

 Respondent 781777[\[print\]](#)

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## 1. Disclaimer

This document is a working document of the Committee on Legal Affairs of the European Parliament for consultation and does not prejudice any future decision to be taken by the European Parliament. Only responses received through this online questionnaire, subject to the exception for people with disabilities and their representatives, will be taken into account and included in the report summarising the responses. Please read [User Guide](#) before starting to fill this questionnaire.

In case of any questions related to this public consultation please contact:  
[Consultation.Robotics@europarl.europa.eu](mailto:Consultation.Robotics@europarl.europa.eu).

It is important to read the [specific privacy statement](#) available on the public consultation website for information on how your personal data and contribution will be used.

## 2.

### Executive Summary

Robotics and artificial intelligence (AI) have become one of the most prominent technological trends of our century. The swift increase in their use and development presents new and difficult challenges to our societies.

The aim of this consultation is to launch a broad based debate with a wide range of stakeholders on the European Parliament report on Civil Law Rules on Robotics ((2015/2103(INL))).<sup>1</sup> This consultation specifically seeks views on how to best address the challenging ethical, economic, legal and social issues related to the developments in the area of robotics and AI for civil use, as identified in the report. The European Parliament is to debate and vote on the report of the Committee on Legal Affairs in Plenary, in February 2017. The current public consultation will contribute to possible further European Parliament initiatives. This consultation will contribute to assessing the feasibility and content of further potential EU policy initiatives on robotics and AI, to maximise the socio-economic opportunities provided by these technological developments for businesses, citizens and governments, and minimise possible negative disruptions. Furthermore, the results of the Consultation may also feed into the forthcoming European Parliamentary Research Service's 'Cost of Non-Europe on Robotics and Artificial Intelligence' Report.

The Consultation is requested and administratively coordinated by the Committee on Legal Affairs of the European Parliament. The Consultation is prepared by the European Parliamentary Research Service, European Added Value Unit. Scientific coordinator, Dr. Tatjana Evas (EAVA Unit).

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<sup>1</sup> Draft report with recommendations to the Commission on Civil Law Rules on Robotics. (2015/2103(INL)), Rapporteur: Mady Delvaux (S&D, Luxembourg), 31 May 2016, PE582.443v01-00; available in all EU languages at <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+COMPARL+PE-582.443+01+NOT+XML+VO//EN>

3. You are replying as:\*

2. an organisation or a company

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4. Please choose from one of the following options on the use of your contribution:\*

1. My/our contribution can be published directly with my personal/organisation information (I consent to publication of all information in my contribution in whole or in part including my name/the name of my organisation, and I declare that nothing within my response is unlawful or would infringe the rights of any third party in a manner that would prevent publication).

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5. The name of your organisation/company/public authority/international organisation:\*

COMECE Secretariat

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6. Your full name (first name, last name):\*

Alessandro Calcagno

4/26/17 11:37:59 AM MEST

7. Email address:\*

[alessandro.calcagno@comece.eu](mailto:alessandro.calcagno@comece.eu)

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8. Is your organization included in the Transparency Register?\*

In the interests of transparency, the European Parliament asks organisations who wish to submit comments in the context of public consultations to provide the Parliament and the public at large with information about whom and what they represent by registering in the Transparency Register and subscribing to its Code of Conduct. If an organisation decides not to provide this information, it is the European Institution's stated policy to list the contribution as part of the individual contributions. (Consultation Standards, see COM (2002) 704; Better Regulation guidelines, see SWD(2015)111 final and Communication on ETI follow-up, see COM (2007) 127).

If you are a registered organisation, please indicate your Register ID number below when replying to the online questionnaire. Your contribution will then be considered as representative of the views of your organisation. If your organisation is not registered, you have the opportunity to [register now](#).

It is important to read the specific privacy statement available on the public consultation website for information on how your personal data and contribution will be used.

