Skopai
Deep Tech Insights

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

Skopai's submission

June 12, 2020

INTRODUCTION

Skopai: A unique AI platform providing complete information about any startup worldwide

Founded in July 2017, Skopai is a spin-off of the "*Université Grenoble Alpes*" and the *Grenoble Alpes Data Institute*. It uses a technology combining Artificial Intelligence with a methodology to provide a qualification, based on objective and standardized criteria, for technological startups and innovative companies via a platform.

Indeed, through its joint AI laboratory with the *Grenoble Informatics Laboratory* (LIG), Skopai is developing an intensive reading and analysis technology for public documents available on the web and in open data about startups / innovative SMEs.

Skopai is participating in COST Action – FinAI: Fintech and Artificial Intelligence in Finance - Towards a transparent financial industry as the French representant in the Management Committee.

Our artificial intelligence algorithms analyse a growing number of companies. We have already identified more than 100,000 startups on the platform, mostly in Europe.

The platform is a SaaS subscription model where each client has their own account. This serves as their tool for finding information on startups and innovative SMEs on the web and the information is kept up to date.

In summary, Skopai collects data on innovative startups and SMEs and dynamically builds a standardized, neutral, and updated description of each company. So, it provides:

1) An identity card on the essential points of its creation and its ecosystem.

2) A standardized description of different axes: market, products, technologies, etc.

3) A data neutralization process.

4) An assessment via maturity levels, strictly based on the standardized description.

The platform is constantly evolving and integrating new functionalities developed and designed according to the feedback and needs of our users, because the user experience is at the heart of the dynamics of our business.

Concerned about our Users satisfaction, on our YouTube channel, we present tutorials for getting started with the platform, using the new features, and understanding our tools to take advantage of the full potential of the platform. Link to our YouTube channel :

https://www.youtube.com/channel/UCig3OBS0sVMZL7PBbf-EKng

More about us here:

Website: https://www.skopai.com/

Twitter : https://twitter.com/skopai_tech

Skopai has a unique positioning in order to provide insights on the issue of AI

On the one hand the tools that Skopai uses are entirely based on data science and AI. This makes Skopai a 100% AI-driven European company.

On the other hand, our activities enable us to have a unique vision of the AI startup ecosystem worldwide. We are witnessing the fact that new startup companies using AI in various fields and for various objectives are springing up all the time. Our unique positioning permits us to identify with precision both the sectors where AI startups work and the kind of products and services that they propose.

Thus, our analysis tools allow us to understand the impact of the use of AI on their evolution, but also all the difficulties encountered by those companies in conjunction to AI regulations.

Due to its expertise on AI issues Skopai has already been selected to participate to other EU consultations on AI in the past

Skopai was one of the 10 AI European companies selected by EIT in order to participate in a joint EIT-JRC project and questionnaire on the Legal and Regulatory Implications of Artificial Intelligence and contributed, especially, in the assessment of the legal and regulatory framework of text and data mining. This project led, among other things, to the organization of a workshop in 2018 and the publication of a Report in 2019.

Skopai welcomes the publication of the European Commission's White Paper on AI.

We agree with the European Commission that AI has a tremendous potential to change our lives by improving healthcare, 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 in many other ways that we can only begin to imagine. AI provides innovative solutions for business and could bring important benefits to global economy and well-being. From a European perspective it is important to create an "ecosystem of excellence" and to create the right incentives to accelerate the adoption of AI solutions, including by SMEs.

At the same time several AI applications present risks and could have important legal and ethical implications. In order to create an "ecosystem of excellence", it is necessary to have an adequate legal and regulatory framework providing legal certainty for business and creating a trust-worthy AI for European citizens. The human-centric approach of the Commission is welcome. It is possible to construct a legal and ethical framework where AI developments can be harnessed for the public good and in a way protecting consumers and citizens.

The current legal and regulatory framework, including on issues of liability, already provides satisfactory solutions to several problems. However, this framework needs to be adapted in order to address new challenges created by AI and rapid technological developments and to fil eventual gaps. This adaptation should take place in a careful way, following a risk-based and a sector by sector approach. We need an evolution, not a revolution, a "wise" regulation, not a "wild" one. While improvements to the current regulatory framework are welcome in order to prevent/mitigate/exclude a series of AI-related risks, Europe should avoid an overburdening of AI regulations and civil liability rules which could block innovation.

