

## Consultation on the White Paper on Artificial Intelligence. A European Approach

### Atos position paper

Atos welcomes the White Paper “On Artificial Intelligence – A European approach to excellence and trust” published by the European Commission in February 2020.

Atos is a global leader in digital transformation with 110,000 employees in 73 countries and annual revenue of € 12 billion. European number one in Cloud, Cybersecurity, and High-Performance Computing, the Group provides end-to-end Orchestrated Hybrid Cloud, Big Data, Business Applications, and Digital Workplace solutions. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos|Syntel, and Unify. Atos is a SE (Societas Europaea), listed on the CAC40 Paris stock index.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education, and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Atos has been working for a long time in [Artificial Intelligence](#) as reflected in the company’s [strategic vision](#) which emphasizes the importance of AI as part of the digital transformation. Atos’ vision for AI is based on three main pillars:

1. The identification of the right use cases where the application of AI can be really disruptive to our customers.
2. The provision of sufficient and specialized computing power, including the most innovative technologies like edge or quantum computing.
3. Ensuring trust and compliance, safeguarding the value provided by AI while at the same time guaranteeing compliance with existing regulations and related guidelines to preserve fundamental values and human rights in accordance with the European principles.

Atos provides this document as a way to explain in detail its contributions to the EC White Paper and its consultation.

### About the authors

This answer to the consultation on the EU White paper on AI has been prepared jointly by a multidisciplinary and multinational team including R&D, delivery, and legal Atos experts. Thus, it aims to reflect the consolidated vision of the overall group, being aligned with the company’s strategy which positions AI as a fundamental technology for the digital transformation process.

## Section 1- An ecosystem of excellence

**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)?**

Working with Member states	4
Focussing the efforts of the research and innovation community	5
Skills	4
Focus on SMEs	4
Partnership with the private sector	5
Promoting the adoption of AI by the public sector	3

**Are there other actions that should be considered? (500 characters max)**

The European funding of Research and Innovation should emphasize and prioritize projects which embed potential for industrialization by European industrial companies. Europe should establish an agenda to invest and reinforce European AI technology sovereignty (e.g., EPI, neuromorphic computing, HPC centres, quantum computing). Adoption in strategic industrial verticals should be fostered through lighthouse projects and large-scale pilots. Publication of open standards, guidelines, and good practices-

The European funding of Research and Innovation should **emphasize and give priority to projects which embed a potential for industrialization** by European industrial companies. Although purely academic research is key to the long-term development of the European AI ecosystem, the key stakes of the upcoming years include the ability of Europe to build a leading industry around AI and gain strategic autonomy in this field.

Thus, Europe should establish an agenda to **invest and reinforce its sovereignty in key technologies for AI where leadership is not decided yet** (e.g., EPI, neuromorphic computing, HPC centres, quantum computing), minimizing the vulnerabilities in terms of privacy and security that the reliance on third-party technologies implies. European projects such as EPI (European Processor Initiative) are paving the way in this direction. Additionally, sovereignty on the software stack is equally important. Building our own technology would allow us to control its life cycle and therefore adapt it more easily to Europe's specific needs. For example, in order to integrate with a European AI hardware technology (such as the European Processor Initiative), the software stack must be controlled enabling us to develop and deploy AI use cases.

It is also critical to maintain the control of data-driven technologies to enforce the application of European regulations.

To that effect, we propose that the EC federates a number of European industry players to **collaborate on several articulated industrial innovation projects**. The establishment of Large-Scale Pilots (LSPs) or lighthouse project in strategic industrial verticals will help to promote the update of AI technologies through the generation of guidelines, lowering down the technical and non-technical barriers and fostering the transfer of technology from academia and research centres to the industry and real production environments. Experiences gained from the Internet of Things (IoT) and Big Data during the last decade shall be valuable for setting up this process.

Following the example of the work that is being conducted by Artificial Intelligence High-Level Expert Group (AI HLEG) regarding *Ethics Guidelines for Trustworthy AI*, Europe should work on the creation of open standards that break siloes between verticals and that facilitate the access to good practices from all the European AI community and especially the SMEs.

In this context, **avoiding fragmentation** is extremely important, and that is why some of those actions should be articulated around a European Partnership on AI, Data and Robotics, which brings different stakeholders together, provides a sound agenda in line with the above challenges, communicates progress in a transparent way to the society at large and takes advantage of critical mass and representativeness of the ecosystem.

