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Digital Czech Republic 2020

POLICY RECOMMENDATIONS / DECEMBER 2020

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Policy Recommendations – Anas Zaza, December 2020

Artificial Intelligence (AI) systems have become commonplace and will continue to impact our daily lives. Keywords such as algorithms, automation, and big data are increasingly applied as AI systems improve and continue to seep into different sectors of society. In the age of digitalization, AI systems play a vital role and will affect the lives of citizens as their use continues to rise from the governmental, banking to healthcare sectors.

The Covid-19 pandemic has accelerated many digitalization efforts. With the ongoing digital revolution, there exist opportunities for Europe and EU member states. Disruptive technologies have the ability to transform economies and society as well as create new challenges.[1]

The 2020 Digital Czech Republic conference was held in Prague from the 8th to the 9th of October 2020, marking its fifth consecutive year. This event was also the first to be held on a digital online platform and streamed live internationally. The conference was held under the patronages of the Ministry of Health, the Ministry of Industry and Trade, the Ministry of Education, Youth and Sports, and the Ministry of the Interior.

Towards an EU Human-Centric and Trustworthy AI

The European Commission has set out its vision for AI to be trustworthy and human-centric. The European Strategy on Artificial Intelligence was set forth, in part, by the AI High-Level Expert Group (AI HLEG)[2], in which they presented recommendations on future-related policy developments and on ethical, legal, and societal issues related to AI, including socio-economic challenges.[3]

The *Ethics Guidelines for Trustworthy AI* were published by the AI HLEG in April 2019, along with 33 proposed Policy and Investment recommendations for Trustworthy AI. These documents were addressed to EU institutions and member states and were published in June 2019. Additional emphasis on building an "ecosystem of trust" appeared in the Commission's White Paper on Artificial Intelligence published in February 2020. Highlighting:

"Technology is a crucial driver of innovation and productivity, and AI is one of the most transformative technologies of our time. We believe that Trustworthy AI can help achieving sustainability, growth and competitiveness, and inclusion – thus contributing to individual and societal well-being."[4]

The Czech Republic National Artificial Intelligence Strategy (NAIS) encompasses nearly all aspects indirectly with the aim of improving the country's economic growth and competitiveness in AI by creating favorable policy conditions.

[1] International Conference Digital Czech Republic (2018).
[2] European Commission (2018). "*Following the launch of its Artificial Intelligence Strategy in 2018, the European Commission appointed a group of 52 experts to advice for its implementation. The group members were selected following an open selection process and comprised representatives from academia, civil society and industry.*"
[3] AI HLEG (2019).
[4] Ibid.

Research & Development

The building and establishment of European Centres of Excellence in AI research, Test Centres, and Digital Innovation Hubs are highlighted in the NAIS.[5] The establishment of a European Centre of Excellence in AI would be based on a consortium of academic research institutes, with its headquarters in Prague and branches throughout the Czech Republic.

This is concordant with the AI HLEG's recommendations on Policy and Investment Recommendations, which highlights the aim of ensuring world-class research capabilities in AI within the EU.

Education & Jobs

Education, training, and retraining, both technical and humanitarian, will play a crucial role, targeting the skills needed over the next decade. In order to ensure that AI and its digital transformation capabilities will benefit society as a whole, a stronger promotion and support of business-education links and public-private partnerships is recommended.[6] Work-based education pathways linking education and private sector, such as apprenticeships, can produce significantly better results in terms of employability, inclusion, and youth employment.[7]

EU countries still face shortages of ICT professionals and lack AI-specialized higher education programs. The Commission, together with European countries, committed to supporting advanced degrees in AI through, for example, dedicated scholarships. The Czech Republic has outlined financial and non-financial support for attracting and retaining researchers in the Czech Republic, supporting their careers in research organizations, and attracting new talents from abroad.[8]

Additionally, the creating and transformation of the education system should not be limited to only higher forms of education, i.e., Bachelors, Masters, Ph.D. programs, but be incorporated into early stages of primary and elementary school education systems, with Educators playing a vital role.

EU & National Funding

Maintaining access and the availability of EU and national funding will ensure the realization of digitalization and moving forward in a post-Covid world.