1. Yes

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9. If yes, please indicate your Register ID number:\*

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10. Please indicate the type of organisation or company:\*

10. Other, please specify (Organisations representing churches and religious communities (Section V of the EU Transparency Register))

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11. Please specify the type of organisation: (optional)

12. Please indicate the type of public authority or international organisation:\*

-

13. Please specify the type of public authority: (optional)

14. Is your organisation a multinational enterprise (groups with establishments in more than one country)?\*

2. No

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15. Is your organisation a multinational enterprise with establishments outside of the EU?\*

-

16. How many employees does your company have?\*

2. 10-49

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17. Please provide a brief description of your organisation's activities: (optional)

18. Where are you based (resident) and/or where do you carry out your activity?\*

2. Belgium

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19. Field of activity or sector (if applicable): choose at least one option \*  
(Statistical classification of economic activities in the European Community (NACE), for details on

the classification please consult Eurostat <http://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF/dd5443f5-b886-40e4-920d-9df03590ff91?version=1.0>).

- 10. Information and communication
- 15. Education
- 16. Human health and social work activities

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20. Has your organisation received funding from the EU in the last five years?\*

- 1. No

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21. What is your nationality?\*

-

22. How old are you?\*

-

23. What is your gender?\*

-

24. What is your highest level of education?\*

-

25. What is your current occupation?\*

-

26. Have you studied, worked or lived in another EU Member State than your country of origin?\*

-

27. Finally, if required, may the European Parliament services contact you for further details on the information you have submitted?\*

- 1. Yes

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28. Have you ever used, or do you currently use robots at home or at work (e.g. a robotic vacuum cleaner at home or an industrial robot at work)?\*

*(A robot is defined here as an autonomous machine which can assist humans in everyday tasks e.g. as a kind of co-worker helping on the factory floor or as a robot cleaner, or in activities which may be dangerous for humans, like search and rescue in disasters. Robots can come in many shapes or sizes, including human-like. Traditional kitchen appliances, such as a blender or a coffee maker, are not robots. [definition used in the Special Eurobarometer on attitudes towards robots*

[http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_382\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_382_en.pdf))

-

**29. Generally speaking are you interested or not interested in scientific discoveries and technological developments?\***

-

**30. Generally speaking, what is your view on robots?\***

-

**31. Generally speaking, what is your view on developments in artificial intelligence?\***

-

**32. In a one to three year future, robots will become part of my life:\***

-

**33. In your opinion, in Europe, when it will become commonplace for robots to do your current job?\***

-

**34. Please indicate to what extent you agree or disagree with the each of the following statements related to robotics and AI:\***

	Strongly agree	Agree	Neither Agree or Disagree	Disagree	Strongly disagree	I do not know
Robots are a good thing for society, because they help people	-	-	-	-	-	-
Robots steal peoples' jobs	-	-	-	-	-	-
Robots are necessary as they can do jobs that are too hard or too dangerous for people	-	-	-	-	-	-
Robots are a form of technology that requires careful management	-	-	-	-	-	-
Autonomous robots (i.e. drones, driverless vehicles) is an efficient way of transporting and delivering goods	-	-	-	-	-	-
Artificial intelligence is a threat to humanity	-	-	-	-	-	-
Robots are bad thing for society because they create more inequalities	-	-	-	-	-	-
Artificial intelligence is a threat to privacy	-	-	-	-	-	-
Artificial intelligence is a threat to fundamental human rights	-	-	-	-	-	-

**35. Please indicate to what extent you feel concerned about the following issues related to robotics**

## and AI:\*

	Strongly concerned	Concerned	I am neutral	Not concerned at all	I do not know
Physical safety, for example when a robot's code fails	-	-	-	-	-
Ethics, i.e. how robots are programmed, on the basis of what values and principles would autonomous robots function?	-	-	-	-	-
Rules on liability, i.e. if robots cause damage, who is responsible and who is liable to pay compensation	-	-	-	-	-
Intellectual Property	-	-	-	-	-
Data Protection, i.e. how data collected by robots is stored and processed, who has access to data?	-	-	-	-	-
EU competitiveness in the global context, i.e. development of robotics in comparison to other countries, for example China, Japan, South Korea, the United States of America.	-	-	-	-	-

## 36. Generally speaking, do you think it is necessary to regulate developments in the robotics and AI area?\*

-

## 37. In your opinion, who should take a primary responsibility to finance research and development in the area of robotics and AI?\*

