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Prosus views on Artificial Intelligence – A European approach to excellence and trust¹

Summary

- 1. The Commission should expand upon its commitment to developing excellence in AI, and to promoting its growth in Europe.
 - Recommendations: Setting a positive and optimistic tone for AI will improve sentiment and better incentivize investment and adoption; expanding the goal for regulatory review will assist in flagging barriers to AI-driven innovation; elevating the focus on expanding participation of women will build on comparative strengths; and incentives for SMEs to engage more deeply in the AI ecosystem should be increased through support for platform models.
- 2. All AI and machine learning applications are context specific. Each application presents differentiated risks, benefits and impacts to individuals and society. Phases of the machine learning process should also be evaluated in context.
 - Recommendation: The Commission should further refine its accountable, EU-level risk-based approach to AI policy, differentiating between sources and types of data, use-cases, models and sectors.
- 3. There are several co-regulatory tools at the Commission's disposal to support growth of AI deployment.
 - Recommendation: The Commission should convene experts in AI for growth, pursue Codes of Conduct that can be recognised under the GDPR, encourage best practice standards through NGOs and standardsetting bodies, consider the potential of seal programs, explore the opportunity for regulatory sandboxes, and link/map all these potential outputs to provisions of existing regulation.

¹ Prosus written response to the European Commission's White Paper consultation, 19 Feb-14 June 2020 (https://ec.europa.eu/digital-single-market/en/news/white-paper-artificial-intelligence-european-approach-excellence-and-trust).



4. Europe's approach to international engagement will be critical to its success.

Recommendation: Addressing AI ethics is a global undertaking. The Commission should continue to promote inclusiveness, recruiting non-EU organizations, academics, scientists and government observers to participate as key stakeholders in dialogues relevant to AI policy in dialogues relevant to AI policy in Europe, including from emerging markets and economies.

Introduction to Prosus

Prosus is a global consumer internet group and one of the largest technology investors in the world. Headquartered in the Netherlands, the Group's businesses serve customers in more than 90 markets. The Group estimates that approximately one-fifth of the world's population use products and services of businesses that the Group has built, acquired or invested in. The Group's diversified portfolio comprises businesses in high-growth sectors, including food delivery, online classifieds, payments and fintech, etail, online education, and social and internet platforms.

To accelerate and scale our AI activities across the Group, we have created a global AI team, based in Amsterdam. The team is composed of world-class, experienced data scientists that work together with the multiple AI-hubs of Prosus' businesses across the world. The Prosus AI team supports our group companies to accelerate and scale the adoption of machine learning and AI, and to develop AI-by-design products and services. The team ensures that we share knowledge and best practice on data science between our companies through a global Guild. The team also fosters innovation through an AI development lab, and operates a model factory – a collection of machine learning models that can be adopted and deployed by the group companies.

The AI talent pool of Prosus is rapidly growing (it doubled over the last twelve months) and is distinctively diverse, culturally, geographically and in terms of expertise and competences. Given the pervasive and global nature of AI-driven growth, we believe this is a major intangible asset for Prosus. As a result of this investment priority, more machine learning models are making their way into our products. We are using machine learning in various ways across the Group, such as increasing the trust and safety of interactions between online buyers and sellers and making services simpler and more streamlined.

From the start, our teams have recognized the critical role that responsible data governance must play to support these initiatives. As a global company, our Group Policy on Data Privacy Governance² is inspired by the European framework to help inform the ethical underpinnings of what we believe is necessary for consumer internet businesses to meet the goal to respect privacy as an important value, and as an essential element of public trust. We take this approach no matter where in the world our majority owned and controlled businesses may be established. Additionally, we see the European General Data

² Prosus, Policy on Data Privacy Governance. Protecting Data Subjects, 2019 (https://www.prosus.com/getattachment/Bottom-Links/Privacy/Prosus Data-Privacy-Governance-Policy 22-08-2019.pdf.aspx?lang=en-US).



Protection Regulation (GDPR) as a highwater benchmark for assessing what it means to do the right thing with personal data, in a compliant manner, across these businesses.

