

Answer to:

Consultation on the White Paper on Artificial Intelligence - A European Approach

Introduction

Artificial intelligence (AI) is a strategic technology that offers many benefits for citizens and the economy. It will change our lives by improving healthcare (e.g. making diagnosis more precise, enabling better prevention of diseases), increasing the efficiency of farming, contributing to climate change mitigation and adaptation, improving the efficiency of production systems through predictive maintenance, increasing the security of Europeans and the protection of workers, and in many other ways that we can only begin to imagine.

At the same time, AI entails a number of potential risks, such as risks to safety, gender-based or other kinds of discrimination, opaque decision-making, or intrusion in our private lives.

The [European approach for AI](#) aims to promote Europe's innovation capacity in the area of AI while supporting the development and uptake of ethical and trustworthy AI across the EU. According to this approach, AI should work for people and be a force for good in society.

For Europe to seize fully the opportunities that AI offers, it must develop and reinforce the necessary industrial and technological capacities. As set out in the accompanying European strategy for data, this also requires measures that will enable the EU to become a global hub for data.

The current public consultation comes along with the [White Paper on Artificial Intelligence - A European Approach](#) aimed to foster a European ecosystem of excellence and trust in AI and a Report on the safety and liability aspects of AI. The White Paper proposes:

- Measures that will streamline research, foster collaboration between Member States and increase investment into AI development and deployment;
- Policy options for a future EU regulatory framework that would determine the types of legal requirements that would apply to relevant actors, with a particular focus on high-risk applications.

This consultation enables all European citizens, Member States and relevant stakeholders (including civil society, industry and academics) to provide their opinion on the White Paper and contribute to a European approach for AI. To this end, the following questionnaire is divided in three sections:

- **Section 1** refers to the specific actions, proposed in the White Paper’s Chapter 4 for the building of an ecosystem of excellence that can support the development and uptake of AI across the EU economy and public administration;
- **Section 2** refers to a series of options for a regulatory framework for AI, set up in the White Paper’s Chapter 5;
- **Section 3** refers to the [Report on the safety and liability aspects of AI](#).

Respondents can provide their opinion by choosing the most appropriate answer among the ones suggested for each question or suggesting their own ideas in dedicated text boxes.

Feedback can be provided in one of the following languages:

[BG](#) | [CS](#) | [DE](#) | [DA](#) | [EL](#) | [EN](#) | [ES](#) | [ET](#) | [FI](#) | [FR](#) | [HR](#) | [HU](#) | [IT](#) | [LT](#) | [LV](#) | [MT](#) | [NL](#) | [PL](#) | [PT](#) | [RO](#) | [SK](#) | [SL](#) | [SV](#)

Written feedback provided in other document formats, can be uploaded through the button made available at the end of the questionnaire.

The survey will remain open until 31 May 2020.

Section 1 - An ecosystem of excellence

To build an ecosystem of excellence that can support the development and uptake of AI across the EU economy, the White Paper proposes a series of actions.

In your opinion, how important are the six actions proposed in section 4 of the White Paper on AI (1-5: 1 is not important at all, 5 is very important)?

	1 - Not important at all	2 - Not important	3 - Neutral	4 - Important	5 - Very important	No opinion
Working with Member states	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Focussing the efforts of the research and innovation community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Focus on SMEs	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Partnership with the private sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Promoting the adoption of AI by the public sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are there other actions that should be considered?

500 character(s) maximum

Revising the Coordinated Plan on AI (Action 1)

The Commission, taking into account the results of the public consultation on the White Paper, will propose to Member States a revision of the Coordinated Plan to be adopted by end 2020.

In your opinion, how important is it in each of these areas to align policies and strengthen coordination as described in section 4.A of the White Paper (1-5: 1 is not important at all, 5 is very important)?

	1 – Not important at all	2 - Not important	3 - Neutral	4 - Important	5 - Very important	No opinion
Strengthen excellence in research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Establish world-reference testing facilities for AI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Promote the uptake of AI by business and the public sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Increase the financing for start-ups innovating in AI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Develop skills for AI and adapt existing training programmes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Build up the European data space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Are there other areas that that should be considered?

500 character(s) maximum

- The use of AI for cybersecurity applications, including joint procurements of AI solutions for cybersecurity.
- Developing innovative and low power semiconductors, as these components will underpin AI systems.
- Cyber-resilience of AI systems, including robust learning.
- An adequate legal framework defining which data can be obtained and used to design AI based systems or products to favour the development of an AI industry located in EU and EU owned to ensure EU industrial sovereignty.

A united and strengthened research and innovation community striving for excellence

Joining forces at all levels, from basic research to deployment, will be key to overcome fragmentation and create synergies between the existing networks of excellence.