-

## 38. In your opinion in which area is EU regulatory action most urgent?\*

	Very important	Important	Neutral	Somewhat important	Not at all important	I do not know
Autonomous vehicles	-	-	-	-	-	-
Care robots	-	-	-	-	-	-
Medical robots	-	-	-	-	-	-
Technologies for human repair and enhancement	-	-	-	-	-	-
Drones (RPAS)	-	-	-	-	-	-

## 39. Please indicate, to what extent you agree or disagree with the each of the following statements, at European Union level it is necessary ...\*

	Strongly agree	Agree	Disagree	Strongly disagree	I do not know
to have a common European definition of smart autonomous robots	-	-	-	-	-
to introduce a system of registration of advanced robots	-	-	-	-	-
to publicly finance more research projects in the area of robotics	-	-	-	-	-

to address ethical challenges raised by the technological developments of robots and their applications through regulation	-	-	-	-	-
to develop a guiding ethical framework of rules and principles for the design, engineering, production and use of robots and artificial intelligence	-	-	-	-	-
to adopt regulatory measures to mitigate the impacts of robotics on the labour market	-	-	-	-	-
to adopt regulatory measures to address the impacts of robotics on the physical safety of humans	-	-	-	-	-
to adopt regulatory measures to address issues related to damages and liability related to the use of robots and artificial intelligence	-	-	-	-	-

**40. What implications has the development of robotics and AI in your field/industry/organisation?\***

8. other (please specify)

Changes to human relations, consequences on anthropological models, impact on organisation.

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**41. In your field, what are the key obstacles/barriers to market development in robotics and AI?\***

4. human resources, i.e. employee skills or training

9. other (please specify)

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**42. What action, in the context of technological developments in robotics and AI in your field, should the EU take to encourage innovation and global competitiveness in the European Union? Please select up to 3 choices which in your opinion are most urgent.\***

1. Better regulatory framework

4. Better ethical standards

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**43. What action, in the context of technological developments in robotics and AI in your field, should the EU take to unlock the potential for growth and jobs in the European Union? Please select up to 3 choices which in your opinion are most urgent.\***

1. Better regulatory framework

4. Better ethical standards

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**44. What actions should the EU take, in the context of technological developments in robotics and AI in your field, to enhance productivity in the European Union? Please select up to 3 choices which in your opinion are most urgent.\***

1. Better regulatory framework

4. Better ethical standards

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**45. What are the societal and economic impacts that developments of robotics and AI bring, or could potentially bring to your field in the short to mid-term?\***

1. end users and/or intermediaries benefit from lower prices

4. end users negatively impacted by diminishing level of privacy

5. end users negatively impacted by the lack of 'personal' service, for example in the health sector or care for elderly
6. societies benefit from more efficient use of resources
7. societies benefit from more sustainable use of resources
9. societies are negatively affected by diminishing level of protection of fundamental rights (i.e. privacy, data protection)
10. labour markets are negatively affected by technologies (i.e. change in the nature of work, mismatch between available and needed skills)

We would like to highlight in particular possible negative effects on the poorest.

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**46. In addition to actions at national level, what added value does the EU bring, or potentially bring to your field in the context of new technological developments in robotics and AI?\***

5. The EU regulatory framework helps to enhance protection of fundamental rights and ethical rules

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**47. Are there areas in your industry where potential innovation and growth based on new technological developments are at a standstill, due to a lack of or outdated EU law and policy?\***

2. No

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**48. You have indicated that EU law and policy is lagging behind your industry/organisation's needs, what in your opinion are the main problems? Please explain: (optional)**

**49. You have indicated that EU law and policy is lagging behind your industry/organisation's needs, what in your opinion is the financial impact of those issues being unresolved? (Please provide estimate if possible): (optional)**

**50. You have indicated that EU law and policy is lagging behind your industry/organisation's needs, what in your opinion can be done to address the situation? What types of measures/incentives /investments are necessary? At what level? (Please explain): (optional)**

**51. What is the net impact of increased digitalisation and automation in your industry/organisation on employment?\***

1. employment lost

We also consider the shifts in the value chain and profile of employees needed important.

