Should Artificial Intelligence be Regulated at European Union Level?

Submission by Dessislava Fessenko¹ in the course of the European Commissions' consultation on the inception impact assessment as part of the initiative "Artificial intelligence – ethical and legal requirements"

In 2015, a group of scientists from the Toulouse School of Economics, Massachusetts Institute of Technology and the University of California conducted a series of online surveys² among a large number of respondents asking them to solve a "simple" moral dilemma:

In the face of an imminent accident resulting from a brake failure, should an autonomous vehicle (a) retain its course and, thus, hit a number of pedestrians crossing the street at this moment, (b) swerve left/right and hit only one, unsuspecting passerby walking down the sidewalk, or (c) sacrifice the passenger in the autonomous vehicle (e.g. by swerving the car into a wall/tree) in order to avoid any further casualties.

The majority of the respondents approved of the utilitarian approach whereby the passenger in the autonomous vehicle is sacrificed to the benefit of a greater number of others on the street. Yet, when asked whether they would buy an autonomous vehicle programmed to do so, respondents admitted that they would not.

The outcome from such surveys clearly demonstrate the magnitude and complexity of the ethical issues that the deployment and use of artificial intelligence ("Al") solutions (such as autonomous vehicles) raise. To name just a few:

- What ethical rules (e.g. utilitarian, or stricter and more predetermined (Kantian)) should the programming of AI be based upon?
- How could the myriad of variations of the so-called "trolley problem" (to cause or let harm happen, to whom at the expense of who else) be resolved?
- Who has the moral authority for all these decisions Al developers and deployers, business
 organisations that mandate the development of Al and would ultimately use it, regulators?

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² An overview available here .

- Upon what kind of social consensus and mandate from a vast number of societies, with different (potentially diverging) ethical backgrounds, perceptions, and values, which would employ AI in one form of another?
- Must the end-user of an AI solution be allowed some form of ultimate control over the operations
 of that solution assuming that the user (a human being) may have better moral knowledge (or
 at least intuition(s)) as to right/wrong?
- How is liability to be (re)allocated among developers/deployers, corporate users, end users for biases, operational failures, or harm caused by AI given how deterministic the programming of AI is supposed – or may fail – to be?

All matters that need to receive some sense of direction and, possibly, resolution long before Al becomes a global commodity. Hopefully, by way of broader public and institutional debate. In the lights of the complexity of and the daunting ethical dimensions of AI, the question of whether the EU should regulate AI solutions then appears rhetorical.

Yet, such a question seems to transpire in the inception impact assessment put up for public consultation by the European Commission as part of the initiative "Artificial intelligence – ethical and legal requirements" with view to gathering stakeholders' views as to the need and possible forms of a legislative initiative regarding AI at EU level.

Two of the main options considered are: (a) a "soft-law" (i.e. non-legislative approach) whereby the Al industry is encouraged to design, implement and enforce ethical codes; and (b) voluntary labelling of Al solutions in order "to enable customers to identify Al applications that comply with certain requirements for trustworthy Al".

Mandatory requirements for use/deployment of all or certain (higher-risk) Al solutions are considered as a third possible option. Their main focal points appear likely to be safeguarding fundamental rights (e.g. non-discrimination, privacy to the extent that it is not tackled by the GDPR), product safety and liability/redress mechanisms with respect to harm caused by Al solutions.

Going back to the question, I wish to hereby submit the views that:

1. Mandatory regulation is needed. As evident from areas such as data privacy, fake news, cyber security, tech firms (be it start-ups or large one, the latter appearing to drive and currently

dominate the Al turf) cannot always be trusted to come up with and play by fair and equitable, consumer-friendly voluntary standards.

2. The mandatory requirements should tackle first and foremost ethical and legal issues at the inception of AI solutions (e.g. regarding standards of programming, approach to decision rules, quality of input data, second and third layers of safety nets to be available in the course of operations of an AI solutions) and, as a second line, legal issues around application of AI solutions (non-discriminatory application, avoidance of intrusion into privacy/personal life, reallocation of liability, etc.). At the end of the day, end users would not buy an AI solution unless they are absolutely convinced from the outset – including based on regulatory mechanisms warranting this – in the uncompromised flawlessness of its conception and design from its nuts and bolts to its cognitive elements.

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