

On 25 April 2018, a new [Communication](#) was published that sets out the European Commission's (EC's) **new strategy to boost Europe's artificial intelligence (AI) capabilities and related industries**, while at the same time preparing for socioeconomic changes emanating from these emerging technologies. The Communication also poses questions as to whether – and, if so, where and how – the European legal and ethical framework needs to be adapted due to the advent of AI.

The EC refers to AI as “**systems that show intelligent behaviour** by analysing their environment, and performing various tasks with some degree of autonomy to achieve specific goals.”<sup>1</sup>

European leaders are considering AI as a **top priority**. On 10 April, 24 member states<sup>2</sup> and Norway co-signed a [Declaration](#) which commits them to working together on AI.

The EC suggests that, by 2025, the **economic impact** of the automation of knowledge work, robots and autonomous vehicles could reach up to €12 trillion, annually. European **private sector investment** in AI lags behind Asia and the US.

Most developed economies recognise the **game-changing nature of AI** and have adopted different approaches, which reflect their own political, economic, cultural and social systems. Amid fierce global competition, a **solid European framework is needed**.

## The New Strategy in Detail

The EC's communication is based on **three distinct pillars**:

**I. Boosting the EU's scientific base, technological expertise and industrial capacity**, as well as the “AI uptake” by both the private and public sectors. This includes investments in research and innovation and better access to data.

**II. Preparing for social-economic changes brought about by AI**, by encouraging the modernisation of education and training systems, nurturing talent, anticipating changes in the labour market, supporting labour market transitions and adapting social protection systems.

**III. Ensuring an appropriate ethical and legal framework** based on the EU's values and in line with the Charter of Fundamental Rights. This includes forthcoming guidance on existing **product liability rules**, a detailed analysis of emerging challenges and cooperation with stakeholders – through a newly established multi-stakeholder platform, to be called the **European AI Alliance**<sup>3</sup> – to develop **AI ethics guidelines**.

## Pillar I: Boosting AI Capacity and Investments

In 2018-20, the EC plans to:

- **Invest around €1.5 billion in research and innovation in AI technologies** and support AI applications that address societal challenges in sectors such as health, transport and agrifood; the EC will also support breakthrough, market-creating innovation through the pilot [European Innovation Council](#)
- **Strengthen AI research excellence centres**
- **Strengthen the uptake of AI across Europe via a toolbox for potential users**, with a focus on small and medium-sized enterprises, non-tech companies and public administrations; this will include an “**AI-on-demand platform**”, giving support and easy access to the latest algorithms and expertise, a network of **AI-focused Digital Innovation Hubs** facilitating testing and experimentation and the set-up of **industrial data platforms** offering high-quality datasets
- **Stimulate more private investments** in AI under the European Fund for Strategic Investments (at least €500 million until 2020)

## Beyond 2020

The EC proposals under the next EU multiannual financial framework (2021-27) will include:

- **Upgrading the pan-European network of AI excellence centres**
- Research and innovation in fields such as **explainable AI**, unsupervised machine learning, energy and data efficiency
- Additional **Digital Innovation Hubs**, world-leading testing and experimentation facilities in areas such as transport, healthcare, agrifood and manufacturing, supported by regulatory sandboxes
- **Supporting the adoption of AI by organisations across all sectors**, including public interest applications, through co-investment with member states

<sup>1</sup> See [EC Factsheet on Artificial Intelligence](#).

<sup>2</sup> Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

<sup>3</sup> <https://ec.europa.eu/digital-single-market/en/news/call-high-level-expert-group-artificial-intelligence>

- Exploring **joint innovation procurement** for the use and development of AI
- A **support centre for data sharing**, which will be closely linked with the AI-on-demand platform to facilitate development of business and public sector applications

In order to make more data available for potential AI usage, the EC has put forward a set of initiatives to grow the European data space. These include:

- An **updated Directive on public sector information**, e.g. traffic, meteorological, economic and financial data or business registers
- **Guidance on sharing private sector data** in the economy (including industrial data)
- An **updated recommendation on access to and preservation of scientific information**
- A **communication on the digital transformation of health and care**, including sharing of genomic and other health data sets

## Pillar II: Preparing for Socioeconomic Changes

While labour and education policies are primarily dealt with at the national member state level, the EC plans to put forward various support measures in 2018:

- Set up **dedicated (re-)training schemes** in connection with the blueprint on sectoral cooperation on skills **for professional profiles that are at risk of being automated**
- Gather detailed analysis and expert inputs to **anticipate the changes on the labour market and skills mismatch across the EU**
- Support **Digital Opportunity Traineeships** in advanced digital skills for students and graduates
- Encourage, via the **Digital Skills and Jobs Coalition**, business-education partnerships to take steps to attract and retain AI talent
- **Invite social partners to include AI in their work programmes** at sectoral and cross-sectoral level, where relevant

Proposals under the next EU multi-annual financial framework (2021-27) will include strengthened support for the acquisition of advanced digital skills, including AI-specific expertise. The EC also intends to broaden the scope of the current **European Globalisation Adjustment Fund** beyond redundancies caused by delocalisation, including to those resulting from digitisation and automation.

## Pillar III: Ensuring an Appropriate Ethical and Legal Framework

Under Pillar III, the EC will:

- Ask the **“European AI Alliance” to develop draft AI Ethics Guidelines** and new safety and technical interoperability standards by the end of 2018, in cooperation with the European Group on Ethics in Science and New Technologies

- Issue a guidance document on the interpretation of the **Product Liability Directive** in light of technological developments by mid-2019
- Publish, by mid-2019, a **report on potential gaps in the liability and safety frameworks** for AI, Internet of Things and robotics
- Implement a pilot project on **Algorithmic Awareness Building** to gather a solid evidence-base and support the design of policy responses to AI-driven challenges
- Support national and EU-level consumer organisations and data protection supervising authorities in **building an understanding of AI-powered applications** with the input of the European Consumer Consultative Group and of the European Data Protection Board

## Next Steps

The **EC will work with member states on a coordinated plan for AI**. The discussions will take place in the framework of the existing European platforms of national initiatives to digitise industry, with the view to agree on this plan **by the end of 2018**.

The EC will, in due course, issue a Communication on the **future of connected and automated mobility in Europe** and a Communication on the future research and innovation ambitions for Europe. AI will be a key element of these initiatives.

Given the scale of the **challenges associated with AI**, the full mobilisation of a diverse set of participants, including businesses, consumer organisations, trade unions and other representatives of civil society bodies is essential. The EC thus launched a **multi-stakeholder platform, the European AI Alliance**, to support the **implementation** of the proposed **AI measures**.

**Two new expert groups will be created:** (i) an **AI technology expert group**, and (ii) a **liability and new technologies expert group**. The work of the expert groups will be pivotal to determine whether new sectorial or horizontal legislation will be required.

## How We Can Help

For more information about this important new EU initiative and how it relates to other EU initiatives in the data economy, or to discuss how to best engage in this important ongoing policy formation process, please get in contact with us.

We can help you understand the impact of AI on your operations, propose matching legal, regulatory and other risk mitigation measures or devise a strategy to maximise potential opportunities for you.

We have a global network of 47 offices in 20 countries, with 15 of those offices located in Europe. This allows us to combine the expertise of more than 600 lawyers across Europe with our “best in class” Public Policy team in order to help clients successfully navigate their way through complex legal, regulatory and policy matters at the national or EU level.

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