Skopai has partnered with the Chair on the Legal and Regulatory Implications of Artificial Intelligence of the Multidisciplinary Institute on Artificial Intelligence in order to undertake further research on all these issues. It would be delighted to contribute to further developments in this field and to cooperate to future EU projects on AI.

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					X	
Focussing the efforts of the research and innovation community					X	
Skills					X	
Focus on SMEs					X	
Partnership with the private sector					X	
Promoting the adoption of AI by the public sector					X	

All these actions identified in the Whiter Paper are important in order to build an ecosystem of excellence. Skopai welcomes the European Commission's promise to boost AI uptake across the economy, both by private and public sector.

Are there other actions that should be considered?

The biggest challenge to the AI is to have the ability to set up data sets large enough to build AI algorithms. Deep learning needs huge set of data to reach efficient results. The ability to build efficient data sets with enough data but also the quality requested to set up AI algorithms constitutes one of the actions to be considered at European level.

We are lagging behind in this area compared to our US competitors. Some areas may benefit of fuzzy or less regulation to take advance in technology and develop capacity to train their algorithms and build new models.

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				X		
Establish world-reference testing facilities for AI			X			
Promote the uptake of AI by business and the public sector				X		
Increase the financing for start-ups innovating in AI					X	
Develop skills for AI and adapt existing training programmes				X		
Build up the European data space					X	

Are there other areas that that should be considered?

Education to promote a larger understanding of the legal features around AI should be another area of interest to make the Europeans knowledge better on those subject and avoid unnecessary fears about new services based on AI.

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				X		
Network of existing AI research excellence centres					X	
Set up a public-private partnership for industrial research					X	

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

Several EU Member States have adopted strong measures in order to support excellence in AI Research. The European Union could support these national measures and help establish a network of existing AI research excellence centres. The EU should also ensure that these AI research excellence centres work in cooperation and harmony and help create strong synergies among them. While competition could be productive in some cases, the EU has to ensure that there will be no rivalry between national centres and no “reinventing the wheel” phenomena. The creation of a single “lighthouse” research center could be useful but such a solution of centralization could also raise some difficulties and should be very carefully thought and planned.

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			X			
Provide access to testing and reference facilities			X			
Promote knowledge transfer and support the development of AI expertise for SMEs			X			
Support partnerships between SMEs, larger enterprises and academia around AI projects					X	
Provide information about equity financing for AI startups					X	

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

The funding in digital companies and AI companies in Europe is limited in comparison with the funding of equivalent companies in North America or in Asia. The difference in level of investment in these companies can be double or triple. Investment above series B and C is rare. This phenomenon is powerful in this area much more than in that of biotech or industrytech or hardware (in comparison to software). Main tasks of specialised Digital Innovations Hubs should be optimizing the financing of such companies and enhancing pan-european co-investements.

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			**X**			
AI may breach fundamental rights (such as human dignity, privacy, data protection, freedom of expression, workers' rights etc.)					**X**	
The use of AI may lead to discriminatory outcomes					**X**	
AI may take actions for which the rationale cannot be explained				**X**		
AI may make it more difficult for persons having suffered harm to obtain compensation			**X**			
AI is not always accurate		**X**				

The fundamental concerns about AI are those related to the risks of violations of human rights, including the prohibition of discrimination. Facial recognition technologies, for example, could be used for bulk surveillance greatly endangering the right to privacy. Excessive content moderation by AI systems could ignore context and endanger free speech. Systems taking eventually important decisions on the basis of “emotion recognition” could be based on flawed scientific premises. Databases used by AI systems might be biased or based on pre-existing incomplete or biased data. Furthermore, the way algorithms are made could also be biased or lead to discriminatory outcomes. “AI” is not a *carte blanche* to do anything. The objectives and construction of AI systems should be based on existing human rights, ethical principles and solid scientific standards.

Other concerns appearing on the questionnaire appear somehow less important. Concerning safety, for instance, there is no doubt about the need for technical robustness and safety of AI systems ; but on the other hand AI could greatly enhance safety and cybersecurity in some fields. In the same way, explicability and accuracy could be absolutely essential in some contexts (for instance when the use of AI systems leads to decisions affecting persons and their rights) but less important in other contexts. Requiring from AI systems to be “completely accurate” and “always explicable” could pose a very high and costly standard that European SMEs could sometimes be unable to meet and this, in turn, could hurt innovation. Do we really

impose such high standards to humans when they perform (often in an imperfect way) similar tasks? We thus think that it is necessary to tailor these requirements in relation with the AI sector concerned, the expected outcomes and the risks for human rights.