In your opinion how important are the three actions proposed in sections 4.B, 4.C and 4.E of the White Paper on AI (1-5: 1 is not important at all, 5 is very important)?

	1 - Not important at all	2 - Not important	3 - Neutral	4 - Important	5 - Very important	No opinion
Support the establishment of a lighthouse research centre that is world class and able to attract the best minds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Network of existing AI research excellence centres	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Set up a public-private partnership for industrial research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Are there any other actions to strengthen the research and innovation community that should be given a priority?

500 character(s) maximum

AI cyber-resilience is key, especially for products that convey safety risks. The establishment of the European Cybersecurity Competence Centre can play an important role in strengthening the cybersecurity level of AI systems. This future structure could streamline EU funding to support research and innovation projects focusing on AI cyber-resilience.

Research centres should also benefit from a legal framework giving them an easy and simplified access to publicly and privately owned data.

Focusing on Small and Medium Enterprises (SMEs)

The Commission will work with Member States to ensure that at least one digital innovation hub per Member State has a high degree of specialisation on AI.

In your opinion, how important are each of these tasks of the specialised Digital Innovation Hubs mentioned in section 4.D of the White Paper in relation to SMEs (1-5: 1 is not important at all, 5 is very important)?

	1 - Not important at all	2 - Not important	3 - Neutral	4 - Important	5 - Very important	No opinion
Help to raise SME's awareness about potential benefits of AI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide access to testing and reference facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promote knowledge transfer and support the development of AI expertise for SMEs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support partnerships between SMEs, larger enterprises and academia around AI projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Provide information about equity financing for AI startups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are there any other tasks that you consider important for specialised Digital Innovations Hubs?

500 character(s) maximum

SMEs often struggle more than big companies to deal with legal compliance, cybersecurity and privacy related issues. Digital Innovation Hubs can play a key role in helping them to uptake solutions dealing with these issues (access control, hardware-based solutions etc.) in the context of AI, or even assist them in completing the required tasks (legal counsel, support in assessing compliance of AI with the data protection framework).

Section 2 - An ecosystem of trust

Chapter 5 of the White Paper sets out options for a regulatory framework for AI.

In your opinion, how important are the following concerns about AI (1-5: 1 is not important at all, 5 is very important)?

	1 - Not important at all	2 - Not important	3 - Neutral	4 - Important	5 - Very important	No opinion
AI may endanger safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
AI may breach fundamental rights (such as human dignity, privacy, data protection, freedom of expression, workers' rights etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The use of AI may lead to discriminatory outcomes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
AI may take actions for which the rationale cannot be explained	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
AI may make it more difficult for persons having suffered harm to obtain compensation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
AI is not always accurate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you have any other concerns about AI that are not mentioned above? Please specify:

500 character(s) maximum

AI based products and solutions can be subject to cyber-attacks which can endanger safety and/or result in data loss and privacy violations. It is essential to develop methodologies, standards and certification schemes that strengthen the security of AI systems. Security-by-design is key in this respect. Duly attention must be paid to the robustness of algorithms and management of credentials. The Cybersecurity Act provides the relevant basis for future certification.

Do you think that the concerns expressed above can be addressed by applicable EU legislation? If not, do you think that there should be specific new rules for AI systems?

- Current legislation is fully sufficient
- Current legislation may have some gaps
- There is a need for a new legislation
- Other
- No opinion

If you think that new rules are necessary for AI system, do you agree that the introduction of new compulsory requirements should be limited to high-risk applications (where the possible harm caused by the AI system is particularly high)?

- Yes
- No
- Other
- No opinion

If you wish, please indicate the AI application or use that is most concerning (“high-risk”) from your perspective:

500 character(s) maximum

All AI applications should be covered by compulsory minimum requirements on (1) safety, (2) security, and (3) ethics. AI products and solutions should be considered as a product regulated by clear rules for placing on the market and ex post rules. All AI systems should be ethical by design and secure by design. These requirements should be based on European standards.

For high-risk applications, stricter requirements and certification -supervised by a national authority, should apply.

In your opinion, how important are the following mandatory requirements of a possible future regulatory framework for AI (as section 5.D of the White Paper) (1-5: 1 is not important at all, 5 is very important)?