For all the above reasons, we are strongly aligned with the European Commission's dual focus on expanding investment and uptake of AI and machine learning solutions in Europe, while responsibly addressing the policy, governance and ethical questions that go hand in hand with the pervasive deployment of this technology. We also agree with the Commission's broad assessment that more dialogue, debate and experimentation must occur to meet the challenges and risks presented by AI, so as to preserve its benefits and the public's trust in them. A responsible regulatory framework will be a key component of this future success. In response to the Commission's call for input in this regard, we are pleased to offer the following observations and recommendations.

Our comments in detail³

1. The Commission should expand upon its commitment to developing excellence in AI, and to promoting its growth in Europe.

AI for growth

Artificial Intelligence has moved out of the labs to power application platforms and consumer services. It has already transformed technology companies in Europe, US and Asia and is on a path to transform economies and societies. The impact is similar to the broad impact of past general-purpose technologies (engine, electricity, automobile, internet). By 2030, AI could add US\$13 trillion to the global output (or the equivalent of the output of China in 2018). Scenarios indicate that the AI growth potential can be even higher than electricity or the internet. While AI so far is basically "only" machine learning, its potential is nonetheless vast.

The Commission is correct to express concern that European investment in research and innovation falls far below the public and private investment into AI in other regions of the world. Citing McKinsey's 2017 report, the Commission notes that only " \in 3.2 billion were invested in AI in Europe in 2016, compared to around \in 12.1 billion in North America and \in 6.5 billion in Asia" (WPAI p. 4). While there may be many historic explanations for past reluctance, one explanation may reflect European sentiment about the field itself.

In our view, communicating better about the policy to embrace artificial intelligence – with an appropriate sense of optimism and excitement – is an important strategic consideration for how the Commission can achieve a central objective it sets forth in its White Paper: "to create the right incentives to accelerate the adoption of solutions based on AI" (WPAI p. 3). To incentivize

⁴ McKinsey Global Institute, Notes from the AI frontier: Modeling the impact of AI on the world economy, 2018 (https://www.mckinsey.com/featured-insights/artificial-intelligence/notes-from-the-ai-frontier-modeling-the-impact-of-ai-on-the-world-economy#). Since 2016, the rapid growth of AI excellence and investment in Asia has only accelerated; see Forbes Insights, Where Asia is Taking The World With AI, 2020 (https://www.forbes.com/sites/insights-ibmai/2020/05/21/where-asia-is-taking-the-world-with-ai/#57f384a07947).



³ References herein to the Commission White Paper on Artificial Intelligence – A European approach to excellence and trust will be cited as "WPAI".

broader uptake in this space, the Commission must elaborate upon the basic premise that artificial intelligence and machine learning are tools to solve problems – both large and small. By learning how better to deploy these technologies in a responsible way, European business, and society as a whole, can be better for it.

This conviction cannot appear as an afterthought or some kind of reluctant concession: it must be reflected in word and deed by the Commission if we are to succeed in growing the share of AI capabilities in the EU and rising to the level of other jurisdictions in our capacity to derive social and economic value from this technology. Put differently, it is incredibly important to communicate about the vast array of benign machine learning applications that have already been deployed, in numerous sectors and businesses, and how they are helping improve our predictive capabilities, increase efficiencies, and promote better outcomes.

If the overriding sentiment is aligned to the premise that artificial intelligence and machine learning tools are to be used for good, more European students will be incentivized to enter the profession, more research papers will issue from European institutions, more SMEs will experiment with and integrate solutions into their products or services, and more useful European data will be aggregated and pooled for use.

Our Prosus AI team is eager to share experience, practice, learnings and models with the scientific and business community, to contribute to the growth of awareness and competence in the ecosystems where we operate. We also actively contribute to several 'Data Science for Social Good' initiatives, training data scientists to solve problems that have a positive social impact, and empowering communities, NGOs and public entities to leverage AI to tackle important societal challenges. By promoting such initiatives within the broader European community, awareness about the benefits, desirability and value of getting involved in AI as a field, and in making deeper investments in the ecosystem, can grow.

Regulatory approach

Our team is committed to striving for responsible and sustainable AI, and as part of that we work to develop methods, tools and applications that are explainable, unbiased and robust. While legitimate concerns about killer robots, "high risk" applications encoding racial biases and discrimination or even risks to life and limb in the context of human transport must absolutely be addressed, in our estimation the regulatory tools to manage these types of risks ought not be the same as the tools we consider for systems that are designed to recognize digits from handwriting, for example. In fact, in many instances what is called for to promote broader adoption of the technology is enabling legislation, which can remove barriers imposed by legacy provisions of existing laws that were never drafted with AI in mind.