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**52. You have indicated that developments in robotics and AI have an impact on employment in your industry. Please explain, i.e. where are the gains or losses? What type of shifts in employment profiles are taking place? Which employee profiles are at risk, and which profiles are in demand? What kind of measures at EU level you would support to address the impacts on the labour market and employment structures? (optional)**



53. What measures, should the EU adopt to address societal and economic risks related to the development and use of robotics and AI in your field? (optional)

The EU should adopt strong measures to safeguard fundamental rights, with reference in particular to privacy and human dignity.

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54. Which industry (sector) do you think will experience fastest economic growth in the next three-five years, due to the development and application of robotics and AI? (Maximum three answers):\*

4. logistics and transport
9. financial services
12. gaming and entertainment industry

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55. In your opinion, what are the key policy areas where EU intervention is most urgent? (max. three)\*

1. autonomous vehicles

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56. You are welcome to provide feedback to all six themes above, or selectively, only to those you find most urgent for your industry/organisation. Please select area(s) on which you would like to provide the answers.\*

1. rules on ethics (11 questions)
2. liability rules (10 questions)
3. connectivity, intellectual property and flow of data (4 questions)
4. standardisation, safety and security (4 questions)
5. employment and labour market (11 questions)
6. institutional coordination and oversight (4 questions)

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57. In your opinion, what are the main risks related to the use of autonomous robots and AI? (max. three choices)\*

1. human safety
4. privacy
7. self-determination

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58. Do you support the introduction of a common European definition for a smart robot?\*

4. Somewhat oppose

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59. In your opinion what key specific characteristics of a smart robot must be reflected in the definition of an autonomous robot\*

	Very important	Important	Neutral	Slightly important	Not at all important	I do not know
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Acquires autonomy through sensors and/or by exchanging data with its environment (inter-connectivity) and trades and analyses data	-	-	-	-	-	-
It is self-learning from experience and by interaction	-	-	-	-	-	-
Has a physical support	-	-	-	-	-	-
Adapts its behaviour and actions to its environment	-	-	-	-	-	-
It is not alive in the biological sense	-	-	-	-	-	-

60. Do you support the establishment of a registration system for advanced robots at EU level?\*

2. Somewhat support

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61. In your opinion, this EU level registration system for advance robots should:\*

1. be compulsory and apply only for specific categories of robots

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62. Do you support the establishment of an EU level framework for socially and ethically conscious technological development?\*

1. Yes

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63. In your opinion, an EU ethical framework should apply to robots from the stage of\*

3. development

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64. Please indicate how important or unimportant you consider the following measures to support socially and ethically conscious technological development?\*

	Very important	Important	Neutral	Slightly important	Not at all important	I do not know
A guiding ethical framework for the design, production and use of robots.	X	-	-	-	-	-
Financial support for research projects that, among other issues, address social, ethical, legal and economic challenges raised by the technological development and its application.	-	X	-	-	-	-
Development and support of research programmes at EU level that include a mechanism for short-term verification of the outcomes, to understand what real risks and opportunities are associated with the dissemination of these technologies.	-	X	-	-	-	-
Development and support of initiatives and programmes that facilitate smoother transition of socio-ethical technologies from research to commercialisation on the market.	-	-	-	-	-	X

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65. You have indicated that a guiding ethical framework should be elaborated and adopted at EU level. In this context, how important are the following initiatives/codes of conduct?\*

	Very important	Important	Neutral	Slightly important	Not at all important	I do not know
A code of conduct for robotic engineers.	-	X	-	-	-	-
A code for research ethics committees when reviewing robotics and protocols.	-	X	-	-	-	-
Model licences for designers and users.	-	-	X	-	-	-

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66. You have indicated that a code of conduct for robotic engineers should be elaborated and adopted at EU level. In this context, what in your view are the most important principles that should be included in the code of conduct?\*

