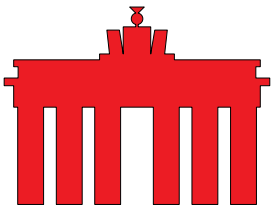

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**Position Paper on the White Paper on Artificial Intelligence – A European Approach to Excellence and Trust (COM(2020)65final)**

Berlin, 18 May 2020

On 19 February the European Commission published its White Paper on Artificial Intelligence. As a follow-up to the European Commission's previous AI Strategy (COM (2018)237 final) and its Coordinated Plan (COM (2018) 795 final), the long-awaited White Paper sets out the intentions of the new Commission under President Ursula von der Leyen, both for the current legislative term and beyond. The White Paper was issued on the same day as a series of other publications on digital topics. It was accompanied by a Commission draft Data Strategy and a paper which deals more closely with liability issues in the field of artificial intelligence. On the same day, the EU Commission also presented its Digital Strategy, of which the White Paper forms an integral component.

The White Paper identifies two central aspects for the further political handling of artificial intelligence. The first is described as an "ecosystem for excellence" and the second as an "ecosystem for trust". The first aspect deals in particular with research and support measures, while the second aspect addresses regulation.

eco – Association of the Internet Industry regards the White Paper on Artificial Intelligence as an extremely important assemblage of the European Commission's planned measures in the field of artificial intelligence. As such, eco wishes to take the opportunity to contribute to the discussions on the paper.

## I. General remarks

- **Keeping the whole economy in mind in the promotion of artificial intelligence**

The White Paper places a strong focus on developing an ecosystem of excellence. This step is to be welcomed in principle and is essential for the successful development of artificial intelligence systems. At the same time, it is important to ensure that this expansion is not limited to supporting selected industries in building an AI ecosystem for their own purposes. Comprehensive digitalisation of society and the economy, as also outlined in the Data Strategy, is urgently needed if the European economy is to continue to compete globally and to benefit from thriving digital innovation.

Competence building in the digital field must therefore be geared as far as possible to ensuring that society and the economy are capable of using artificial intelligence, integrating it into business models and services, and configuring value chains. Exclusive support for academically-educated top executives may well be an important component for the successful application of artificial intelligence. However, it does not go far enough. The population at large must also be placed in a position to understand and use artificial intelligence to the maximum extent possible. Furthermore, the envisaged initiatives in research and development should not be limited to baseline research; rather, the transfer into applications for society and economy should also be considered and supported.

- **Keeping the regulatory framework transparent**

In its White Paper, in the context of trust, the EU Commission also describes a potential framework for the regulation of artificial intelligence. Here, the focus should be on ensuring that the planned regulatory framework is consistent, as well as being transparent and practicable for all parties involved, such as artificial intelligence developers, users and operators, but also for citizens and regulators. A highly complex regulatory framework can quickly lead to contradictions and difficulties in application and development. This would be counterproductive for the application and integration of AI in business and society.

## II. On the AI White Paper in detail

- **On the introduction**

In its draft for the White Paper, the Commission formulates three ambitious objectives which, from eco's point of view, hold equal weight, given that they are closely intertwined and are as such mutually dependent. The aim is to provide citizens with better services, both public and private, and to give companies the opportunity to introduce new products. Finally, services of public interest are also classified as of relevance.

Ultimately, the extent to which the strong link between these three objectives is suitably reflected in the Commission's two-dimensional approach of an "ecosystem of excellence" and an "ecosystem of trust" is not clear. Essentially, from eco's point of view, placing a stronger emphasis on the efforts of the industry to develop and operate new services would make sense.

- **On Section 2: Capitalising on strengths in industrial and professional markets**

The European Commission regards the traditional economic focus of many European states on the manufacturing industry as being a central feature of the AI White Paper. This focus on a specific sector – even if it is not wrong in principle – may obscure the requirements of modern markets and data-driven business models, as this only envisages the integration of artificial intelligence into business models and distribution channels that are already in existence. However, this does not do justice to the fact that artificial intelligence as well as digitalisation in general not only often fundamentally change existing business models and disrupt new value chains, but also place completely different demands on companies. From eco's point of view, a resolute digitalised European economy and society should basically pursue a holistic approach and implement it consistently. In eco's opinion, this also entails an acceptance and willingness to call existing business models, innovation cycles and forms into question.