How to regulate AI not only for risk mitigation and for liability allocation but for growth and innovation should become a central focus of the Commission's efforts. Business trust and investor sentiment is also shaped by exposure to tools of economic and business utility, such as churn prediction models, process optimization, search algorithms, text understanding and recommendation engines – and it should be clear that such applications are encouraged and



valued. Considering how to remove existing regulatory barriers to broader access to data used to train machine learning models is key. Doing so likely involves drafting of enabling legislation at the EU or Member State level to authorize useful AI applications, and embracing the promise of partnerships with coregulatory actors that can assist in developing governance frameworks well-adapted to benign applications.

The White Paper devotes an entire section (WPAI pp. 13-16) to possible adjustments to existing EU legislation in the context of AI, but the overriding focus and result of the mapping exercise seems to yield recommendations about extension of regulation to new conditions, devoting comparatively little time to the task of identifying unintended regulatory barriers to AI deployment. One concrete suggestion that could support the Commission in its efforts to identify existing regulatory barriers to broader AI deployment in Europe might be to consider convening a group of experts that are dedicated to the promise of AI for Growth. Stakeholders who actually work in the AI field and have confronted such barriers – in particular to data access – would provide invaluable guidance to the Commission and could help flag those provisions in existing legislation that may justify updates.

Expanding women's participation

The Commission correctly emphasizes the opportunity to improve the number of women trained and employed in Europe within the AI community and in related fields (WPAI p. 6). This issue could benefit from greater focus by the Commission, in particular by attempting to tackle lack of diversity in AI research through policy interventions in higher education and universities, as suggested by Professor Petia Radeva at the University of Barcelona. Notably, Nesta's 2019 findings in this area suggest that Europe has a base from which to build:

"Women in the Netherlands, Norway and Denmark are more likely to publish AI papers while those in Japan and Singapore are less likely to. The UK is 22nd on this list, with 26.62 per cent of AI papers having at least one female co-author. Women working in physics, education, computer ethics and other societal issues, and biology, are more likely top publish work on AI in comparison to those working in computer science or mathematics". 6

Interestingly, observations from another tech-related field show that gender gaps can be closed. In 2015 the International Association of Privacy Professionals published its global salary survey results, showing that in privacy and data governance, women occupied similarly senior positions and earned roughly as much as men. In that report, drawn from a survey of more than 1,300 privacy professionals around the world, women in the EU reported a median salary slightly higher than their male counterparts.⁷

In terms of concrete recommendations to expand women's participation in AI, the Commission's advisory group has already advocated that priority be placed on gender equality and gender mainstreaming, programs to attract female

⁷ 2015 IAPP Privacy Professionals Salary Survey – Executive Summary (https://iapp.org/resources/article/2015-iapp-privacy-professionals-salary-survey/).



⁵ K. Stathoulopoulos & J. Mateos-Garcia, Gender Diversity in AI Research, Nesta Foundation, 2019, p. 28 (https://media.nesta.org.uk/documents/Gender Diversity in AI Research.pdf).

⁶ Key findings of the same study (<u>https://www.nesta.org.uk/report/gender-diversity-ai/</u>).

talents into the field of AI and related subjects, sponsorship of initiatives for networking and coaching for women in AI, expanded inclusion of humanities, social sciences, and gender research into AI research programs, and emphasis on gender bias in algorithmic decision-making. Given the focus on identifying and redressing risks of disparate impacts to minority groups, and to address risks of discrimination to individuals who could be the object of inappropriately biased determinations in AI, it can only be a positive thing to include more representation from people in the very classes we are seeking to protect. More women are needed to ensure that this better balance is struck, in academia, in business, in government and indeed among those who are making assessments about risks of gender-based bias in relevant applications, and how to control for them.

Internet platform AI and SMEs

With respect to SMEs, as an investor in European internet platforms where SMEs plug into centralized tools to buy and sell products, to market and deliver food, and to enable online payments, we are well-placed to support the ambition to expand SME access to the benefits of AI and machine-learning powered technology tools (WPAI p. 7). By promoting an environment that supports SMEs' access to responsibly governed AI-enhanced platforms for services, the benefits of AI investment are also distributed to the long tail, without imposing administrative and compliance burdens on the SMEs themselves. Centralized investment in AI to improve anti-fraud systems, online communications and content safety, and personalization delivers significant benefits for platform participants while distributing costs efficiently.

