport, and lead to innovations, less exposure to hazardous work conditions, and new business models, and the Union must actively embrace developments in this area to advance the digital single market;

B. whereas robots increasingly operate in close proximity to humans and, in particular, the market for robotic services is constantly expanding, allowing new benefits to be brought to society, without neglecting safety and liability issues;

C. whereas, despite the undeniable advantages afforded by robotics, its implementation may entail a transformation of the labour market and a need to reflect on the future of education, employment, and social policies accordingly;

D. whereas the sale and production of robots rose significantly between 2010 and 2014, with an increase of almost 30 % in 2014 alone, particularly in the electronics industry;

E. whereas the digital transformation of European manufacturing industry, which accounts for 15 % of the GDP of the Union, could have a value-added potential of EUR 1,25 trillion in 2025[[1]](#footnote-1), and the adoption of autonomous and robotic technologies could contribute to boosting European industrial output and result in a significant competitive advantage for Europe;

F. whereas machine learning offers enormous economic and innovative benefits for society by vastly improving the ability to analyse data, while also raising challenges to ensure non-discrimination, due process, access to information and comprehensibility in decision-making processes;

G. whereas developments in the field of medical applications, such as robotic prostheses and implants, make persons carrying them vitally reliant on the availability of maintenance, repairs, and enhancements;

H. whereas data protection and respect for intellectual property must be taken into account in the development of all new technological and production prototypes;

I. whereas many third countries have adopted suitable guidelines and legislation in the field of robotics, while a number of Member States have also begun to give the matter serious consideration;

1. Stresses that a Union-level approach can facilitate development by avoiding fragmentation in the internal market and at the same time underlines the importance of the principle of mutual recognition in the cross-border use of robots and robotic systems; recalls that testing, certification and market approval should only be required in a single Member State;

2. Stresses that this approach should be accompanied by effective market surveillance, as well as legal remedies and powers for the Member States to impose recalls and sanction infringements;

3. Stresses the importance of measures to help small and medium-sized enterprises and start-ups in the robotics sector that create new market segments in this sector or make use of robots;

4. Encourages the development of an ambitious European strategy for research and innovation in robotics in order to fully develop its potential for growth and jobs in Europe;

5. While recognising that significant numbers of international standards, addressing issues such as interoperability and safety, already exist and are applied across the industry, believes that further harmonised standardisation for robotics and artificial intelligence is necessary and should be part of the Union’s standardisation priorities in order to foster innovation and to guarantee a high level of consumer protection; stresses that it is essential for common, safe and high-level standards to be developed in this future-oriented area;

6. Calls on the Commission, in cooperation with European standardisation bodies, to continue to engage pro-actively with international standardisation bodies and to improve cooperation with international partners to work further on improving standards in this field; welcomes, in this respect, the setting up of special technical committees, such as ISO/TC 299 Robotics, dedicated exclusively to developing standards on robotics;

7. Reiterates that the vast majority of standards are developed in response to an industry-identified need and encourages European and international standardisation bodies to continually review their own standards to ensure that they meet these needs;

8. Considers that robots developed for both manufacturing and individual use should be subject to product safety and consumer protection rules ensuring, where appropriate, minimum safety standards and addressing the risk of accidents resulting from interaction with, or working in proximity to, humans; believes that ethical issues and issues of data protection, including third-party and personal data, civil liability, education and training and cybersecurity should be addressed in any policy on robotics;

9. Highlights the importance of privacy and security by design in the development of robots and the importance of rules for testing robot responses for the purposes of consumer protection;

10. Stresses that, wherever the use of robots is proposed, there is a need to focus on the dignity of the human being, especially in the field of health care;

11. Points out that for the field of vital medical applications such as robotic prostheses, continuous, sustainable access to maintenance, enhancement and, in particular, software updates that fix malfunctions and vulnerabilities needs to be ensured;

12. Considers that better account of the impact of robotisation needs to be taken in Member States' employment, education and social policies; asks the Commission to help seek a uniform regulatory framework and greater cooperation between the Member States; asks the Member States to put in place redesigned training frameworks to prevent a shortage of information and communications technology professionals;

13. Recognises that robotics and artificial intelligence technologies are increasingly used in autonomous vehicles, such as autonomous cars and civilian drones; notes that some Member States are already enacting or considering legislation in this area in particular, which could result in a patchwork of national legislations hampering the development of autonomous vehicles; calls, therefore, for a single set of Union rules striking the right balance between the interests of users, businesses and other concerned parties, while avoiding overregulation in robotics and robotic systems;

14. Calls for regulatory cooperation in order to amend certain international agreements, such as the Vienna Convention on Road Traffic of 8 November 1968 and the Hague Traffic Accident Convention of 4 May 1971;

15. Believes that, in the case of autonomous vehicles, there may not necessarily be a need to alter the legal situation relating to insurance, as current practices and relationships between operators, manufacturers and insurers may adequately cope with the introduction of new technologies, as has been the case in the past;

16. Underlines that the use of robotics in healthcare is already a growing market, especially in telerobotic surgical procedures, in which Europe leads; asks the Commission to ensure conditions to allow the increased use of such practices;

17. Calls on the Commission to increase funding for interdisciplinary studies of the societal impacts of artificial intelligence and machine learning processes.

RESULT OF FINAL VOTE IN COMMITTEE ASKED FOR OPINION

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| **Date adopted** | 11.10.2016 |  |  |  |
| **Result of final vote** | +:  –:  0: | 35  1  1 | | |
| **Members present for the final vote** | Catherine Bearder, Dita Charanzová, Carlos Coelho, Lara Comi, Anna Maria Corazza Bildt, Daniel Dalton, Nicola Danti, Dennis de Jong, Vicky Ford, Ildikó Gáll-Pelcz, Evelyne Gebhardt, Maria Grapini, Sergio Gutiérrez Prieto, Robert Jarosław Iwaszkiewicz, Liisa Jaakonsaari, Antonio López-Istúriz White, Marlene Mizzi, Eva Paunova, Jiří Pospíšil, Virginie Rozière, Christel Schaldemose, Andreas Schwab, Olga Sehnalová, Igor Šoltes, Ivan Štefanec, Catherine Stihler, Richard Sulík, Róża Gräfin von Thun und Hohenstein, Mylène Troszczynski, Mihai Ţurcanu, Anneleen Van Bossuyt, Marco Zullo | | | |
| **Substitutes present for the final vote** | Birgit Collin-Langen, Morten Løkkegaard, Julia Reda, Marc Tarabella | | | |
| **Substitutes under Rule 200(2) present for the final vote** | John Stuart Agnew | | | |

1. STOA, Ethical Aspects of Cyber-Physical Systems, Scientific Foresight Study (May 2016), Annex 1, p. 37. [↑](#footnote-ref-1)