IET response to the AI Act: Have Your Say on Trustworthy General-Purpose AI

About the Institution of Engineering and Technology (IET)

The IET is a trusted adviser of independent, impartial, evidence-based engineering and technology expertise. We are a registered charity and one of the world's leading professional societies for the engineering and technology community with over 155,000 members worldwide in 148 countries. Our strength is in working collaboratively with government, industry and academia to engineer solutions for our greatest societal challenges. We believe that professional guidance, especially in highly technological areas, is critical to good policy making. For further details on the evidence submitted, please contact policy@theiet.org.

Executive Summary

AI is influencing how businesses, industries and technologies operate now and in the future. However, there is concern over the lack of understanding and information surrounding AI, the data used to train the models and ethical considerations. This has given rise to a discussion around the ownership of data needed to train these algorithms, as well as the impact of bias and fundamental data quality in the information they produce. As AI spans every sector, it is imperative that regulation is coordinated globally, so there is consistency and clarity.

An IET survey taken on the use of AI highlighted that 29% of those surveyed had concerns on the lack of information around AI and lack of skills and confidence to use the technology, with over a quarter of people saying they wished there was more information about how it works and how to use it. (Source: Artificial Intelligence behind 3 times more daily tasks than we think, IET)

The importance of AI stems further afield that the UK, countries across the globe are increasing their use of AI. The use of AI appears in the top three most selected changes made in Germany, India, China, Australia and the USA. (Source: International Green Skills Survey 2023, IET)

Recommendations

- **Global cooperation** is pivotal to the AI Act (the Act) as it will guarantee that each country is aware of the Act's policies and regulations. This will also benefit inter-country communications and ensure implementation of the act is consistent throughout nations. It will also make it easier for multi-national businesses to operate.

- **Consistent and constant reviews** should be carried out to identify new potential risks or gaps in the Act.
- **Understanding and clear guidance** are essential. Ensuring organisations, institutions and users of AI have a clear understanding of the Act is pivotal. There is currently a key issue with confusion, apprehension and reluctance around AI, having a clear, concise understanding will help adherence to the Act and the uptake of AI.

Cooperation

AI has become more prominent in the national and international digital and technological landscape. As a result of this, there has been more investment and legislation surrounding this technology and its uptake. There is a risk that there is too much divergence in regulation that makes navigating regulation as a global business to be challenging.

Therefore, it is of paramount importance that countries, and sectors, affected by the Act work harmoniously to align policies and regulations. This will not only aid awareness and adherence but will also benefit those businesses that are operating AI across varying nations as they will all be operating under the same remit of the Act.

Cooperation can spread beyond the European Union (EU), some lessons can be learned from the emerging AI strategies of other countries which share high ambitions for the technology. For example, the approach by the United States federal government, held many public consultations in developing a framework for trustworthy AI. Proving that bringing together all stakeholders in the development of AI governance – from government, industry, professional bodies, academia, and the general public, is essential for success.As well as this, it is essential to train and build the capacity of the government officials, legislators, and policymakers that will be responsible for the governance. This is exemplified by the approach of the United Arab Emirates (UAE). The UAE is a regional leader in AI, which is projected to account for 13.6% of its GDP by 2030. This underscores the need to facilitate more legislation and better guidance.

Having cooperated with all stakeholders to create concise and clear messaging and regulation, the Act will enable a better understanding of what is expecting of each sector and will smoothen the international processes needed between nations.

Consistent and constant reviews

As the development and implementation of AI has accelerated over the last 18 – 24 months, the need for consistent and constant reviews of new legislation / regulation has never been greater. This guidance / regulation should focus on a broad range of societal areas of

concern. These include (but are not limited to): privacy; accountability; transparency and explainability; fairness and non-discrimination; human control of technology; and the promotion of human values.

Ensuring the safe and secure use of AI requires a regulatory oversight body that coordinates guidance on good practice, and delivers sanctions where misuse has occurred. One option to deliver this is to set-up and fund a regulatory oversight body. This is necessary to ensure AI is used safely and helps prevent incidents from occurring – this is fundamental to maintaining public trust, which underpins the economic and social benefits AI can bring.

The Act should be reviewed and updated in accordance with changing environments to ensure that it is relevant and effective as technologies develop. We support the inclusion of trustworthy general-purpose AI models in the Act; however, it should be reviewed when new vulnerabilities are revealed. The regulatory oversight body can oversee this.

Having reviews of the AI models, and the act itself, leads to modernisations to ensure that it remains relevant with the ever-changing AI landscape. It also keeps countries within the EU accountable to adhere to the regulations set out in the act, regardless of their AI capabilities.

Transparency, understanding and clear guidance

Clear and concise guidance leads to a better understanding of the act, its policies and its regulations. This means adhering to the act becomes more manageable for management teams of organisations, officials and users. This is pivotal, particularly when senior leaders and managers need to drive cultural change organisationally from the top and be responsible for making awareness and risk management a business priority.

Transparency and explainability require that AI systems be designed and implemented to allow for oversight. There should also be an active, open dialogue with the public about their approach to AI and how it was developed. Public trust in the safety of AI is paramount, and it should be made clear that regulations are in place to ensure it cannot be compromised. The government should also emphasise to the public the economic and social benefits that AI can bring. We recommend that organisations should make it clear when they are using AI – this would improve transparency for both regulators and end users. However, the approach taken should be tuned to the context to provide maximum benefit.

Having transparency and clarity will also help organisations develop, particularly by sharing good practice and having open data sets available to for training / upskilling. This could be very beneficial as it was reported that two-thirds of engineering employers with a skills strategy in place, think improved management skills will be essential to delivering their

strategy. Whilst six in ten felt that better innovation skills will be necessary. (Source: IET skills for a digital future 2023 survey, IET)

The increased understanding with AI and its regulations would benefit engineering organisations as a significant increase in the proportion of organisations say their engineers should currently understand / be able to work with AI currently and in five years' time, extended reality, quantum engineering / computing, and machine learning (Source: IET skills for a digital future 2023 survey, IET). The increases here show that employers recognise these will become important skills in the future.

Conclusion

Overall, while we welcome the proposal to include trustworthy general-purpose AI models in the Act, we recommend that cooperation, repeated reviews and clear guidance be at the forefront of this amendment. Following these recommendations will aid the Act to further drive innovation, increase confidence and boost uptake of AI amongst nations, organisations and users.