As the Commission has discussed, encouraging SMEs to adapt their own processes or to innovate using AI may require expanded access to finance. It is important to note that financial burdens are not the only element of the SME picture that the Commission will want to address. Additionally, the operational and administrative burdens imposed by governance and documentation processes, including requirements to keep records of data, provide information to affected data subjects, and enable human oversight – to cite three of the Commission's proposed domain requirements to regulate AI processes – will not be easily absorbed and implemented by smaller companies with comparatively few resources. SMEs may be reticent to engage with technology that is perceived as carrying excessive restrictions.

While the Commission rightly contemplates a sliding-scale risk-based approach to the imposition of such requirements, it nevertheless proposes to apply them in circumstances where, "due to the risks at stake, the use of AI applications for certain purposes is to be considered high-risk as such – that is, irrespective of the sector concerned" (WPAI p. 18). Recruitment processes and situations impacting workers' rights are offered as examples of such generally applicable high-risk situations. SMEs innovating with AI in the spaces deemed inherently high-risk by the Commission will therefore need support for a model that nevertheless allows them to govern such processes in line with their resources.

⁸ High-Level Expert Group on Artificial Intelligence, Policy and Investment Recommendations for Trustworthy AI, 2019, p. 35 (https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=60343).



Perhaps one approach to this issue would be to align the governance requirements applicable to SMEs expanding their use of AI technology to the capabilities of the Digital Innovation Hubs and the AI-on-demand platform in which the Commission seeks to further invest. If such resources can come with privacy and ethics by design built in, an important barrier to SMEs' adoption could be lifted. Finally, broader low-cost or free public access to data sets, as contemplated in the Commission's Data Strategy⁹, would further reduce barriers to entry and create opportunities for enhanced value among SMEs.¹⁰

<u>Recommendations</u>: Setting a positive and optimistic tone for AI will improve sentiment and better incentivize investment and adoption; expanding the goal for regulatory review will assist in flagging barriers to AI-driven innovation; elevating the focus on expanding participation of women will build on comparative strengths; and incentives for SMEs to engage more deeply in the AI ecosystem should be increased through support for platform models.

2. All AI and machine learning applications are context specific. Each application presents differentiated risks, benefits and impacts to individuals and society. Phases of the machine learning process should also be evaluated in context.

One of the exciting attributes of AI technology is that it can be generally purposed for a wide variety of applications. These applications will vary greatly in terms of the types of data used, the level of complexity of the techniques used to train the models themselves, and the potential applications for those that appear to perform well and ought to be eligible to "go live" into production. A vast number of use cases rely on low-risk data sets, and/or on data sets that are already clearly regulated by data protection law, should they incorporate data that is personal to individuals, in either identifiable or in pseudonymous form.

We agree with the Commission in its assessment that a targeted, risk-based approach to evaluating what regulatory enhancements are needed to address specific categories of applications is the right approach. Just as in data protection risk assessment – it is useful to identify the types of risks in AI that we are seeking to mitigate or prioritize, and then to map the available actions we can take to test whether they actually reduce the risk in a meaningful way. Put differently, each type of risk warrants its own risk mitigation strategy. Organizations that pursue accountable AI development processes understand and implement this methodology. Risks to individuals, to business and to society are all relevant in this assessment.

In discussing risk assessment, the White Paper essentially contemplates a few threshold regulatory equations (WPAI pp. 17-18):

- Risky sector + significant risk application = targeted AI regulation
- Less risky sector + high risk application = targeted AI regulation

¹⁰ See also Prosus' views on A European strategy for data (written response to the European Commission's online consultation 19 Feb-31 May 2020), 29 May 2020, p. 4.



⁹ European Commission, A European strategy for data, 2019 (https://ec.europa.eu/info/sites/info/files/communication-european-strategy-data-19feb2020 en.pdf).

