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*“We need to focus on the power of Artificial Intelligence to transform our lives and indeed our societies.”*

Věra Jourová, European Commissioner for Justice, Consumers and Gender Equality

*“It’s not technology that will decide our future. It’s us.”*

Margrethe Vestager, European Commissioner for Competition

*“Only through deepened cooperation in pursuit of a common goal can the EU challenge major actors, such as the United States and China.”*

Roberto Viola, Director General for Communications Networks,  
Content & Technology, DG CONNECT

## 1. Introduction - Opportunities and risks of AI

Artificial intelligence (AI) is a breakthrough technology because it can improve all sectors of our economy and our everyday life, just like electricity. The main potential of AI therefore is versatility. Some sectors will be quicker to adapt, and will have more benefits than others. In just five to ten years, the autonomous vehicles may become widely available with a significant positive impact on everyday`s life, both in terms of improving road safety and reducing environmental impacts.

European Commission stresses three goals to be achieved together:

1. The take-up and development of the AI technology within the EU.
2. Effective protection of European citizens and building of trustworthy AI.
3. Minimization of negative impacts of automation on labour markets and societies.

These goals are closely linked, for ensuring the take up, it is needed not only to focus on **private and public investments** and material sources. It is also needed to ensure that users – citizens, consumers, but also firms using AI – are protected and have **trust in the technologies**. The Commission is therefore looking at civil liability rules to ensure that the technology can deliver these benefits for the EU. While the AI brings a lot of potential benefits, it is also important to be aware of the **risks to our rights and liberties**. We already see examples when AI is used to undermine fundamental rights and liberties. This should be prevented and never happen in the EU.

It is also important to address the fears of many that because of AI they might lose their jobs. The development of AI can affect labor market and cause **definitive shift of economic power from labor to capital**. The resulting fundamental political transformation and instability that may not be obvious at the time of the boom, but will show its full force if problems arise. Digitalization, robotization and automation will create new opportunities and new types of jobs. Professions will change, new skills will be required and it will be necessary to adapt to these changes. Some of the main necessities will be to invest continuously to Research and Development. However, the **adaptation of skills for jobholders** to get ready for this next important technological step will be of key importance.<sup>1</sup>

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<sup>1</sup> The issues related with the Future of Work will be addressed separately in detail in the forthcoming discussion paper for the Ralf Dahrendorf Roundtable organized by the European Liberal Forum and Institute for politics and Society on 7 March 2019

## 2. AI the European way

Investment levels for AI in the EU are low and fragmented, compared with other parts of the world such as the US and China. The main problems and opportunities may be summarised into five main points:<sup>2</sup>

1. Europe is adding an AI gap to its digital gap
2. AI may scale up in a fast-paced game of competition, innovation, and new skills acquisition
3. AI could give EU economies a strong boost
4. AI performance is likely to vary among EU member states
5. Europe should consider prioritizing action to accelerate its path to AI

First, Europe need to **step up and maximise the investments through partnerships**. Therefore, on 7 December 2018, the European Commission published a **Coordinated Plan on the development of AI in the EU**. It builds on the earlier Communication “Artificial Intelligence for Europe” from April 2018, in which the Commission presented a European AI strategy based on three pillars:

1. Boosting the EU’s technological and industrial capacity and AI uptake across the economy.
2. Preparing for socio-economic changes brought about by AI.
3. Ensuring an appropriate ethical and legal framework.

Coordinated Plan further builds on specific cornerstones for development of european AI:

1. Maximising investments through partnerships.
2. Creating European data spaces.
3. Nurturing talent, skills and life-long learning.
4. Developing ethical and trustworthy AI.

**Through bold investments and by acting in a coordinated and focused way as a whole, Europe shall play a role in the area of AI that matches its economic weight.** Only through deepened cooperation in pursuit of a common goal can the EU challenge major actors, such as the United States and China. The Commission has made ambitious proposals both for investing in AI-related research and innovation and for accelerating the adoption of AI across the economy. The goal is to reach a total of 20 billion euros from 2018 to 2020, and then an annual average of 20 billion euros in the decade after 2020, including both public and private investment.

It is **crucial to improve access to data**, which is essential for developing AI. Together with European countries, the Commission wants to create common European data spaces to make data sharing across borders seamless, while ensuring full compliance with the GDPR which is not against the use of metadata.

