

National strategies on Artificial Intelligence A European perspective in 2019

Country report – Latvia



In February 2020, the Latvian government released its national AI strategy on [Developing Artificial Intelligence Solutions](#) (Latvia, 2019). A draft of the national AI strategy was released in July 2019 for [public consultation](#). In order to collect the view and feedback from relevant stakeholders to move ahead in the preparation of the final national AI strategy. The objective of the Latvian strategy is to promote the uptake and growth of AI in the whole economy. The proposed strategy outlines policy actions in the following areas and devotes particular attention to the promotion of AI in the public administration:

- Raising the awareness of and competences in AI across society through education reforms;
- Promoting the adoption and development of AI in the public and private sector;
- Actively engage in national and international cooperation;
- Developing an appropriate legal and ethical framework for AI;
- Unleashing the benefits of a well-developed data ecosystem;
- Investing in a digital and telecommunication infrastructure to support AI developments.

The Latvian AI strategy highlights investment projections in line with the recommendations of the Coordinated Plan. These estimations amount at a public investment of €25 million per year, and a total investment (public and private sectors combined) of €74 million per year. More concrete investment plans will be defined and released at a later stage.

1 Human capital

Improving **skills and competences in AI-related fields** is primordial to accelerate the speed of AI deployment, usage and development. To this purpose the Latvian strategy advocates the integration of AI themes in the general education system at all levels. The Latvian government recognises the need to raise the awareness and understanding of AI among all citizens, and in particular students, researchers and professionals in the private and public sector. Taking the example of the Finnish course on [AI Elements](#), Latvia will develop an equivalent online course. The target audience of this course are expert level and management level specialists to help support digital transformation. Furthermore, the Latvian government intends to prepare a National Research Programme and to reform the education system.

2 From the lab to the market

In terms of research, the Latvian strategy highlights that several universities and research centres are currently conducting several **research projects in the field of AI**. The [LU Institute of Mathematics and Informatics](#) is active in the following research strands: speech recognition, semantic analysis, image analysis, natural language analysis, computer vision and robotics. The [Riga Technical University](#) (RTU) carries out research among others in autonomous systems and robots, image and sound processing and smart sensor systems. It has a dedicated Chair in Artificial Intelligence and Systems Engineering focusing on machine training and data mining. In addition, the RTU [Institute of Industrial Electronics and Electrical Engineering](#) is coordinating the NexIT project of the National Research Programme with the aim of fostering ICT services in the public sector and of consolidating data collection and processing. Finally, Latvia's strategy presents a range of ongoing research projects in the field of AI that are supported by the European Regional Development Fund and Horizon 2020.

The deployment of AI solutions in the industry and public administration will be encouraged through an increased pace of digitisation. To this purpose, the Latvian government is preparing Digital Transformation Guidelines by the second quarter of 2021 with policy measures to support the digital transformation. This will include financial provisions and support programs for research and innovation in AI. The Latvian strategy identifies **priority sectors** with a high potential for AI applications in the country, such as transport (Intelligent transport systems), culture, justice (AI as support for decision making and drafting legislation), agriculture (automated control), and translation. AI is also mentioned as an effective tool to create a virtual assistant platform in the public administration and to establish an efficient information system in the healthcare sector.

Lastly, several **value chain ecosystems** are currently developed by the Ministry of Economics. Three strategic value chain ecosystem pilots are being implemented – on Smart materials, Biomedicine and Smart city – to enhance state-of-the-art research and innovation in these fields. These priority areas are based on Latvia's [Smart specialization strategy](#). The ecosystems bring together innovation actors from private, public and academic sectors. AI is a key enabling technology to facilitate the implementation of above-mentioned ecosystems.

3 Networking

To foster innovations in AI, research and development should not be conducted in isolation but rather in collaboration, by bringing together competences from national and international organisations. The Latvian government will encourage joint projects and increase opportunities for **public-private partnerships in AI**. Understanding the growing importance of the global landscape of AI, the government will pay particular attention to the involvement of international stakeholders in collaborative efforts. To increase Latvia's international visibility and to attract foreign investments, the Ministry of Foreign Affairs considers to set up a platform to present Latvia's achievements and best practices in AI. Networking opportunities will be further channelled through Latvia's Digital Innovation Hubs, being the [Ventspils High Technology Park](#), the Latvian [IT Cluster Association](#) and the [Institute of Electronics and Computer Sciences](#).

4 Regulation

As the proliferation of AI technologies brings along **new regulatory challenges**, the Latvian government calls for the development of a normative framework to define what is ethically and legally sound in the field of AI. At the moment, Latvia is relying on its current national legislation and on EU Directives defining regulations on product safety ([Directive 2001/95/EC](#)) and liabilities ([Directive 1985/374/EEC](#)). However, the government recognises the need to provide more clarity on these issues, in particular on AI goods and services. Hence, it will work on a new legal environment for AI and will set up regulatory sandboxes to facilitate testing of AI concepts and ideas. Regarding ethics, the government adopts the European [ethical guidelines](#) outlined by the European Commission for the Efficiency of Justice.

5 Infrastructure

Given that data is an important driver for the development of AI applications, the Latvian government has adopted guiding principles for e-government and data governance in the public administration. These [measures](#) aim to foster the development of new **information systems towards open data** and to facilitate the path towards the creation of single data centres. In June 2017, Latvia has launched an [Open Data Portal](#) to harmonise data collection and encourage data sharing. A survey targeting practitioners has also been launched in March 2019 to understand their data needs and to obtain recommendations and feedback on the data published in the open data portal. The Ministry of Environmental Protection and Regional Development ([VARAM](#)) has been appointed as national authority to coordinate open data policies and initiatives in the public administration. In the third quarter of 2019, an information report entitled "Latvian Open Data Strategy" will be published. This report will lay the foundations for strategic policy actions for the period 2019-2022 towards an open data governance in the public administration.

Latvia has currently two **High Performing Computing Centres**: the High Performance Computing Unit at the Ventspils International Radio Astronomy Centre ([VSRC](#)) and the RTU [Scientific Computing Centre](#). Besides these two centres, the Institute of Electronics and Computer Sciences ([EDI](#)), an independent scientific institute, has also invested in a high performance computer allowing to explore and analyse big data with cutting-edge techniques in AI. In addition, the Latvian strategy mentions the need to increase computing capacities through investments in cloud services and quantum computing.

6 Update

The implementation of the Latvian strategy will be monitored and evaluated on a regular basis and adjusted with additional policy initiatives where needed.

Background information

This country report has been prepared in the context of [AI Watch](#) and the [OECD AI Policy Observatory](#).

AI Watch is the European Commission knowledge service to monitor the development, uptake and impact of Artificial Intelligence (AI) for Europe, launched in December 2018.

The OECD AI Policy Observatory (OECD.AI) is an inclusive hub for public policy on AI. It aims to help countries encourage, nurture and monitor the responsible development of trustworthy AI systems for the benefit of society.

This country report has been created on the 25th of February 2020. Please visit <https://ec.europa.eu/knowledge4policy/ai-watch/latvia-ai-strategy-report> for regular updates.

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 EU Science Hub: ec.europa.eu/jrc/en  @EU_ScienceHub  Joint Research Centre
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Contacts:

European Commission – Joint Research Centre
Directorate B – Growth & Innovation – Digital Economy Unit (B6)
e-mail: EC-AI-WATCH@ec.europa.eu
website: https://ec.europa.eu/knowledge4policy/ai-watch_en

