At a glance

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European Parliament

Civil law rules on robotics

The Legal Affairs (JURI) Committee has tabled a report with recommendations to the Commission on the civil-law and ethical aspects of robotics. The report calls for EU legislation introducing a register of robots, setting up an EU Agency for Robotics and laying down principles of civil liability for damages caused by robots. Such legislation should be complemented by ethical codes of conduct.

Background

In January 2015, the JURI Committee decided to establish a working group on legal questions related to the development of robotics and artificial intelligence in the EU, with a focus on civil-law aspects. The group held 10 meetings between May 2015 and September 2016, and heard advice from a number of stakeholders, scientists and lawyers. In June 2016, the EPRS Scientific Foresight Unit published an expert study on the Ethical Aspects of Cyber-Physical Systems (CPS). CPS are intelligent robotics systems, linked with the Internet of Things, or technical systems of networked computers, robots and artificial intelligence that interact with the physical world. Examples include automated cars and drones, as well as robots used in healthcare, as aids for disabled people and in agriculture. The study drew attention to possible risks from the development of robotics, including such aspects as employment, privacy protection, safety and civil liability.

Report of the Legal Affairs Committee

In January 2017, the JURI Committee adopted its report with recommendations to the Commission, on 'Civil law rules on robotics'. Opinions were delivered by two associated committees, TRAN and LIBE, as well as by IMCO, ENVI, ITRE and EMPL. The report calls on the Commission to propose EU legislation defining a 'smart robot' as one which has autonomy through the use of sensors and/or interconnectivity with the environment, which has at least a minor physical support, which adapts its behaviour and actions to the environment and which cannot be defined as having 'life' in the biological sense. The report proposes to introduce a system of registration of advanced robots that would be managed by an EU Agency for Robotics and Artificial Intelligence. This agency would also provide technical, ethical and regulatory expertise on robotics to public actors. As regards liability for damage caused by robots, the report suggests that liability could either be based on strict liability (no fault required) or on a risk-management approach (liability of a person who was able to minimise the risks). Liability should be proportionate to the actual level of instructions given to the robot and to its degree of autonomy. Rules on liability could be complemented by a compulsory insurance scheme for robot users, and a compensation fund to pay out compensation in case no insurance policy covered the risk.

Ethical issues

The report proposed, as an annex to the resolution, two draft codes of conduct – a Code of Ethical Conduct for Robotics Engineers and a Code for Research Ethics Committees. The first code puts forward four ethical principles in robotics engineering: 1) *beneficence* (robots should act in the best interests of humans); 2) *non-maleficence* (robots should not harm humans); 3) *autonomy* (human interaction with robots should be voluntary); 4) *justice* (the benefits of robotics should be distributed fairly).

Forthcoming public consultation

A public consultation on the civil-law rules for robotics has been requested and is being coordinated by the Committee on Legal Affairs of Parliament, and was prepared by the European Added Value Unit of EPRS. The consultation is to last until April 2017, with separate questionnaires for the general public and for experts. The results are expected to be published in the autumn of 2017.

Legislative initiative report: 2015/2103(INL); Committee responsible: JURI (Associated committees – Rule 54: TRAN, LIBE); Rapporteur: Mady Delvaux (S&D, Luxembourg)

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