- **On Section 3: Seizing the opportunities ahead: The next data wave**

The view that Europe is well positioned in both energy-efficient electronics and in the area of algorithmic foundations for artificial intelligence may contain a certain level of truth. However, this assessment does not take into account the fact that progress in the application and implementation of corresponding technologies is sometimes very slow. This applies both to the expansion of high-performance digital networks, which are particularly important for the field of edge computing, and to the use of artificial intelligence itself, which has not yet penetrated many fields of application, such as human resources, medical diagnostics or commerce. Especially when it comes to the development of medical applications, the general conditions are very difficult, especially due to the requirements of the GDPR. "Data donations" or "digital twins", as suggested by the EU in various instances, must be regarded as questionable as possible alternatives. eco also expects the greater availability of data to have only limited effects on the further proliferation of artificial intelligence systems, on account of the rather restrictive approach to data policy.

- **On Section 4A: Working with Member States within the context of an ecosystem of excellence**

Within the context of cooperation with the Member States, the European Commission plans to engage in negotiations for a revised edition of the Coordinated Plan for Artificial Intelligence. The paper which was first published in December 2018 will be re-issued under the parameters of the European Commission's new Digital Strategy and will be expanded to

include societal and environmental aspects and to accord these greater prominence. It remains to be seen to what extent these plans will take account of intensified digitalisation.

Overall, the previous Coordinated Plan had already placed a clear emphasis on research and development and on the allocation of funds for activities of individual Member States, but it remains unclear what specific means were to be used to provide incentives for the industry. In this respect, it remains to be seen whether a new Coordinated Plan will actually provide new impetus.

- **On Section 4B: Focusing the efforts of the research and innovation community**

From eco's point of view, bringing together and pooling the various government, academic and private initiatives for further research and development of artificial intelligence is a central aspect for their success. In this respect, strengthening the development and research environment in the field of artificial intelligence in Europe is a key factor for determining success. It is important to ensure a balance between necessary centralisation and the best possible distribution of resources and expertise. The creation of a new legal instrument, which the Commission intends to look into, would be an important enabler for all parties involved in order to be able to conduct research in a legally secure and effective manner.

- **On Section 4C: Skills**

Competence building, both in the development of technologies using artificial intelligence and in artificial intelligence systems themselves, as well as the acquisition of skills for their use, are key factors for the success of such technologies and systems in the European Economic Area. In this context, the planned establishment of a network of universities is to be welcomed. In addition, eco would also like to see the Commission take into account not only academic education and the development of skills in this arena, but also, to the extent possible, vocational and school education.

- **On Section 4D: Focus on SMEs**

Small to medium-sized enterprises form the backbone of the European economy, which is currently still struggling to make digitalisation and artificial intelligence work to its benefit. Against this background, eco welcomes the Commission's efforts to promote digitalisation through innovation hubs and a pilot scheme.

- **On Section 4E: Partnership with the private sector**

As with the focus on SMEs, the partnership with the private sector – which is to take the form of a public-private partnership – is a proposal to be regarded positively. eco welcomes the measure and sees it as an opportunity for SMEs in particular to create innovation in the fields of AI, data and robotics.

- **On Section 4F: Promoting the adoption of AI by the public sector**

A further positive factor is that the EU Commission has also recognized that artificial intelligence can make an important contribution to the public sector, for example in land-use planning or healthcare, but also for future planning. The chosen approach of dialogue communication is necessary and therefore also to be welcomed. At the same time, eco would find it desirable to see the existing pressure to innovate being taken more into account and for a timeframe and concrete objectives to be set for the dialogues.

- **On Section 4G: Securing access to data and computing infrastructures**

The prerequisites for artificial intelligence are both suitable data pools and functioning digital core infrastructures. Against this background, it is welcome that the EU Commission is focusing on high-performance and quantum computers as well as cloud and edge infrastructures. It remains to be seen to what extent the planned subsidies will provide an actual boost to the European Economic Area.

- **On Section 4H: International aspects**

eco welcomes the efforts of the EU Commission to coordinate its own activities internationally, which in various areas will also lead to regulation, and to engage in dialogue concerning these activities in appropriate institutions and bodies in order to achieve consensus.

- **On Section 5: An ecosystem of trust: Regulatory framework for AI**

The introductory text rightly points out that artificial intelligence must enjoy the trust of users in order to be successful, and that its use is not necessarily straightforward in every situation. It is also correctly stated that preliminary work and considerations on the regulatory framework for artificial intelligence in the form of Guidelines for the ethical use of AI have already been carried out by a High-Level Expert Group and, in addition, regulation already exists which sets limits to the use of AI. The need for a procedure that is as harmonised as possible throughout Europe is also outlined and is to be

welcomed. eco regrets, however, that the EU Commission chooses a very restrictive approach here, which primarily refers to possible risks in the use of artificial intelligence, and does not highlight the chances and potentials of AI and their intended use scenarios and application goals. Nor does the Commission address the question of how to remove possible obstacles to the use of artificial intelligence, for example in the area of collecting and deploying training data.