	Very important	Important	Neutral	Slightly important	Not at all important	I do not know
Principle of beneficence - robots should act in the best interests of humans.	-	X	-	-	-	-
Non-maleficence - the doctrine of 'first, do not harm', whereby robots should not harm a human.	X	-	-	-	-	-
Autonomy - the capacity to make an informed, un-coerced decision about the terms of interaction with robots.	-	-	X	-	-	-
Justice - fair distribution of the benefits associated with robotics and affordability of homecare and healthcare robots in particular.	-	-	X	-	-	-
Precautionary principle - anticipating potential safety impacts of outcomes and taking due precautions, proportional to the level of protection, while encouraging progress for the benefit of society and the environment.	-	X	-	-	-	-
Inclusiveness - allowing for participation in the decision-making process by all stakeholders involved in, or concerned by, robotics research activities.	X	-	-	-	-	-
Accountability - anticipating and accounting for the social, environmental and human health impacts that robotics may impose on present and future generations.	X	-	-	-	-	-
Safety	X	-	-	-	-	-
Reversibility	X	-	-	-	-	-
Privacy	X	-	-	-	-	-
Transparency	-	X	-	-	-	-
Maximising benefit and minimising harm	-	-	X	-	-	-
Respect for fundamental human rights	X	-	-	-	-	-

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67. Should you have further observations about general principles and ethical issues guiding development, engineering and use of advanced robots or AI, please share your experience or

suggestions here.

Without prejudice to future contributions, COMECE would like to highlight the capital importance of high ethical, human-centred standards in the domain or robots and AI. National ethical frameworks should still play a central role, in the light of the specific traditions and sensibilities existing in the Member States. While not taking a final position at this stage on the opportunity or not to adopt a Code of Ethical Conduct for Robotics Engineers, we would consider particularly relevant the considerations proposed in this regard in the Annex of the EP Resolution concerning “Fundamental Rights”, “Precaution” and “Privacy”. In this context, we welcome the work being done by the European Commission in supporting national authorities on the issue of “connected toys”, in relation to the need to ensure that they guarantee a full respect the privacy and security of children. We would encourage the European Parliament to also deepen its reflection on this specific subject. On the topic of ethics and robotics, at the EU level we would deem the European Group on Ethics in Science and New Technologies to be the more appropriate and natural body to be entrusted with the relevant reflection and advice. A key starting point should be the idea that in this area, ethics should still and exclusively be referred to the human, and not directly to robots, which should always remain objects under human responsibility.

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68. Please indicate whether you agree or disagree with the following statement ‘The current EU regulatory framework on liability is sufficient to address new developments in robotics and AI’\*

I somewhat agree, however in addition to the current legally binding rules, the EU needs to adopt  
4. non-legislative instruments such as guidelines and codes of conduct specifically related to robotics and AI

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69. Do you agree with the following statement ‘Robots should have a specific legal status’?\*

5. Strongly disagree

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70. Please indicate to what extent you agree or disagree with the each of the following statements related to the type of legal status robots should have:\*

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	I do not know
Robots should be regarded as natural persons (i.e. humans).	-	-	-	-	-	-
Robots should be regarded as legal persons (i.e. companies).	-	-	-	-	-	-
Robots should be regarded as animals or objects.	-	-	-	-	-	-
A new category should be created, with its own specific features and implications as regards attribution of rights and duties, including liability for damages.	-	-	-	-	-	-

71. Please indicate to what extent you support or oppose each of the following statements related to the allocation of risks related to the use of autonomous robots:\*

	Strongly support	Support	Neutral	Oppose	Strongly oppose	I do not know
Strict liability for manufacturers	X	-	-	-	-	-

Strict liability for owners	-	X	-	-	-	-
Strict liability for users	-	X	-	-	-	-

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72. Please indicate your opinion regarding which issues related to the regulation of liability and damages require the most urgent intervention at EU level:\*

3. no intervention is necessary

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73. Please indicate to what extent you support or oppose the establishment of an obligatory insurance scheme for damages caused by autonomous robots:\*

2. support

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74. Please provide suggestions as to what should be the scope of the coverage of this insurance scheme, i.e. what risks it should cover: (optional)

75. Please indicate to what extent you support or oppose the establishment of a compulsory insurance and compensation fund  
\*

3. neutral

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76. Please provide suggestions as to how this compulsory insurance scheme should be operated: (optional)