	1 - Not important at all	2 - Not important	3 - Neutral	4 - Important	5 - Very important	No opinion
The quality of training data sets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The keeping of records and data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Information on the purpose and the nature of AI systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Robustness and accuracy of AI systems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Human oversight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Clear liability and safety rules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
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In addition to the existing EU legislation, in particular the data protection framework, including the General Data Protection Regulation and the Law Enforcement Directive, or, where relevant, the new possibly mandatory requirements foreseen above (see question above), do you think that the use of remote biometric identification systems (e.g. face recognition) and other technologies which may be used in public spaces need to be subject to further EU-level guidelines or regulation:

- No further guidelines or regulations are needed
- Biometric identification systems should be allowed in publicly accessible spaces only in certain cases or if certain conditions are fulfilled (please specify)
- Other special requirements in addition to those mentioned in the question above should be imposed (please specify)
- Use of Biometric identification systems in publicly accessible spaces, by way of exception to the current general prohibition, should not take place until a specific guideline or legislation at EU level is in place.
- Biometric identification systems should never be allowed in publicly accessible spaces
- No opinion

Please specify your answer:

Biometric identification systems are already covered by the General Data Protection Regulation (GDPR). The processing of biometrics data for uniquely identifying purposes is forbidden pursuant to Article 9(1) of GDPR. Facial recognition can only take place if it falls under the scope of one of the exemptions listed in such article. Thus, an effective implementation of GDPR ensures that facial recognition is used in a duly justified manner and does not excessively interfere with the right to privacy.

Do you believe that a voluntary labelling system (Section 5.G of the White Paper) would be useful for AI systems that are not considered high-risk in addition to existing legislation?

- Very much
- Much
- Rather not
- Not at all
- No opinion

Do you have any further suggestion on a voluntary labelling system?

500 character(s) maximum

A voluntary labelling system is not the preferred option as all AI systems should fall under the category of products for which CE marking is required and should therefore comply with minimum mandatory requirements before being placed on the EU market. CE marking should include specific requirements for AI systems, for instance on the quality of datasets used to train AI systems. Methodology, standards and conformity assessments are needed to check compliance with minimum requirements.

What is the best way to ensure that AI is trustworthy, secure and in respect of European values and rules?

- Compliance of high-risk applications with the identified requirements should be self-assessed ex-ante (prior to putting the system on the market)
- Compliance of high-risk applications should be assessed ex-ante by means of an external conformity assessment procedure
- Ex-post market surveillance after the AI-enabled high-risk product or service has been put on the market and, where needed, enforcement by relevant competent authorities
- A combination of ex-ante compliance and ex-post enforcement mechanisms
- Other enforcement system
- No opinion

Do you have any further suggestion on the assessment of compliance?

500 character(s) maximum

For high-risk applications: certification by national authorities conducted through strict rules by accredited European laboratories. Accreditation based on Regulation 765/2008, with additional requirements to ensure that (1) CABs and (2) laboratories are performing their tasks in the EU territory. Assessment repeated over lifetime of AI systems.

For low-risk: conformity with minimum requirements through European conformity standards and conformity assessments performed by third parties.

Section 3 – Safety and liability implications of AI, IoT and robotics

The overall objective of the safety and liability legal frameworks is to ensure that all products and services, including those integrating emerging digital technologies, operate safely, reliably and consistently and that damage having occurred is remedied efficiently.

The current product safety legislation already supports an extended concept of safety protecting against all kind of risks arising from the product according to its use. However, which particular risks stemming from the use of artificial intelligence do you think should be further spelled out to provide more legal certainty?

- Cyber risks
- Personal security risks
- Risks related to the loss of connectivity
- Mental health risks

In your opinion, are there any further risks to be expanded on to provide more legal certainty?

500 character(s) maximum

Do you think that the safety legislative framework should consider new risk assessment procedures for products subject to important changes during their lifetime?

- Yes
- No
- No opinion

Do you have any further considerations regarding risk assessment procedures?

500 character(s) maximum

Risk assessment procedures need to take into account the possibility for an AI system to evolve over time. This means that new vulnerabilities might arise, which will need to be addressed through adequate corrective measures. Risk assessment will need to be repeated once a product is already placed on the market.

Do you think that the current EU legislative framework for liability (Product Liability Directive) should be amended to better cover the risks engendered by certain AI applications?

- Yes
- No
- No opinion

Do you have any further considerations regarding the question above?

500 character(s) maximum

AI should be considered a product pursuant to the Product Liability Directive. The definition of “damage” should include loss of data, privacy violations and non-ethical uses.

The White Paper proposes a strict liability for high risk applications, coupled with mandatory insurance. This option must be carefully assessed in the light of current technological evolutions. This new framework should not discourage manufacturers/users from developing/acquiring AI systems.

Do you think that the current national liability rules should be adapted for the operation of AI to better ensure proper compensation for damage and a fair allocation of liability?

- Yes, for all AI applications
- Yes, for specific AI applications No
- No opinion

Do you have any further considerations regarding the question above?

500 character(s) maximum

Thank you for your contribution to this questionnaire. In case you want to share further ideas on these topics, you can upload a document below.