## Revising the Coordinated Plan on AI

**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)?**

Strengthen excellence in research	4
Establish world-reference testing facilities for AI	5
Promote the uptake of AI by business and the public sector	5
Increase the financing for start-ups innovating in AI	4
Develop skills for AI and adapt existing training programmes	4
Build up the European data space	5

**Are there other areas that should be considered? (500 characters max)**

- i) Fostering transnational and cross-organisational collaboration and programs
- ii) Data for Industrial AI. Europe can still claim leadership in industrial AI. For this to happen, there is a need to foster data sharing capabilities within and across industries.
- iii) Creating European structures to support data collection and sharing
- iv) General Public & SME awareness and training
- v) Members states support the local adoption of the AI-on-demand platform and Gaia-X. National instances should be created

Atos proposes to consider some additional areas to the ones already included in the Coordinated Plan on AI.

### 1. Fostering transnational and cross-organisational collaboration and programs

Atos recommends that the EU supports the establishment of multi-national research and development **centres for innovation networks**, based on the existing structures and competencies of the concerned Member States. In addition to basic research, these transnational research and innovation networks should focus on data sharing reference models, on the authorization of access to data and information, and the transfer of research results into industrial applications.

To this end, the following activities could pave the way for and nurture these collaborative structures:

1. Establishment of a European program for the promotion of basic research with annual calls for proposals on specific key industry topic areas or specific fields of application of AI, aiming specifically at **enabling data & knowledge sharing and establishing common data reference models**;
2. Expansion **Open data** made available across Member States by public authorities
3. Promotion of EU-sponsored joint conferences, temporary staff exchanges between the centres and joint doctorates, summer schools, hackathons, etc.;
4. Establishment of EU-funded measures to **interlink the AI transfer activities** via jointly operated testbeds with access to data sets and the exchange of best practice activities.

## 2. Data for Industrial AI

Europe can still gain and claim leadership in AI in one sector: industrial AI. For this to happen, there is an urgent need to foster data sharing capabilities within and across industries, in order to build European AI-enabled global industrial leaders. This requires focusing on data sharing, data augmentation, data anonymization techniques, processes, and regulatory frameworks.

Atos recommends the creation of "**data partnerships**" among companies and with research institutions to foster the exchange and pooling of data. In this context, the support by the EU to "data partnerships" among companies, for example by increasing the visibility of existing data platforms such as the **International Data Space Association (IDSA)**, a.k.a. Industry Data Space. The "International Data Space" initiative can indeed serve as a source of inspiration or model for a reference architecture which fosters the rapid deployment of trusted data governance environments of value creation, through a reference architecture model enabling data sovereignty, decentralized data management, and data as an asset with easy linkage capability. Initiatives aligned with ongoing activities such as i-Spaces (data-driven innovation environments within BDVA) or the Support Center for Data Sharing by the EC are welcome.

## 3. Creating European structures to support data collection and sharing

The establishment of **industry-focused collaborative structures** within the framework of a European research consortium should be addressed. In addition to the existing and planned competence centres and clusters, the EU should establish a **European research consortium**, i.e. a network of methodology or technology-oriented centres as well as domain or application-oriented centres working collaboratively. The consortium should include **industry-relevant shared curated data and computing infrastructures** for scientific and industrial use as well as **industry-specific transfer hubs**, which are intended to accelerate the transfer to the society and markets via archetypal applications.

In addition, **European Research Data Infrastructure** should be created to make it possible to systematically record and open the currently decentralised, project-based, and temporarily stored stocks of science and research public data for the European science system and contribute to standardisation.

A concerted European effort in the production of **synthetic data sets** should be undertaken. In the age of artificial intelligence, simulation is increasingly important. Data is an essential element in the development of artificial intelligence-based on machine learning. However, the **collection of real-world data can be difficult** due to intellectual property issues, it is often costly and time-consuming due to hand-made annotations, and it may not be possible in some cases to have sufficient quantity and variety of real data for a model to be well generalized. **Simulation tools**

**can help bridge this gap.** For example, 3D game engines can quickly create synthetic data as well as the metadata needed for supervised learning. 3D Design tools can have a role here. AI itself can be part of the simulation tool to improve realism, and the recent GAN (Generative Adversarial Network) technique can be used to create more realistic data sets. Simulation is already widely used in the fields of robotics or reinforcement learning and could be used even more. Europe can boost this area which would facilitate the spread of AI in industries by removing the dependency on real data. The **power of HPC** can be the key to make these real-world digital simulators run effectively.