77. Should you have further observations about liability issues please share your experience or suggestions here: (optional)

The COMECE Secretariat expresses its concern for the recommendation made in Para 59, f) of the recent European Parliament resolution on Civil Law Rules on Robotics, according to which the Commission should reflect on the possibility of "...creating a specific legal status for robots... so that at least the most sophisticated autonomous robots could be established as having the status of electronic persons responsible for making good any damage they may cause, and possibly applying electronic personality to cases where robots make autonomous decisions or otherwise interact with third parties independently". The human person is the foundation of every legal order. For a natural person, legal personality derives from his/her existence as a human person. That personality implies rights and duties that are exercised within the frame of human dignity. Placing robots on the same level as human persons would be at odds with Art. 6 UDHR, which states that "Everyone has the right to recognition everywhere as a person before the law". The European Parliament's proposal also contradicts the very concept of responsibility, based on ultimate human rights and duties. Responsibility rooted in legal personality shall only be exercised in presence of a certain capacity for freedom. Freedom is more than autonomy. As underlined in the study published by the European Parliament's Policy Department for "Citizens' Rights and Constitutional Affairs" on "European Civil Law Rules in Robotics" "Legal personality is assigned to a natural person as a natural consequence of their being human; ...its assignment to a legal person is based on legal fiction. Legal persons are able to act within the legal sphere solely because there is a human being behind the scenes to represent it...". Furthermore, a legal person exists only because of an initial expression of human will. However, in the case of robots, the EP Resolution links their possible legal personality to their alleged "autonomous

features/decision-taking” (Recitals Z, AF). We share the conclusions of the same study, according to which “...it would be inappropriate and out-of-place not only to recognise the existence of an electronic person but to even create any such legal personality. Doing so risks not only assigning rights and obligations to what is just a tool, but also tearing down the boundaries between man and machine, blurring the lines between the living and the inert, the human and the inhuman” (p. 16). While the European Parliament’s Resolution leaves the question open, other passages imply granting “legal personality” to robots (Recitals AB, AC), without any solid scientific and technological grounds (e.g. see the considerations on “unpredictable behaviour” of robots at Recital AI). Legal consequences have been grossly overlooked: legal personality does not apply only to liability. Recognising legal personality to robots could open up possibilities for their capability of having a full range of legal rights and duties (e.g. under contract law, copyright law and even family law). Issues related to the use of “law enforcement machines” at the borders could also come into play. We would not be in favour of using for robots rules on liability for animals, which would lead to an unacceptable shift towards considering robots as belonging to the area of “the living”. Existing applicable legal regimes relying on liability of humans already provide viable legal solutions: e.g. provisions on defective products; rules about liability for damages or injury caused by things in one’s care. On the theme of liability, we would also recommend clarifications with regard to the terms “trainer” and “training” used in Paragraph 56 of the Resolution and on the legal implications of this passage.

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**78. Please indicate to what extent you support or oppose the following statements on the necessity for EU action(s) related to connectivity, intellectual property rights, and the flow of data? The EU should take action(s) ...\***

	Strongly support	Support	Neutral	Oppose	Strongly oppose	I do not know
To develop a balanced approach to intellectual property rights when applied to hardware and software standards, and codes that protect innovation and at the same time foster innovation.	-	-	X	-	-	-
To support a horizontal and technology neutral approach to intellectual property applicable to the various sectors in which robotics could be employed.	-	-	X	-	-	-
To elaborate criteria for an ‘own intellectual creation’ for copyrightable works produced by computers or robots.	-	-	-	X	-	-
To foster development of standards for the concept of privacy by design.	X	-	-	-	-	-
To foster development of standards for the concept of privacy by default.	X	-	-	-	-	-
To foster development of standards for the concept of informed consent.	-	X	-	-	-	-
To foster development of standards for the concept of encryption.	-	X	-	-	-	-
To elaborate criteria to ensure that the use of personal data as a ‘currency’ does not lead to a circumvention of the basic principles governing the right to privacy and data protection.	X	-	-	-	-	-
To set a framework that will meet the connectivity requirements for the EU’s digital future.	-	-	X	-	-	-
To set a framework to ensure that access to broadband and 5G network is fully in line with the net neutrality principle.	-	X	-	-	-	-
To ensure that civil law regulations are consistent with Regulation (EU) No 2016/679 (the General Data Protection Regulation).	-	-	X	-	-	-
To review rules and criteria regarding the use of cameras and sensors in robots.	-	X	-	-	-	-
To ensure transparent mechanisms for data subjects.	-	X	-	-	-	-

To ensure that appropriate remedies are available for data subjects in compliance with EU data protection law.