- Risky sector + less risky application = existing legislative framework
- Less risky sector + less risky application = existing legislative framework

It is suggested that the risky sectors would be enumerated on a list, but that the list would be subject to change over time. It is less clear what criteria would guide distinctions between significant risk and high-risk categories, other than the notions that significant risks have to do with impact on affected parties, and that high-risk activities are exemplified by processes like recruiting and remote biometric identification. On this basis, we are concerned that AI practitioners are not likely to find the equations particularly useful in determining whether they should or should not apply the recommended "risk mitigations" that follow as regulatory requirements. The legal certainty that the Commission seeks to ensure could be strengthened by a few key enhancements.

First, drawing from experience in the data protection framework, it is useful to establish the expectation that all organizations that use AI should be accountable. We think accountability in this context means having the processes in place to ensure that risks are properly identified, assessed and mitigated, and that the organization stands ready to demonstrate how it addressed these questions. Numerous organizations, including the Centre for Information Policy Leadership (CIPL), advocate for accountability-based frameworks, and we encourage the Commission to consider how accountability models could strengthen the approach to AI governance.

In terms of assessing risk, as the Commission states, "the assessment of the level of risk of a given use could be based on the impact on the affected parties" (WPAI p. 17). Expanding on the considerations that should be taken into account by AI practitioners will be critical not only to helping them make good judgements about the risks and appropriate mitigations for those risks, but for establishing and leading a consistent framework at EU-level that avoids unhelpful diversity across Member States, as emphasized in the White Paper (WPAI p. 9). Promoting interoperability of risk criteria at the international level would also be important to avoid unhelpful diversity of applications for European citizens that use foreign products and services.

The Commission has already begun to articulate what such criteria might look like, which could be reformulated as a series of questions:

- Does the AI process have a legal (or similar) effect on individual rights or company rights?
- Does the AI process involve a risk of injury or death?
- Could the AI process hurt someone or something?
- Are the effects of the AI process reasonably avoidable by individuals or legal entities?

One could further contemplate risk questions that are relevant to specific phases of the AI lifecycle:

- Training, Validation and Testing data sets: Is the data biased / being sourced fairly / being used of sufficient quality, and fit for purpose?
- Algorithms and models: Is the model sufficiently robust, reliable and sufficiently accurate to put into production?
- Project controls: Is the development process difficult to interrogate or review?



While the above questions are by no means exhaustive, they provide a sort of roadmap for AI practitioners to then identify appropriate interventions to address the risks if they apply, and at the stage of the process where they are most relevant. Such threshold questions could trigger further questions relevant to the specific risks in a given use case. It also provides a solid basis for training of AI engineers to make these risks assessments (and document them if appropriate) as part of their ordinary procedures. This also helps focus resources on the problems that matter, rather than those that are merely theoretical.

Answers to questions about risks themselves point the way to risk mitigations that are targeted to avoid or redress these specific risks. If the risk is not material or not present, then we ought not activate mitigations for the sake of doing so. Essentially, this is the role that the "requirements" the Commission explores should play in the governance model.

In the context of training data (WPAI pp. 18-19)¹¹, the mitigation to a risk that data used to train a model could raise a safety risk can be mitigated by a requirement that data be "fit for purpose." This is to say data should be sufficiently broad and representative so as to be appropriate to account for safety standards that are relevant to an application. Safety criteria are industry specific, and so the criterion is meaningful to the extent that safety data is relevant for building a model. A corollary suggests that one should take precautions to ensure that a model ought not be used in the circumstances for which it has not been designed.

Risks of bias in data sets can be addressed by setting expectations that AI practitioners should be responsible to identify, evaluate and adjust for bias in the data as a matter of standard practice. Promoting standard tools for auditability of bias would also support SME integration of such practice. Risks of unfair data sourcing are redressed, inter alia, by ensuring that accountable programs have incorporated data protection compliance into their methodologies, including in their contracting procedures as applicable.

Turning to documentation requirements, it is worth noting that in AI research data sets and/or models are routinely tested in multiple variants, and only a select few perform with sufficient quality to "advance" to consideration as something that could be put into production. This research phase of the process is highly iterative and could even generate hundreds of variations. For that reason, it is extremely important to target requirements to the subset of projects that actually have a prospect of affecting individuals, to avoid needless bureaucracy. To a take a concrete example, the Commission contemplates "keeping records and data" about "data sets used to train and test the AI systems, including a description of the main characteristics and how the data set was selected," as well as "documentation on the programming and training methodologies, processes and techniques used to build, test and validate the AI systems" (WPAI p. 19).