Finally, Atos proposes the creation of a **European Centre of Expertise on Industry Data**, with the responsibility of benchmarking and documenting data sources and use cases, promoting the definition of reference architecture models, offering expertise and guidance to the European ecosystem, and guiding the collection and storage of data in the European Research Data Infrastructure. This Centre should rely on industrial expert representatives.

In order to democratize the AI training phases which are extremely demanding in terms of computing resources and therefore costly, especially for SMEs, it may be interesting to **develop existing HPC computing infrastructures** to enable the execution of AI workloads and to allocate part of the **computing infrastructure to AI projects** in conjunction with data providers ("compute for data barter").

#### 4. General Public & SME awareness and training

Alongside the actions directed at small and large businesses, the General Public needs to be more familiar with AI concepts. A coordinated European Plan needs to be put in place to that effect. This plan can also include SME as a priority target. Existing instruments that target SMEs such as DIH can be used for some of these actions.

#### 5. Members states support the local adoption of the AI-on-demand platform and Gaia-X

The presence of relevant companies from all Member States should be guaranteed in the strategic European initiatives like **Gaia-X** or the AI-on-demand-platform to maximize the capillarization of new advances throughout the whole European geography, balancing possible gaps in digital transformation and adoption.

In the case of the AI-on-demand-platform, Member States should contribute by analysing the viability to invest in national instances of the platform in order to create local ecosystems and populate the catalogue with more resources.

A united and strengthened research and innovation community striving for 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)?**

Support the establishment of a lighthouse research centre that is world-class and able to attract the best minds	5
Network of existing AI research excellence centres	4
Set up a public-private partnership for industrial research	5

**Are there any other actions to strengthen the research and innovation community that should be given a priority?** (500 characters max)

- i) To set-up an innovation accelerator Fund that would complement and collaborate with (not replace) the existing programmes, with a potential lever effect (on equity and loans). The Fund would include diversified TRL levels, industry sectors, and technology domains.
- ii) To reinforce the role of the future PPP as the mechanism to join together the different European groups working in AI.
- iii) To create specific AI Networks of Excellence for AI at the edge and robotics.

## 1. Creating a European Innovation Accelerator Fund

Many financial tools, instruments, and funding programs have been developed by European Institutions to strengthen and support European Research and Innovation. However, despite all these instruments, **successful innovation projects generally lack the funding required** to set-up and launch a sustainable business. Investments or acquisitions by non-European players are too often the only way for entrepreneurs to reach cruising altitude. Atos believes that Europe needs to **reduce the fragmentation** and the siloed approach to innovation investment to circumvent this issue.

**A European Innovation Accelerator Fund** which complements and collaborates with (not replaces) the existing programmes (e.g. H2020/Horizon Europe, Flagship, etc.) should be created. These existing programmes may propose to channel their funds through the Fund, with a potential lever effect (on equity and loans). The Fund will include diversified TRL levels, industry sectors, and technology domains to globalize and **minimize the investment risks and maximize the lever effect**.

## 2. The AI Public-Private Partnership

**A PPP for industrial research** must be considered as **a fundamental instrument** to bring together the different families working in AI, e.g., BDVA, euRobotics, Claire, Ellis, EurAI, the AI Networks of Excellence, the future Lighthouse Research centre, the AI4EU project and its possible association, the AI Alliance, and of course, the industry representing the demand-side (for example through industrial associations). The PPP will be a single home for all the stakeholders to collaborate in the definition of a common agenda.

In this direction, Atos as a founding member of BDVA has actively participated in the ongoing activities towards the creation of the AI PPP with already concrete results such as the Strategic Research, Innovation, and Deployment Agenda (SRIDA)<sup>1</sup> and the partnership proposal outline<sup>2</sup>.

## 3. Networks of Excellence in AI

The establishment of a lighthouse research centre and the promotion of networks of existing AI research excellence centres shall become fundamental actions to mitigate the existing fragmentation that characterizes the European AI research landscape. As a laying ground, the

<sup>1</sup> <http://www.bdva.eu/sites/default/files/AI%20PPP%20SRIDA-Consultation%20Version-June%202019%20-%20Online%20version.pdf>

<sup>2</sup> [https://ec.europa.eu/info/sites/info/files/research\\_and\\_innovation/funding/documents/ec\\_rtd\\_he-partnerships-european-partnership-on-artificial-intelligence-data-and-robotics.pdf](https://ec.europa.eu/info/sites/info/files/research_and_innovation/funding/documents/ec_rtd_he-partnerships-european-partnership-on-artificial-intelligence-data-and-robotics.pdf)

European Commission has funded the creation of four pan-European Networks of Excellence (NoE) in AI through ICT-48-2020 topic<sup>3</sup>. The objectives of the topic already defined the importance of the synergies to be maintained with the industry for the identification of industrial roadmaps and to develop industrial Ph.D. programmes. Nevertheless, in order to intensify the market orientation of the research done by the networks, the European Commission should establish mechanisms to incorporate and strengthen the presence of leading European industries from multiple domains as a way to guarantee the business relevance of their results.