To real human intelligence is essential to build an artificial one. It is therefore of the utmost importance to **nurture talent, skills and life-long learning**. EU countries face shortages of ICT professionals and lack AI-specialised higher education programmes. The Commission, together with European countries, committed to support advanced degrees in AI through, for example, dedicated scholarships.

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<sup>2</sup> Notes from the AI frontier: Tackling Europe’s gap in digital and AI, McKinsey Global Institute (MGI)

Europe needs to become more competitive in the AI game. But it should also pay attention to what specialization - EU is an area with a high protection of safety and fundamental rights, with legislation which ensures that AI is both ethical and trustworthy. Therefore **Europe needs to define its own EU way on standards for AI**. And given its economic weight, it has a chance that European standard could influence others in the world, just as it did recently on data protection and GDPR. This **EU way of dealing with AI should be human-centred and value-based**.

### 3. Czech Republic as AI Heart of Europe

The Czech Republic is one of the most industrialized Central/Eastern European countries, with a **huge potential in robotics and artificial intelligence**. The Commission has a high level of ambition regarding AI, and **it is important that the Member States aim similarly high**. Czech government has similar ambitions and the Czech Republic wants to be the AI Heart of Europe – to help put the EU ahead of the competitors.

The **Analysis on the Development Potential of Artificial Intelligence in the Czech Republic**, which was commissioned by the Czech government and published at the end of last year, aims to present the strengths and opportunities for the Czech Republic in a comprehensive manner. This forward-looking approach is welcomed by the European Commission and two of the conference panelists were important contributors to the analysis - Professor **Michal Pěchouček**, head of the Center for AI at the Czech Technical University and founder of the Prague.ai consortium and **Alžběta Krausová**, Head of CICERo – Center for Innovations and Cyberlaw. Research at the Institute of State and Law of the Czech Academy of Sciences.

**European Commission shall support Member States to achieve their ambitious objectives** for example by the support for **AI excellence centres** across Europe including the CEE region and for the setting up of testing and experimentation infrastructures and data platforms. **The Czech Republic is a frontrunner** in the EU for what concerns AI; it is very active with many events and programmes aimed at putting together all relevant actors. It has a real potential to pursue an ambitious AI policy at the European level and become a **model country for the whole EU**.

### 4. Intelligent Mobility and Transportation

Nowadays the concept of driving is slowly shifting into a new dimension of self-driving cars. AI technology has already been implemented in several automotive companies like Tesla, BMW, Volvo, and Toyota. The AI may have very serious impact on the whole automotive industry that is one of the most important for the European economy, especially in the countries like Germany or Czech Republic. The new federal industrial strategy of the German government clearly states: If the digital platform for autonomous driving with Artificial Intelligence were to come from the USA and the battery from Asia for the cars of the future, **Germany and Europe would have lost over 50 per cent of value added** in this area. The associated impact would extend **far beyond the automotive industry itself**. This problem therefore concerns not only the companies in the sector but all economic and state stakeholders equally. The structure of the whole industry will change over the next few years and in many areas no one is ready yet. However, the wave of rapid changes has already started and it is needed to react in both private and public sector.

There are four ways of AI impact in the automotive:

1. assisted driving,
2. cloud-hosted intelligence,
3. enhanced connectivity, and
4. intelligent insurance risk assessment.

Its full implementation requires **new regulations, logistics, security, and infrastructure**. No doubt that mobility is an important economic factor because it provides with goods and services for our general daily activity. The future goals of mobility seem **more safety, comfort, and environment** focused. However, it is necessary to keep in mind new risks which can emerge, like **liability and responsibility**.

The concept of the so called **Smart mobility** is very important issue that covers not just driverless cars, but also the preparation of infrastructure or drones safety for instance. Czech Republic expressed commitment to **create legislation for all levels of future transportation**. One of the answers to the current problems is to provide and promote **reliable shared mobility**. The best thing is yet to come. It is important to cooperate with the automotive industry, state regulators and cities.

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<sup>3</sup> An event organised by the European Liberal Forum (ELF). Supported by Institute for Politics and Society and partners. Co-funded by the European Parliament. Neither the European Parliament nor the European Liberal Forum are responsible for the content of the programme, or for any use that may be made of it. The views expressed herein are those of the speaker(s) alone. These views do not necessarily reflect those of the European Parliament and/or the European Liberal Forum asbl