Given that the purpose of the documentation risk mitigation is to address opacity of process and to facilitate enforcement and verifiability of compliance with rules designed to protect individuals from harm, it makes sense to target such requirements only to the aspects of the process that would be relevant to explain

 $^{^{11}}$ By extension, we presume some of these concepts would be equally applicable to testing and validation data sets.



a model that was actually put into production. It is less useful to address earlier iterations in testing that were abandoned due to lack of quality, unfitness for purpose, or for other reasons, and which as a result never directly impacted individuals. Finally, it is worth noting that there is a distinction to be drawn between technical documentation which requires specialist knowledge for understanding it, and other documentation repackaged for distinct audiences. While the former may be generated in the ordinary course of AI development processes, the latter could require teams to take on additional administrative burden to adapt the form of their documentation.

We see information provision (WPAI p. 20) as an important component of redress for specific risks, but the forms of transparency must be adapted to their specific contexts and the nature of the impact on the individual. We agree with the Commission's point that in many applications such information is likely unnecessary, due to immediate obviousness. In other circumstances – such as when a person is engaging with a bot or computer-generated visualization – it is useful to expect to use tools to flag this for an individual who might not otherwise perceive it. Such context should also account for the degree of risk or intrusion presented by the application itself. There are likely to be a large number of applications for which lengthy disclosures or notices would be unnecessarily disruptive and add little value. Notices should be an agreed mechanism to address a specific, articulable risk that the notice will help avoid. Further, in processes that are human based (enhanced with AI support), labelling requirements are not likely needed. Finally, on this point it is useful for the Commission to recognize the value of EU-level standards for the expectations set around such notices, to avoid unhelpful diversity across Member States.

With respect to robustness and accuracy (WPAI pp. 20-21), there may well be a useful distinction to be drawn based on context. In specific domains, such as financial, medical, transport and law enforcement, accuracy requirements manifest as critical foils for distinct risks to individuals. In other, lower risk contexts, the justification for legislating the accuracy of a movie prediction, for example, is far less compelling. Because the principle does not appear to evenly apply in all contexts, it is likely worth further interrogation by the Commission. In the context of security, it is routine for the Commission to establish an expectation of "reasonable" security, which is subject to change over time accounting for evolving threat landscapes, and accounts for the diversity of risks to distinct applications of AI.

The role of human oversight of "high-risk" AI systems (WPAI p. 21) strikes us as a particularly thorny problem given how difficult it would be to provide a prescriptive inventory of use cases for which the degree of human intervention could be specified. Such expectation is likely to change over time as society gains comfort with AI-assisted devices and objects. We caution against overly prescriptive conditions on allowing AI systems to produce outputs subject to required human intervention, as an essential value of many such systems is the ability to enhance velocity, cost efficiencies and scale beyond available human resources. We also think the Commission should be somewhat wary of requirements seeking to "impos[e] operational constraints on the AI system" (WPAI p. 21), such that a device cannot perform some actions. If we were to imagine being a passenger in a plane that could not perform certain actions due to operational design constraints, we might be very concerned. Rather,



intervening at the design stage to impose internal limitations so that an AI-powered system cannot perform actions for which it was not designed seems like a safer approach to the problem.

<u>Recommendation</u>: The Commission should further refine its accountable, EU-level risk-based approach to AI policy, differentiating between sources and types of data, use-cases, models and sectors.

3. There are several co-regulatory tools at the Commission's disposal to support growth of AI deployment.

Within the range of regulatory approaches to building a sustainable environment of trust around AI in Europe, a lex specialis style regulation of specific technology may not be the most efficient, timely or adaptive model to pursue. Such an approach may also miss the opportunity to simultaneously promote the AI growth objective that the Commission has set.

Following promulgation of the GDPR, it has proven challenging to reach consensus on the tech-specific components of the lex specialis ePrivacy package. Like ePrivacy, and perhaps more so, AI regulation implicates extremely complex technical processes that are evolving and subject to rapid change and innovation, with broad commercial impact. The input and guidance of technology experts are integral to successful policy setting, and such policy must account for changes in the technology landscape and the shifting sands of priority set within the AI community itself. AI is, by its very nature, a moving target. It is also arguably distinct from ePrivacy insofar as the Commission has adopted an explicit policy that it wishes to see more AI technology deployment across Europe, and to promote it.