In addition, it is important to highlight the complexity and diversity of the technological areas covered under the umbrella of AI. The original text of ICT-48 topic defined four topics to be addressed by the networks: advances in the foundations of AI, developing the next generation of intelligent robots, advanced perception or interaction with humans and environments, AI at the edge, and hardware for AI. Nevertheless, robotics and AI at the edge were finally not covered by the selected projects, which should be done in future calls about this topic.

### Focusing on Small and Medium Enterprises (SMEs)

**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)?**

Help to raise SME's awareness about potential benefits of AI	3
Provide access to testing and reference facilities	5
Promote knowledge transfer and support the development of AI expertise for SMEs	4
Support partnerships between SMEs, larger enterprises and academia around AI projects	5
Provide information about equity financing for AI startups	5

**Are there any other tasks that you consider important for specialised Digital Innovations Hubs? (500 characters max)**

- i) Role and legal activity of DIHs must be defined to bring certainty to members, potential partners, and users. Sustainability mechanisms should be also specified.
- ii) Current DIHs landscape starts to be fragmented. Requirements must be elaborated to maximize their excellence and impact.
- iii) The relation between DIHs and industry must be encouraged, since connections between SMEs and big companies lead to fruitful collaboration ecosystems.

During the last years, Digital Innovation Hubs (DIHs) have become highly relevant as powerful mechanisms to facilitate access to services with respect to all the aspects of the digital transformation, having as main target SMEs and startups. Many DIHs are led by academia (e.g. universities, research centres, non-profit organizations). While they can serve to put in contact demand and offering or even to help developing innovative prototypes based on immature

<sup>3</sup> <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/ict-48-2020>



technologies, their models and scope must be revisited to ensure that they work side-by-side with private companies.

Therefore, their role and legal activity must be better defined and specified to bring certainty to their members and potential users and to implement the needed mechanisms to guarantee their long-term sustainability. At this point, it will be important to clarify which are the possible legal relationships between DIHs and companies.

Finally, a well-defined strategy must be established to avoid fragmentation. The number of DIHs has grown quickly during the last years due to the increasing funding opportunities and the public attention that the instrument has received. Although the main purpose of DIHs is to maximize the impact of new technologies and their spread through the whole European geography, solid and common requirements must be agreed to maximize their excellence. Efficient coordination mechanisms shall be created to take into account vertical domains and key enabling technologies. Member States should support the actions concerning DIHs.

## Section 2 - An ecosystem of trust

### AI concerns and risks

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

AI may endanger safety	3
AI may breach fundamental rights (such as human dignity, privacy, data protection, freedom of expression, workers' rights etc.)	5
The use of AI may lead to discriminatory outcomes	4
AI may take actions for which the rationale cannot be explained	3
AI may make it more difficult for persons having suffered harm to obtain compensation	4
AI is not always accurate	5

**Do you have any other concerns about AI that are not mentioned above? Please specify:**  
(500 characters max)

- i) Sustainability of AI with regards to its impact on natural resources and energy consumption. Europe should encourage the least voracious of usage AI and promote only the use cases which have a positive impact on the society at large.
- ii) Collaboration and co-existence (also physical) between humans and AI systems.
- iii) Lack of resources and know-how to operate AI systems.
- iv) Importance of cybersecurity to prevent attacks causing security and safety risks.



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
<b>Current legislation may have some gaps</b>
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)?