Utilization of funds directed to initiatives of digitalization, AI, etc. was made closer on the 10th of November 2020, when the European Parliament and EU member states in the Council, with the support of the European Commission, reached an agreement on the largest EU budget, of €1.8 trillion. Following the coronavirus crisis and its consequences, the package will help rebuild a greener, more **digital,** and more resilient Europe, which is a better fit for current and forthcoming challenges.[9]

The long-term budget for 2021–2027 of €1.074 trillion is combined with the temporary recovery instrument, NextGenerationEU (NGEU), of €750 billion. Of NGEU instrument,

[5] NAIS (2019).
[6] Digital Europe (2019).
[7] Ibid.
[8] NAIS (2019), p. 16.
[9] European Commission (2020a).

€10.6 billion was allocated towards Single market, innovation, and digital, plus €132.8 billion was allocated there from the Multiannual Financial Framework (MFF).[10]

Connectivity & Security

Connectivity and security are important aspects of ensuring infrastructure for digitalization across all sectors of the economy and society as a whole.

Part of the Digital Czech Republic concept and the Innovation Strategy of the Czech Republic 2019–2030 is the *Implementation and Development of 5G Networks* in the Czech Republic.

As realized in the *Implementation and Development of 5G Networks*:

"Building a digital economy cannot be realized without high-speed networks or very high-capacity networks, including fifth generation networks (hereinafter '5G networks'). It is also necessary to use analytical tools to work with Big Data, Artificial Intelligence and the Internet of Things (hereinafter the 'IoT'), while ensuring the cybernetic security of the entire system."[11]

Further, a Joint Declaration on 5G Security was signed between the United States and the Czech Republic on the 6th of May 2020. Stated in the declaration:

"The United States and the Czech Republic welcome efforts such as the Council of the European Union 'Conclusions on the significance of 5G to the European Economy and the need to mitigate security risks linked to 5G,' Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions: Secure 5G deployment in the EU – Implementing the EU toolbox,' and the 'Prague Proposals' as important steps toward developing a common approach to 5G network security. These proposals, adopted at a landmark conference hosted by the Czech government in May 2019, emphasize the need to develop and deploy 5G networks based on free and fair competition, transparency, and the rule of law."[12]

"Protecting communications networks from disruption or manipulation, and ensuring the privacy and individual liberties of the citizens of the United States and the Czech Republic are vital to ensuring that our people are able to take advantage of the tremendous economic opportunities 5G will enable."[13]

Ensuring security within a digitalized environment is a key step to maintaining trust in the systems and safeguarding of personal data of citizens.

Additionally, clear legislation is set forth, ensuring the protection of fundamental rights, privacy, and security as well as legal certainty for investors and citizens alike.

[10] European Commission (2020b).
[11] Implementation and Development of 5G Networks (2019).
[12] Joint Statement on United States (2020).
[13] Ibid.

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Works Cited

DIGITALEUROPE. DIGITALEUROPE's Recommendations on Artificial Intelligence Policy. Published November 13, 2019. Available at: https://www.digitaleurope.org/resources/digitaleuropes-recommendations-on-artificial-intelligence-policy/.

European Commission. High-Level Expert Group on Artificial Intelligence. Published 2018. Last update November 18, 2020. Available at: https://ec.europa.eu/digital-single-market/en/high-level-expert-group-artificial-intelligence.

European Commission. NextGenerationEU: Commission presents next steps for €672.5 billion Recovery and Resilience Facility in 2021 Annual Sustainable Growth Strategy. Published September 17, 2020. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1658.

European Commission. Recovery plan for Europe. Published 2020. Available at: https://ec.europa.eu/info/strategy/recovery-plan-europe_en.

Institute for Politics and Society. International Conference Digital Czech Republic 2018. Mezinárodní Konference Digitální Česko. Published 2018. Available at: https://www.digital-czech-republic.eu/.

Smit, Sven, et al. The Future of Work in Europe: Automation, Workforce Transitions, and the Shifting Geography of Employment. McKinsey Global Institute. Published June 2020. Available at: https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-in-europe.

United States Department of State. Joint Statement on United States – Czech Republic Joint Declaration on 5G Security – United States Department of State. Published May 6, 2020. Available at: https://www.state.gov/joint-statement-on-united-states-czech-republic-joint-declaration-on-5g-security/.

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