-

X

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With regard to the review of rules and criteria regarding the use of cameras and sensors in robots, our indication is based on the idea that they would have a limitative effect, protect privacy and have the human body out of the commercial scope.

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79. What issues related to developments in the robotics and AI sector should the EU address as a matter of priority? (max. three choices)\*

4. protection of personal data
5. privacy in communication between humans, robots and AI
6. security by design, including an obligation for designers of robots and AI to develop products that are safe, secure and fit for purpose

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80. In your opinion, what are the biggest (1) benefits and/or (2) obstacles and deficiencies related to intellectual property rights, connectivity, and flow of data in the current EU regulatory framework?

81. Should you have further observations about connectivity, intellectual property rights, and the flow of data, please share your experience or suggestions here: (optional)

82. Please indicate, whether you agree or disagree with the following statements: 'the development of EU standards in the field of AI and robotics technologies are of key importance ...'\*

	Strongly agree	Agree	Disagree	Strongly disagree	I do not know
for future competition in this field.	-	X	-	-	-
to foster innovation.	-	X	-	-	-
to avoid fragmentation of the international market.	-	X	-	-	-
to guarantee a high level of product safety.	-	X	-	-	-
to guarantee consumer protection.	X	-	-	-	-

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83. Please indicate how important or unimportant the following EU actions in the area of standardisation, safety and security, are for your industry?\*

	Very important	Important	Neutral	Slightly important	Not at all important	I do not know
EU involvement in the international harmonisation of technical standards, in particular together with the European Standardisation Organisations and International Organization for Standardization.	-	-	X	-	-	-
Revision of EU legislation in light of development of robotics and AI.	-	-	X	-	-	-

Elaboration of uniform criteria across all EU Member States which individual Member States should use in order to identify areas where experiments with robots are permitted.

- - X - - -

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84. In your opinion, what are the biggest (1) benefits and/or (2) obstacles and deficiencies in the current EU regulatory framework related to standardisation, safety and security for robotics and AI?"

85. Should you have further observations about standardisation, safety and security, please share your experience or suggestions here:

86. Please indicate to what extent you support or oppose the following statements related to the necessity for EU action(s) in the area of education and employment in the context of technological developments in robotics and AI: 'the EU should take action(s) ...'\*

	Strongly support	Support	Neutral	Oppose	Strongly oppose	I do not know
to support women in information and communication technologies (ICT).	-	-	X	-	-	-
to modernise educational systems to boost e-skills and competences.	-	X	-	-	-	-
to support training and retraining of people already in the labour market.	-	X	-	-	-	-
to support occupational health and safety at work.	-	X	-	-	-	-
to support the involvement of social partners.	-	X	-	-	-	-
to reduce inequalities and social exclusion.	-	X	-	-	-	-
to develop mechanisms for job security, i.e. working and career patterns shaped by digitalisation.	-	X	-	-	-	-
to systematically monitor what types of jobs and tasks are taken by robots.	-	X	-	-	-	-
to systematically monitor what new types of jobs are created as a result of developments in robotics and AI.	-	X	-	-	-	-
to systematically analyse what societal challenges arise.	X	-	-	-	-	-

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87. Based on the developments in your industry related to and resulting from use of robots and AI, please indicate whether you agree or disagree with the following statement: 'there is mismatch between skills available on the labour market and the skills necessary'.\*

2. agree

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88. Please indicate to what extent you agree or disagree with the introduction of corporate reporting requirements on the extent and proportion of the contribution of robotics and AI to the economic results of a company for the purpose of social security contributions:\*