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

It is necessary to focus on **misuses of AI by humans.**

The questionnaire focuses probably too much on "AI" and almost personifies it. Let's not forget the human beings are behind. An AI system could be extremely good at accomplishing specific goals. But its (mis)use could deviate from our society rules and ethics. A car, as such, is not "good" or "bad". But when it is driven at 300km/h by a drunken person then we have a problem. Ill-intentioned people could misuse AI systems. It's important to focus on them and their intentions, not just on "AI".

AI presents tremendous opportunities to do good and improve our lives. It could help cure human flaws. For instance, the questionnaire focuses on the concern that AI may lead to discriminatory outcomes but ignores that AI can greatly help avoid discriminatory outcomes by reducing or eliminating existing human bias. So, any discussion about AI should also focus on the humans behind and the risks of abusing or adding bias to "good" systems.

Furthermore, we should be careful not to constantly vilify AI and not to render its development and use in Europe impossible by setting high standards that far exceed traditional and sometimes more imperfect analogue approaches.

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? (Highlight the chosen answer)

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

Other, please specify :

The current legal and regulatory framework in Europe already includes an important number of technology-neutral rules and provides satisfactory solutions to several problems.

However, this framework might need to be adapted sometimes in order to address new challenges, created by AI and rapid technological developments. Existing rules need to be interpreted in the specific context of AI uses. Fragmentation among European countries in the interpretation and application of these rules should be avoided. New rules could be necessary in some fields where regulatory gaps exist.

This adaptation should take place in a careful way, following a risk-based and a sector by sector approach. Improvements to the current regulatory framework are welcome in order to prevent/mitigate/exclude a series of AI-related risks. But we should avoid an overburdening of AI regulations and civil liability rules which could hinder innovation in Europe and delay the economic recovery following the Covid19 crisis.

We need a "wise" AI regulation, not a "wild" one; an evolution, not a revolution.

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)?

(Highlight the chosen answer)

- YES
- NO
- **Other**
- No opinion

Other, please specify :

A risk-based approach is welcome. However, it is necessary to better define high-risk and the methodology to assess it. Poorly defined categories might deter or delay investment and be detrimental to European companies in relation with their counterparts in other parts of the world.

The Commission's proposal seems to be based in an "all or nothing" dichotomy between "high-risk" applications (that would be subject to a new regulatory framework) and "non-high-risk" applications that would remain under the current regulatory framework. Eventually a more nuanced and sector by sector approach could be more useful: "high risk" applications might not need new rules if they are adequately addressed by existing rules. Inversely, we cannot exclude that in the interest of legal certainty for business and consumer protection and in order to build trust in AI, some new rules might be exceptionally necessary in areas which are not qualified as "high-risk" according to the Commission. A more refined approach might be necessary in order to channel the regulatory action where it is really needed.

Do you agree with the approach to determine "high-risk" AI applications proposed in Section 5.B of the White Paper?

(Highlight the chosen answer)

- YES
- NO
- **Other**
- No opinion

Other, please specify :

While the Commission's approach includes several useful elements, it also creates some uncertainties that need to be addressed.

The introduction of an exhaustive list of sectors provides welcome clarity and predictability about the fields where the regulator should focus his/her attention. However, it fails to recognize the potential existence of high-risk applications in "low-risk" sectors.

The cumulative focus on intended uses is also important, but seems a little bit **cyclical**: *"high-risk" applications are the ones that are used in such a manner that "significant risks" are likely to arise*! It might be more interesting to focus on the potential *severity of the harm* that might occur together with the *likelihood* of its occurrence. Depending on the *severity/likelihood* ratio of specific applications different regulatory solutions might apply. This could lead to different nuances (extreme/high/moderate/low risk) and regulatory responses, instead of what seems to be a rather binary ("all" or "nothing" – see *supra*) approach by the Commission. Furthermore,

the risk assessment should take into consideration whether the choice not to use an AI application in a specific situation (for instance healthcare) might also cause severe harm (for instance to a category of patients). For some applications, AI could fail less than humans do right now, and even if the consequences of failing are hard, it would still be an improvement.

