Main Recommendations

To ensure Israel maintains its technological and scientific leadership in the field of AI, the Ministry of Innovation, Science, and Technology must take the lead in shaping and implementing government policy on AI. As part of this mandate, the ministry should complete the development of the national strategic plan, a process initiated in 2022.

The strategic plan should include key components such as:

- A clear vision and defined milestones.
- A detailed action plan specifying the responsible governmental body for each initiative.
- Timelines for implementation.
- A comprehensive budget plan aligned with the program's objectives.

Furthermore, the ministry should establish a framework for periodic evaluation to ensure the program remains aligned with its goals and achieves measurable outcomes.

Advancing High-Performance Computing infrastructure to support Al development in Israel.

Advancing the Large Language Model (LLM) project and its implementation in government ministries and the public sector.

Developing an agreed and integrated framework to expand research capacity and increase the number of faculty members and researchers in the field of AI.

Updating regulatory principles to align with technological advancements and international agreement standards, and submitting them for government approval.

Integrating education into the national AI program through programs designed to promote and strengthen data literacy within school curricula.

Executing the second phase as outlined in the government decision, while monitoring implementation timelines and the completion of Its key components.

Main Deficiencies

National Plan

Six years after the Prime Minister's decision, a comprehensive national plan has yet to be approved by the government.

Coordinating Entity

There has been no coordinating government entity with overall responsibility for formulating and leading a national plan.



Israel's international ranking

As of 2024, Israel's overall ranking in the field of artificial intelligence remains high (within the top third) according to various indices. However, in the years 2019-2024, Israel's global ranking declined in the following international indices: Tortoise, Oxford, and the Global Innovation Index.









Special Report National preparedness in the field of artificial intelligence

State Comptroller's Report - Cyber and Information Systems

November 2024

Background

Artificial Intelligence (AI) is a comprehensive term encompassing technologies designed to enable machines to perform tasks traditionally requiring human intelligence. The ongoing AI revolution, representing a paradigm of disruptive innovation, is anticipated to profoundly reshape a wide range of sectors and areas of activity, including:



The topics examined in the audit include

- ▶ National preparedness in the field of Al
- ► Israel's international ranking
- Actions taken by the government and government ministries to promote a national AI program
- ▶ Implementation of government decisions the first and second phases
- Data literacy

Milestones in the field of artificial intelligence in Israel, 2018–2023



Implementation of Government Decisions - Phase I

Components of Phase I



Establishment of

High-Performance

Computing (HPC)

infrastructure



Establishing

an enabling

regulatory (Reg.)

environment





Generic R&D and infrastructure for Natural Language Processing (NLP)

Development of human capital (HC) in academia in the field of AI

As of the completion of Phase I in December 2023, it was determined that only approximately 40% of the approved budget for this phase had been utilized, totaling NIS 220 million out of the NIS 550 million allocated by the government.

Implementation of the "Phase I" Budget 40% Implemented Not implemented 138.1 180 HC 34.4 62 Reg. 4 4

- ▶ **HPC:** The current computing infrastructure is inadequate and insufficient to support the advancement of research and industrial applications in Israel.
- ▶ **NLP:** The Hebrew and Arabic language model project faced significant delays, with the implementation agreement signed only on the final day of Phase I.
- ► **HC:** A shortage of researchers and academic faculty continues to pose a major barrier to fully leveraging the potential of AI in Israel.
- ▶ **Regulation:** The principles outlined in the national AI policy document have yet to receive government approval, and Israel currently lacks specific legislation governing the use of AI.

Implementation of Government Decisions - Phase II

In February 2023, the government approved a budget of up to NIS 500 million for the second phase of advancing AI, to be implemented during 2023–2026. The budget is allocated across the following components:



It was determined that an agreement for implementing the second phase, covering the years 2023-2026, was signed only in September 2024, more than a year and a half after the government's initial decision.

Data Literacy in the Education System

Additionally, it was observed that the agreements for both the first and second phases did not include specific provisions addressing data literacy.

Following the publication of the report, the Ministry of Education announced plans to integrate AI into the school curriculum, establish a mechanism for regulating educational innovation, and develop a strategic plan for incorporating AI into the education system.