<b>Yes</b>
No
Other
No opinion

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

<b>Yes</b>
No
Other
No opinion

If you wish, please indicate the AI application or use that is most concerning (“high-risk”) from your perspective: (500 characters max)

AI applied in use-cases involving critical infrastructures (e.g. nuclear plants, electricity generation plants, manufacturing facilities) or where there is a potential risk for personal health and lives. AI for automated decision-making control of Cyber-Physical Systems. AI embedded in medical devices, especially in the case of implantable devices.
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## 1. AI Sustainability

AI sustainability with regards to its impact on natural resources and energy consumption is an important concern. Indeed, as AI use cases expand and AI becomes more pervasive and powers more B2C and B2B businesses, the AI impact on global energy consumption, on GHG emissions, on the exhaustion of natural resources, and the subsequently generated pollution become increasingly significant. We believe that Europe should act both to **encourage the least voracious of AI technologies** and systems and to **promote only the AI-enabled use cases which have a positive impact** on the society at large.

## 2. Collaboration and co-existence (also physical) between humans and AI systems

The adoption of AI systems is going to be a progressive process and they will co-exist with humans. Appropriate mechanisms will have to be implemented to **ensure appropriate oversight**

**principles for safety and security reasons** but also **AI systems should be complemented with the expert know-how of humans to unlock their full potential**. Despite the possibilities to augment the current capabilities of human operators, to improve the workplace conditions and to reduce the time spent in repetitive and un motivating tasks, human-machine cooperation and collaboration is one of the biggest challenges and concerns for AI due to multiple aspects: the ethical perspective of eliminating jobs, privacy issues of human workers, potential bias and discriminative effects of AI systems, conflict resolution between the results of an AI system and a human (e.g., clinical diagnosis, financial rating), lack of know-how and skills to comprehend the mathematical or statistical theories behind the models, potential economic and reputation losses in case of failure, etc. A new dimension must be considered in the case of safety-critical or life-critical systems where the physical integrity of human lives may be also in danger. This is the case of the healthcare domain as it is explained in Atos Global opinion paper for digital vision in health<sup>4</sup>.

The impact of AI on people with disabilities must be also carefully analysed. As disability is situational and the number of impacted people by it relatively small, the effect of biases or unfair automated decisions may be bigger, creating undesired outcomes that exacerbate even more discriminations.

In this context, Atos published a global opinion paper covering some of the ethical foundations that must be adhered to the design and implementation of digital systems including AI technologies. In this paper, Atos Ethics by design and Design for Food are shown as examples of voluntary adopting good practices. It also mentions concepts regarding blending AI with human intelligence<sup>5</sup>.

### 3. Lack of resources and know-how to operate AI systems.

Many of current industrial AI systems are just prototypes tested and validated at a small scale or in laboratory conditions. These **technologies must be transferred to a real and highly scalable production environment** introducing modern AIOps or MLOps practices that cover the end-to-end lifecycle. This goes beyond the concept of training and inferencing and requires a complex process that includes data preparation, feature engineering, model design and evaluation, deployment, and orchestration. In addition, in some cases, these steps must be repeated periodically or even executed online. This is often beyond the capabilities of many companies, and not just SMEs, that have specialized knowledge in specialized field but are not able to handle such a complex IT process or do not have the required resources and infrastructures. This situation could even lead to unfair business models where a limited number of actors will establish monopolistic or oligopolistic positions to the detriment of the other stakeholders.

### 4. Importance of cybersecurity to prevent attacks causing security and safety risks.

Traditionally, IT systems have presented predictable and deterministic behaviours, which have enabled exhaustive verification and testing techniques to be applied in order to provide correct behaviour and to satisfy the design requirements. In the case of AI systems, there are approaches with a **high level of indeterminism** that makes difficult to validate them, with the consequent risks that suppose their usage in critical environments. They also imply a **new soft**

<sup>4</sup> <https://atos.net/wp-content/uploads/2019/03/atos-global-digital-vision-for-health.pdf>

<sup>5</sup> <https://atos.net/wp-content/uploads/2020/04/atos-digital-vision-ethics-opinion-paper.pdf>

**spot for cybersecurity attacks and threats**, so intense research must be done to ensure a high level of protection.

All the risks and concerns expressed in the white paper and extended in the current subsection can be in general addressed by current vertical regulations. Especially in the case of critical industries like automation or healthcare, existing legislation and standards are very exhaustive and take into account the intrinsic particularities of each respective domain. The work to be done by Europe is the analysis of the gaps that the current legislation may have concerning the adoption of AI systems. This is the case of the European Medical Device Regulation that does not give the possibility of having a software system with self-adaption functionalities.

To avoid unnecessary bureaucracy and to maintain the competitiveness of the European industry, the **introduction of compulsory requirements should be limited to high-risk applications**. In the case of low-risk applications, open guidelines and recommendations should be favored. Many of the ratings stated in the White Paper are made specifically for critical use cases impacting people's safety. They would slightly vary if considering non-critical AI use cases.