Finally, while the White Paper is entirely right to highlight (in p. 18) that in some "exceptional instances" the proposed cumulative criteria might not be applicable, this introduces a lot of uncertainties and makes the waters of assessing high risk pretty murky.

As a conclusion the Commission's approach to determine "high-risk" might need more work and refinement.

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

From lethal autonomous weapons systems (sometimes called "killer robots"), developed by militaries and manufacturers around the world with little or no control, to sophisticated surveillance and human manipulation/control systems based on AI, there are several risks of misuse of AI that require attention and regulation.

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				x		
The keeping of records and data				x		
Information on the purpose and the nature of AI systems				x		
Robustness and accuracy of AI systems				x		
Human oversight				x		
Clear liability and safety rules				x		

These requirements are all important but their applicability could vary depending on the specific context and situation.

For instance, the keeping of records in relation to the programming of an algorithm and the kind of datasets used to train AI systems is very important in cases when the use of these systems results in decision making and/or affects the life of persons and their rights. This permits to ensure the transparency and traceability of the process and to explain AI outcomes to the persons concerned or the relevant oversight authorities. The lack of records could

enhance the fear that AI systems are complex and opaque (the popular perception of AI systems as “black-boxes”) and could make it difficult to identify and prove possible breaches of laws, including of legal provisions that protect fundamental rights, attribute liability and enable affected persons to claim compensation.

On the other hand, a requirement to “keep the data themselves” could often be problematic from several points of view. From a personal data protection point of view this not only increases the risks of cyberattacks and other data breaches but could also go against time-limits and other restrictions posed by existing European rules and CJEU case law. More generally, the systematic keeping of mass volumes of data sets could have an important energetic and environmental impact. Skopai believes that AI can greatly contribute to finding solutions to pressing global challenges such as climate change, environmental degradation and sustainability. AI should nonetheless also be developed in an environmental-friendly way and with the objective to limit as much as possible its environmental impact.

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: (Highlight the chosen answer)

- 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:

A research project initiated recently between Skopai and the MIAI Chair on the Legal and Regulatory Implications of Artificial Intelligence has already identified more than 160 startups working in the field of facial recognition and biometrics. These startups develop very diversified products and services including many that could be “used in public spaces”. If one adds to this all the products and services developed by other companies, including big tech companies, we understand the number and diversity of biometric systems that could be deployed in public spaces by private or public actors for verification, identification, surveillance or other purposes.

There is today in Europe an important number of rules, starting with the GDPR and the Law Enforcement Directive, permitting to regulate the use of Facial Recognition Technologies (FRTs). However, a careful analysis is needed in order to assess whether the “technologically neutral” rules of European instruments or the specific provisions concerning biometric data are sufficient and permit to address all the risks related to this particularly sensitive sector.

The initial work of the MIAI Chair on the Legal and Regulatory Implications of Artificial Intelligence shows that there is a lack of transparency concerning the existing and intended uses of FRTs in public spaces. It also shows different attitudes in European States in relation with several issues, including the question whether Data Protection Authorities are

systematically consulted or not before the deployment of FRTs in public spaces. A risk of fragmentation exists in the interpretation of the GDPR and the Law Enforcement Directive by different States, DPAs and other regulatory or oversight bodies. The adoption of guidelines and new rules might be useful in order to provide a better framework for FRTs, fix the red lines, determine in which cases and under which specific conditions (including necessity and proportionality) their use is acceptable in public spaces and help deal with the important issue of the composition and management of associated databases.

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? (Highlight the chosen answer)

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

We are skeptical with the idea of a voluntary labelling system.

A voluntary labelling system would quickly become mandatory as people would mainly use labeled applications putting aside non-labeled ones.

Also, putting in place a labelling system would bring new actors that would offer to help companies to make their AI get the labelling. This would add significant costs to SMEs and favor large groups. Also, the standards and constraints for the label would need to be perfect, which is hard and would take years to develop and update (even more knowing that the field is quite young).

What is the best way to ensure that AI is trustworthy, secure and in respect of European values and rules? (Highlight chosen answer(s))

- 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

The idea that high-risk applications should be tested and certified before they reach the single market and also be submitted to posterior conformity controls seems reasonable. We could make here an analogy with what happens with conformity assessments and posterior technical inspections of cars.