For this reason, it makes sense for the Commission to explore the diverse range of alternative co-regulatory tools it has at its disposal to establish supportive AI policy – from both a growth and a trust perspective – in Europe.

On the matter of expertise, as we have suggested earlier in these comments, the Commission should value the input of AI scientists and experts that practice in the field. On the AI for growth portion of the Commission's goal set, we think that a collection of expert advisors that contribute to defining the policies that will expand deployment of AI in Europe – and can specifically address the related goals of expanding women's participation and access by SMEs to the technology – would be of great assistance. We observe that not all advisory bodies are created equal, and that smaller, more focused expert groups can generate value that is distinct from those offered by larger bodies. Considering standing bodies that incorporate rotation of members may also be an effective way to channel new thinking and follow progress over time. 12

The role that binding Codes of Conduct could play for AI in setting up guidelines that can be anchored in existing legislation should not be overlooked. For example, the GDPR explicitly contemplates the promulgation of Codes of Conduct that can be approved by the European Data Protection Board, essentially

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¹² For further discussion of the benefit of standing advisory groups, including the role they play in certain non-EU jurisdictions, see Prosus' views on A European strategy for data, p. 5.

elevating them to the level of legally bound instruments. The advantage of such an approach is that this form of instrument may be more efficient to adapt and change over time than a regulation that must go through trilogue. Because it is inherently an enterprise that builds in multi-stakeholder participation and is a semi-voluntary regime, legal certainty can be offered to those actors that choose to participate in the system.

Standard-setting bodies and certain NGOs have an important role to play in promulgating guidelines in this space as well, in particular for aspects of AI that are highly technical, which can guide AI experts to pursue benchmarked best practice in the ethics space. Such organizations are often well-placed to define the criteria for seal programs that would allow consumers of AI services to differentiate amongst various competitive players or suppliers of AI infrastructure. In the context of environment sustainability criteria, for example, such an approach could drive broader adoption of better standards for environmental protection in supply chain and infrastructure that supports AI, consistent with an objective highlighted in the White Paper (WPAI p. 2). Such an initiative would be consistent with both AI for good, AI for trust and AI for growth mandates.

The growing interest in regulatory sandboxes¹³ explored in diverse jurisdictions such as Singapore, India, the U.K., Finland and Malta, is also worthy of further exploration by the Commission as a mechanism to promote innovative expansion of AI in an environment that allows companies to test potential guidelines and cooperate with the Commission and Member State governments on proposed standards. In fact, in its Coordinated Plan on Artificial Intelligence of 2018, the Commission indicated that AI testing facilities "may include regulatory sandboxes [...] in selected areas where the law provides regulatory authorities with sufficient leeway". 14 In particular for low risk applications of AI, such a sandbox might be ideal as a channel for recruiting and training the next generation of SME-led AI applications, while providing sufficient legal certainty and guardrails to experiment with data and manage legal risk that might otherwise be perceived as a barrier to entry. As part of its regulatory review and considerations of obstacles to growth of AI, we encourage the Commission to flag those provisions of law that would prevent the use of such sandbox approaches to research with data and AI, and to consider appropriate reforms.

As was demonstrated in the case of Codes of Conduct and the GDPR, many such co-regulatory initiatives can be mapped to aspects of existing legislation, which would allow the Commission to continue regulatory experimentation and evolution in an environment where it is less constrained by traditional legislative process and its associated timelines. Pursuing this path, we believe, will best position the Commission as a champion of both AI for growth and for trust, in a context that respects fundamental human rights and allows the Commission to

¹⁴ Annex to the Commission's Coordinated Plan on Artificial Intelligence, 2018 (https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=56017).



¹³ For a broader discussion, see Centre for Information Policy Leadership, Regulatory Sandboxes in Data Protection: Constructive Engagement and Innovative Regulation in Practice, 2019 (https://www.informationpolicycentre.com/uploads/5/7/1/0/57104281/cipl white paper on regulatory sandboxes in data protection -

constructive engagement and innovative regulation in practice 8 march 2019 .pdf).

deliver on its commitments and duties to Europe, including its economic and competitive ambitions.