- **On Section 5A: Problem definition**

The EU Commission rightly recognises that the use of artificial intelligence in areas sensitive to fundamental rights represents a particular challenge. Systems should not discriminate against people and cannot allow tolerance of flaws; otherwise, the trust that users and operators place in them would not be justified. The fact that, against this background, the functioning of many AI systems is fundamentally questioned is problematic from eco's perspective. Accordingly, the question raised concerning general liability and responsibility is not very helpful. The problems of artificial intelligence systems must always be addressed in the respective context of use and, if necessary, secured by sector-specific rules. An application may be unproblematic in principle, but by integrating it into a suite or using it in a specific environment it may become security-relevant or critical. Separate general technical rules, which then apply in addition to sector-specific rules and parallel to the general rules that apply in any case would create a density of standards that would not be helpful. For the issue of a restricted ability of proof by persons having suffered harm, there are already considerations for "in camera" procedures, with which it is possible to assess systems for associated errors without having to compromise them or disclose them to the general public. Although the Commission's concerns are justified, the conclusions and consequences which they arrive at are difficult to comprehend and are not conducive to achieving the desired objective.

- **On Section 5B: Possible adjustments to existing EU legislative framework relating to AI**

The questions and challenges described in this section apply to almost all forms of IT, not only to artificial intelligence systems. They also do not go into detail about what happens when systems are linked or interconnected with each other. From eco's point of view, placing the blame for a large part of what are perceived as current problems in the enforcement of corresponding rules on the lack of traceability of artificial intelligence is problematic. The conclusion that new rules must be created for artificial intelligence is accordingly not sensible. As already emphasised above, there is a

comprehensive body of laws, regulations and standards to which developers and operators of artificial intelligence systems are bound. For central areas such as data protection, these have extraterritorial effects and also bind providers who are not based in the European Economic Area. From eco's point of view, it would be preferable to implement these standards effectively and apply them to artificial intelligence. The establishment of special laws for artificial intelligence bears the risk of discriminating against digital services and their providers in competition. This would make the application and implementation of AI as a key technology more difficult.

- **On Section 5C: Scope of a future EU regulatory framework**

The broad scope of application for a future AI regulatory framework identified by the Commission would in all likelihood extend to and limit the activities of a wide range of applications, both for consumers and in the commercial and industrial sectors. In fact, the regulations are essentially set to cover all algorithm-based applications that process data. This would affect most of the software already in use today. The cumulative criteria, combined with a purely risk-based approach, would create enormous obstacles for the development of applications in this area. An extremely restrictive regulatory structure will be created, which is unlikely to be worthwhile / investment-friendly for market-oriented providers and which, moreover, is unlikely to be help innovation in this area. Another complicating factor here is that this would entail a bureaucratic burden for the assessment process. The examples given in the White Paper, e.g. the entire healthcare system, the entire energy sector or the transport sector, show that the thresholds for achieving a high level of criticality are set very low. eco does not consider this approach to be appropriate. eco calls for/advocates that a suitable regulatory framework and an appropriate risk-based approach be weighed up against the corresponding expected benefits.

- **On Section 5D: Types of requirements**

The aspects summarised in this section specify requirements for companies wanting to use or develop artificial intelligence. At first glance, the individual aspects may appear to make perfect sense and represent perfectly understandable requirements for the use of artificial intelligence systems in particularly sensitive areas where lives or health could be directly endangered, or in critical infrastructures. However, the question arises in connection with the problem taken up in Section 5C – namely, that of an excessively broad-based regulation – as to the extent to which the requirements presented here could end up being applied even to everyday applications and, at the same time, could place demands on smaller and

non-commercial providers that would be particularly difficult for them to meet. Furthermore, the extent to which requirements for respective systems are not disproportionately higher in comparison to human decisions in comparable situations has not been clarified. Overall, the regulations here convey the impression that the Commission is taking a very restrictive and rigid approach to the use of artificial intelligence. Such an approach will only go so far in accommodating open and innovative digitalisation.

- **On Section 5E: Addressees**

The Commission's approach of assigning responsibility to the players best placed to address the requirements in each case is generally positive. The approaches chosen are already familiar from other legislation. Another positive aspect to be emphasised in this context is that the users of artificial intelligence systems also bear responsibility and are listed among the addressees.