## Requirements for AI

**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)?**

The quality of training data sets	5
The keeping of records and data	5
Information on the purpose and the nature of AI systems	3
Robustness and accuracy of AI systems	4
Human oversight	4
Clear liability and safety rules	5

**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)
<b>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.</b>
Biometric identification systems should never be allowed in publicly accessible spaces
No opinion

Please specify your answer: (500 characters max)

Alongside systems based on biometric identification, there exist today alternatives where the individual does not need to be identified, and information of personal nature need not be shared or stored. These solutions should have priority in EU-sponsored deployment projects and in Research and Innovation.

**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 characters max)

A labelling system should be implemented for AI systems. Critical AI applications would be awarded a Label valid for a set duration (e.g. 2 years) before it must be renewed. This label would qualify the compliance of the systems with a set of guidelines and requirements that can be derived from existing frameworks like HLEG Ethics Guidelines for Trustworthy AI. For SMEs to easily obtain the Label, a self-assessment framework should be provided and DIHs could support them in the process.

Atos proposes the **creation of a “European AI Label”** which would certify that the labelled product or solution meets certain specifications, notably but not only for high-risk applications. This label could operate in a way similar to what already exists for example in the cybersecurity space. It would qualify the compliance of the systems with a set of ethical guidelines. As an example, these guidelines may be derived from existing frameworks, like the “Ethics Guidelines for Trustworthy AI”, by the European Union or the character Virtue from the “Five Value Framework” by prof. Nathan Colaner, or a combination of those. For SMEs to easily obtain the European Label, a self-assessment framework should be provided (EU Sensitive AI Label Portal) and DIHs could support the process. It should be affordable and flexible (e.g. through online tools and services) in order not to hamper the development of businesses.

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

**used in public spaces need to be subject to further EU-level guidelines or regulation:**

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 characters max)

Our main concern is the availability of the tools necessary to assess an AI system as trustworthy, secure, and respectful of rules. These tools mostly do not exist today and are not in place. Thus, a strong investment in research and innovation is required, and the EC can concretely support this investment. Compliance assessment should be enforced through a referent in each member state, in a model similar to that of the LNE (Laboratoire National de Métrologie et d'Essais) in France.

## Section 3 - Safety and liability implications of AI, IoT, and robotics

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 characters max)

In our view, the current EU legal framework on product safety covers all risks that arise or can arise from covered products and related technology, including AI. There is no need to expand the legal framework to address specific AI risks. Clarification of aspects such as relating to risk coverage or safety concepts can be done through other means e.g. guidelines, norms, standards, ... where necessary.

**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 characters max)

All industries in Europe carry out iterative risk assessment and risk reduction measures according to processes that were introduced according to the requirements of safety legislation. All products benefit from such an iterative approach and the same processes can be applied to AI (and software).

**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
<b>No</b>
No opinion

**Do you have any further considerations regarding the question above?** (500 characters max)

No
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**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
<b>Yes, for specific AI applications</b>
No
No opinion

**Please specify the AI applications:**

Highly automated / autonomous systems where AI-enabled systems can cause great damage to people or goods
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**Do you have any further considerations regarding the question above?** (500 characters max)

Under the existing EU legal framework, member states can introduce strict liability regimes in their national legislation for highly automated / autonomous systems to address situations where such AI-enabled systems can cause great damage to people or goods (e.g. cobots on the shop floor). Strict liability shall then trigger the insurance industry to come up with viable insurance solutions.
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In the B2C domain, **the existing EU legal framework on product safety and liability** which consists of numerous directives **is fit for purpose** and has demonstrated its robustness and efficiency. Member States have been transposing the same into national law and applying these rules for more than 30 years. The principle of strict liability (without fault or negligence) shall apply to each defective product sold into the EEA (European Economic Area), regardless if it is AI-enabled or not. Further clarity as to their interpretation arising out of real-life legal cases caused by AI-enabled systems can, therefore, be provided by national case law and doctrine within the boundaries of the existing EU legal framework.

The various industrial players have sufficient maturity to agree on balanced responsibility and liability terms. Focus should rest on the capacity of each player in the value chain to document and explain how the systems were designed, trained, and deployed. These aspects can be managed at the level of norms, standards, certification, and labelling where industrials and public agencies have a role to play to introduce certain requirements that are capable of protecting all legal subjects involved with AI, be it consumers or industries.