<u>Recommendation</u>: The Commission should convene experts in AI for growth, pursue Codes of Conduct that can be recognized under the GDPR, encourage best practice standards through NGOs and standard-setting bodies, consider the potential of seal programs, explore the opportunity for regulatory sandboxes, and link/map all these potential outputs to provisions of existing laws.

4. Europe's approach to international engagement will be critical to its success.

A key attribute of our approach to AI deployment at Prosus is that our teams share the learning and expertise that we have developed globally, in particular how both established and emerging economies adopt AI, develop human capital, and originate businesses models. Across the globe, we have established relationships and research projects with Universities and research centres. We work with the leading institutions and with local academic partners that excel in specific areas, domains and geographies. This gives us access to a broad pool of talent, and we can offer them opportunities for working locally or globally at Prosus.

Operating in this way allows us to gain unique insights into how diverse countries and businesses around the world approach AI projects. This learning is vital to deepening our understanding of new strategies to approach projects that we undertake at our headquarters in The Netherlands. Operating both globally and locally in diverse jurisdictions brings benefits of perspective and awareness about alternative approaches and local needs. We think this type of approach could enhance the Commission's policy making efforts as well.

While the Commission briefly notes the international nature of the ethical questions posed by artificial intelligence capabilities, and that "important work on AI is ongoing in other multinational fora", citing the Council of Europe, UNESCO, OECD, WTO and ITU, it expresses its ambition to manifest global leadership on the topic (WPAI pp. 8-9). Beyond considering inputs from organizations and fora in which Europe currently participates, we see promising opportunities for the Commission to work with and learn from the efforts of individual countries in North & South America, Africa, the Middle East, Asia and Oceania – an avenue which may prove fertile for gaining deeper insights into the underlying sources of success in AI that have emerged at project, humanitarian, national and business levels, including outside of Europe. Hundreds of AI ethics-focused papers, frameworks and proposals have been issued across the world, and the Commission should consider them all as relevant and important references. ¹⁵

¹⁵ A useful comparative study of international AI ethics frameworks was compiled by Dr. Thilo Hagendorff at the University of Tuebingen's International Center for Ethics in the Sciences and Humanities. In his paper, "The Ethics of AI Ethics: An Evaluation of Guidelines" (https://arxiv.org/ftp/arxiv/papers/1903/1903.03425.pdf) he maps inter alia the work of the European Commission's High-level Expert Group on Artificial Intelligence to principles from China, Canada, the United States, and large multinational technology companies.



Assigning value and maintaining openness to inputs from outside of the EU seems all the more important given the strategic priority of interoperability to the Commission's data strategy, which is inextricably linked to the future success of AI growth in Europe. As we outlined in our comments to that consultation, ¹⁶ regulatory interoperability with foreign jurisdictions should be core to the strategy on data. By this we mean "interoperability" stands for the ambition that multiple jurisdictions could achieve sufficient parity in regulatory standard-setting (and in ethical protections for AI) that data handling can occur anywhere in the cloud. This vision of regulatory interoperability is wholly consistent with the Commission's ambition to promote a broader environment that supports data aggregation and meaningful scale. It would be unhelpful, in our view, for the Commission to approach the topic from an excessively siloed-perspective, regulating in such a way that Europe cuts itself off from aspects of the global digital economy due to protective regulatory barriers that don't ultimately advance either its data strategy or its vision to promote excellence in AI.

One mechanism to promote an open and inclusive approach to the international community is to recruit non-EU organizations, academics, scientists and government observers to participate as key stakeholders in smaller expert groups to inform AI policymaking in Europe, in particular those that bring experience from emerging economies and nations that house AI success stories. By doing so, the Commission will benefit from an import of ideas that can only strengthen its leadership in this area and lay the groundwork for a well-informed collaborative approach to bilateral efforts that ensure solid interoperability for data exchange regimes.

<u>Recommendation</u>: Addressing AI ethics is a global undertaking. The Commission should continue to promote inclusiveness, recruiting non-EU organizations, academics, scientists and government observers to participate as key stakeholders in dialogues relevant to AI policy in Europe, including from emerging markets and economies.

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¹⁶ See Prosus' views on A European strategy for data, p. 2.