- **On Section 5F: Compliance and enforcement**

The measures outlined to enforce European AI regulation are problematic. For example, a system of artificial intelligence in the European Area presented by the provider in its current form could be classified by the supervisory authority as undesirable. To rectify this situation, the system would have to be re-trained for the European Economic Area. For the provider or developer, this would involve an enormous amount of work, which would in all probability not be easy to implement. On the one hand, providers must provide appropriate proof of the use of an EU-compliant training data pool and demonstrate that sufficient efforts have been made in accordance with the Commission's requirements. On the other hand, re-training of artificial intelligence would represent an enormous effort for developers and operators, which would hardly be manageable for smaller companies. Against this background, the repeated assessment of AI systems which are capable of learning would also be considerably more burdensome and would be correspondingly problematic. The conformity assessment envisaged by the Commission would not be helpful for the development of artificial intelligence systems and would prove counterproductive for all software development, given the broad scope of application envisaged. eco advocates for transparent and clear enforcement of fair and proportionate rules.

- **On Section 5G: Voluntary labelling for non-high risk AI applications**

The proposed introduction of a relevant quality label is strongly linked to debates that are also being held in the area of IT security. eco is

fundamentally open to such a quality label, but would like to point out that the introduction, auditing and informative value of such a label is subject to similar challenges and problems as in the area of IT security. Questions about re-certification, the consequences of updates, and possible negative effects of an incorrectly labelled product could potentially undermine the idea of such a label.

- **On Section 5H: Governance**

The considerations on governance reflect the questions raised by eco at the outset. Sector-specific regulation must always be taken into account in the context of further thinking on the shaping of artificial intelligence. In eco's opinion, the considerations here do not adequately reflect this aspect. It would make more sense to first examine the necessity of further steps on the basis of existing regulation and, if necessary, to deregulate. In addition, recommendations for adaptation and concrete implementation should be made, for example in the form of implementing regulations or permits within the framework of the GDPR.

- **On Section 6: Conclusion**

As in the governance section, the conclusion also reflects the EU Commission's problems in finding a balance between market-driven and regulated development of AI. The challenges of meeting the requirements of sector-specific regulations on the one hand and general rules on the other are counteracted by the attempt to establish an "in-between" separate regulatory structure for AI. The "European way" suggested by the Commission could become problematic, especially for market-oriented providers.

## III. Conclusion

The White Paper outlines the approaches of the EU Commission to the promotion and regulation of artificial intelligence. The Commission's plans to promote research and development are important and would be likely to have a positive impact in the academic field.

In the opinion of eco, the economic significance of artificial intelligence is not sufficiently/appropriately considered. Too much emphasis is placed on strengthening traditional industries and their business models, without sufficiently taking the disruptive impact of digitalisation on companies into consideration. A proposed restrictive, wide-ranging matrix regulation also gives the impression that the White Paper is an attempt to subject digital

business models and services to separate regulation, an approach which is recurrently being discussed in other areas such as IT security. Against this background, it would be desirable in the further development and legislation if the Commission could focus particular attention on the opportunities and potential of the key technology.

In accordance with its own guidelines, eco considers the following aspects to be of particular relevance:

- **Regulatory framework must promote innovation and comply with sector-specific rules**

The matrix regulation envisaged by the EU Commission will make it considerably more difficult for AI products to enter the market and, in tandem with its broad field of application, slow down innovation in this field. eco therefore advises against blanket ex-ante regulation of artificial intelligence and calls for the existing legal framework to be strengthened. An open and dynamic response to addressing concrete problems in the application of AI, in combination with the solid existing legal framework, should be sufficient to achieve this.

- **Acceptance of artificial intelligence calls for transparency and dialogue**

For artificial intelligence to be successful, it must be properly understood by citizens, companies and political decision-makers. In addition to the technical education of the entire population, eco believes that a fundamental debate is needed about which business principles, rights of state intervention and societal actions should be considered to be acceptable in principle. Concerns and fears about certain phenomena are currently equated with AI and overshadow its usage.

- **Clarification of open questions with regard to the GDPR in the use of AI**

The General Data Protection Regulation (GDPR) with its core principles of accountability, transparency and strong rights of data subjects provides a good basis for data processing in the field of artificial intelligence. Nevertheless, issues still exist, for example, with regard to the narrow purpose limitation and the lack of permissions for concrete application purposes.

With an opportunity-oriented AI policy based on clear, transparent and fair rules and open to innovation, Europe can become a leading location for trustworthy artificial intelligence. As a baseline technology for the challenges facing not only industry and society, but also the environment, AI is an indispensable future factor for Europe.

## About eco

With more than 1,100 member companies, eco is the largest Internet industry association in Europe. Since 1995 eco has been instrumental in shaping the Internet, fostering new technologies, forming framework conditions, and representing the interests of members in politics and international committees. The focal points of the association are the reliability and strengthening of digital infrastructure, IT security, trust, and ethically-oriented digitalization. That is why eco advocates for a free, technology-neutral, and high-performance Internet.