1. strongly agree

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89. Please indicate to what extent you support or oppose introduction of corporate reporting requirements on the extent and proportion of the contribution of robotics and AI to the economic results of a company for the purpose of taxation:\*

3. neutral

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90. Please indicate whether you agree or disagree with the following statement: 'considering developments in the area of robotics and AI, social security systems need to be adjusted to provide appropriate protection to employees'.\*

1. strongly agree

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91. Please indicate whether you agree or disagree with the following statement: 'considering developments in the area of robotics and AI, labour laws need to be adjusted to provide appropriate protection to employees'.\*

3. neutral

4/26/17 12:01:50 PM MEST

92. Please indicate whether you agree or disagree with the following statement: 'restrictions or a ban on partial or total automation of certain tasks or jobs should be introduced in order to guarantee safety'.\*

1. strongly agree

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93. Please indicate whether you agree or disagree with the following statement: 'restrictions or a ban on partial or total automation of certain tasks or jobs should be introduced in order to guarantee respect of fundamental human rights'.\*

1. strongly agree

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94. Please indicate, in which areas you consider that the use of fully autonomous robots should be banned or restricted:\*

7. Education

We would also suggest to consider areas like Military and security, Care of children, elderly and the disabled and Healthcare.

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95. Please indicate whether you agree or disagree with the following statement: 'in the light of the possible effects on the labour market of robotics and AI, a general basic income should be introduced'.\*

3. neutral

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96. Should you have further observations about education and employment as related to the issues of robotics and AI please share your experience or suggestions here

97. In your opinion, in order to provide the technical, ethical and regulatory expertise on developments in the area of robotics and AI:\*

3. Neither the establishment of a new EU agency nor designation of the tasks to an existing EU agency is necessary

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98. You have indicated support for the establishment of a new EU-level European agency for robotics and artificial intelligence. In your opinion, what task(s) should this agency fulfil?\*

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99. You have indicated support for tasks related to robotics and AI to be designated to an existing EU agency, which agency do you propose?\*

-

100. Should you have further observations about institutional cooperation and oversight, please share your experience or suggestions here

Robotics should lead to simplification. We would not be in favour of the creation of a new dedicated EU Agency: robotics is an extremely sectorial domain that can be covered in broader contexts (e.g. innovation and technology); and it is important to curb excessive multiplication of Union structures. The EU already has the main task of protecting human beings in the enjoyment of their fundamental rights and in their capacity to consume: we would support the strengthening of this mission within the existing administrative framework. On the other hand, we are not certain that interaction between humans and robots is an EU primary competence.

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101. Please provide details of any other issues related to robotics and AI to which you would like to draw the European Parliament's attention, or which you consider should be addressed. (optional)

102. Please provide references to any studies or documents that you think are relevant for this consultation. If possible, please provide links. (optional)

European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs on "European Civil Law Rules in Robotics" (2016) "Traité de droit et d'éthique de la robotique civile" by Nathalie Nevejans (Collection Science, éthique et société, Bordeaux, January 2017). Concerning human enhancement, COMECE published already in 2009 the "Avis de la Cellule de réflexion bioéthique sur les perspectives d'amélioration de l'homme (« human enhancement ») par des moyens technologiques (available at the link [http://www.comece.eu/dl/kskLJKJOMnNJqx4KJK/20090525PUBIO\\_FR.pdf](http://www.comece.eu/dl/kskLJKJOMnNJqx4KJK/20090525PUBIO_FR.pdf)).

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103. Please provide information on any successful initiatives at regional, national or international level related to robotics and AI that could support the European Parliament in considering further actions. (optional)

104. Please provide information on any negative experiences or impacts at regional, national or international level related to robotics and AI that could support the European Parliament in considering further actions. (optional)

105. Please note that by clicking on the 'Finish' button below you will complete and submit your answers to the questionnaire.  
After submitting the questionnaire you would not be able to change, review or print your answers to the questionnaire.

If you wish to review some of your answers please use 'Back' button below before the final submission.  
If you wish to review or add some information later, please save the draft, using the 'Save' button below. Your responses will be saved and you would have an opportunity to return to the questionnaire at your convenience any time before the closing date of the Consultation using your e-mail .