However, these requirements and controls should be subject to several conditions and caveats. For instance, conformity assessment requirements already exist in EU law in relation with a large number of products and it is necessary to avoid duplication. Also, one should take into consideration the reservations expressed above in relation with identifying “high-risk” applications. As a conclusion the joint *ex-ante/ex-post* control mechanism should be

implemented in a wise way and with finesse in order to avoid creating unnecessary hurdles for European AI industries.

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? (Highlight chosen answer(s))

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

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

- **YES**
- NO
- No opinion

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? (Highlight the chosen answer)

- **YES**
- NO
- No opinion

Do you have any further considerations regarding the question above?

As a matter of principle the EU and its Members States should avoid overburdening European companies with new AI liability rules as this could hamper innovation in our continent and expose European companies to a competitive disadvantage in relation with their counterparts in other continents. Overregulation and generalization of strict liability schemes could be particularly harmful at the current context of economic recovery following the unprecedent Covid19 lockdowns.

However, as in the field of regulation (see Section 2 above), some adjustments to the existing safety and liability framework might be useful and even necessary in order to build trust on AI and to provide users of AI systems and applications with adequate protection. Here also, we need a "wise" reform, not a "wild" one. Amendments and adjustments should take place only following a rigorous assessment of eventual shortcomings and gaps in the current regulatory framework and using a risk-based approach.

Concerning more specifically the Product Liability Directive, it has served since 1985 as an effective tool and contributed to enhancing consumer protection, innovation and product safety. However, some of its technologically neutral rules might need adjustment and update in order to match adequately the potential risks related to misuse of fast evolving digital technologies.

The Product Liability Directive is based on the principle that the producer is liable for damage caused by the "defect" in a "product" – very much perceived as a material object. However, in complex systems using AI (such as autonomous cars) there might be a constant interaction between traditional products (cars) and associated *services*. It is thus necessary to carefully think whether and how the Product Liability Directive might dial with services and software in situations where there is a significant risk of damage to persons or property. The concept of "defectiveness" also needs careful thinking in relation with sophisticated autonomous systems based on machine-learning. The repartition of liability between the various persons involved (especially between the producer(s) and the operator(s) who decides on the use of the AI-system, who exercises control over the risk and who benefits from its operation) should also be considered.

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? (Highlight the chosen answer)

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

Please specify the AI applications:

National liability legislations offer an important and technology neutral framework in order to cover the challenges arising by the use of new technologies and to enable persons who suffered damage by the operation of such technologies to request reparation.

However, EU Member States laws of tort are far from being harmonized. Also, it is questionable whether all of them include clear liability rules specifically applicable to damage resulting from the use (or, better, *misuse*) of AI systems. Indeed, the specific characteristics of AI systems, including their complexity, connectivity, opacity, autonomy and vulnerability to cyberattacks, could make it more difficult for victims to present a claim of compensation or establish the causal link between the victim's harm and the defendant's action. The EU has noted several times that it considers the liability risk to be one of the key factors that defines the success of new technologies, products and services and that a satisfactory regime could help the public trust AI technology.

Current national liability rules could thus be updated and harmonized in order to better address these issues. Systems of alleviation (or even reversal) of the burden of proof could be useful in order to avoid a situation in which persons who suffer harm or whose property is damaged end up without compensation. This should be the case for high-risks applications, for instance

when the use of AI in automatization of human tasks results to actions that could endanger humans or the safety of organisations.

However, here also, the concept of “high-risk” should be clearly defined. A major issue is whether the same definition of “high risk” should be adopted in relation with the standard regulatory framework analysed above (Section 2) and in relation with the *specific* question of liability rules.

New regimes of strict liability should only be introduced parsimoniously and in situations where the operation or the (mis)use of AI-systems involves a significant potential to cause harm to persons - especially (if not exclusively) in situations where such systems are used in *public* spaces (as a contrast, in “private” situations, such as in smart home appliances, the existence of a contractual relation with the operator should enable victims to seek compensation). Ideally, for reasons of legal certainty, the EU should dress (and update periodically) a list of all “high-risk” AI-systems and define with precision the legal regime (including in terms of risk coverage) for their operation.

Thank you for your contribution to this questionnaire.