



PRESS RELEASE

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Public policy evaluation

THE NATIONAL ARTIFICIAL INTELLIGENCE RESEARCH STRATEGY

Artificial intelligence (AI), which aims to reproduce human intelligence by using computers and mathematics, emerged in the 1950s, influenced in particular by the work of Alan Turing. According to the OECD, AI start-ups attracted nearly 12% of global private equity in the first half of 2018, up from 3% in 2011. Research publications have followed a similar trend, with more than 1.2 million publications in 2019, compared with fewer than 40,000 in 2010. As a result, AI has become an issue of growing priority for public authorities. The adoption by many States of national plans to encourage its development since 2017 bears witness to this. In France, a national strategy for artificial intelligence (NSAI) was launched in March 2018, with an initial €1,527m of public funding for the period 2018-2022, followed in November 2021 by a new so-called “acceleration” phase announced for the period 2022-2025, with the aim of increasing France’s competitiveness and attractiveness in this area. The report published today by the Court of Accounts is an ongoing evaluation of the NSAI, focusing on the “research” and “higher education” components, i.e. the main funding components.

Priority given to research, which has prevented France from falling behind

In 2018, France was one of the first countries worldwide to have a formalised plan for AI. Initially, the French strategy gave priority to AI research. In addition to the 30% of funding allocated to it for the 2018-2022 period, research has also been the subject of a specific plan – the NAIRS – coordinated by the French National Institute for Research in Computer Science and Control (Inria). Since its launch, most of the measures planned under the NAIRS have been implemented. In establishing a formal strategy, the public authorities have sent out a strong political signal about the importance of AI for French research. The Court notes, however, that the effectiveness of the strategy has not yet been proven. Over the period analysed, in terms of the number of AI publications and out of a total of 47 countries compared, France has barely maintained its position in 10th place worldwide and remains in 2nd place in Europe. The Court of Accounts therefore recommends that the existing funding should be monitored more closely. For the research component, €554.6m was ultimately committed over the period 2018-2022. Finally, with a view to attracting talent, certain financing mechanisms would benefit from being made permanent.

Long-term future of the ecosystem of excellence must be guaranteed

The main thrust of the strategy is the creation of centres of excellence in AI, through the accreditation of interdisciplinary institutes in AI (3IA), the establishment of individual chairs, and the identification of centres of excellence outside the 3IA institutes. Synergies between centres of excellence need to be strengthened; for example, by adopting a more systematic approach to promoting each other's work. This would help to raise their profile, both nationally and internationally, as well as France's image as a magnet for foreign talent. At the same time, the missions of the 3IA and non-3IA centres of excellence need to be clarified, and this should be accompanied by a review of the timeframe for the funding allocated to approved institutes (currently four years), which is too short-term to allow for leverage effects. In addition, the Court notes that although the strategy has given a strong signal in terms of raising the profile of training courses for young talent, it is now important to ensure that the funding needed to sustain this dynamic is made available on a long-term basis. The evaluation shows that the NAIRS enabled the creation of an AI research stakeholder structure at a time when AI had not been identified as a discipline in its own right, even though it still needs to mature. To improve it, there is an urgent need to modify the governance and steering for the strategy, and this could provide an opportunity to create a shared overview of public action in AI, at a time when the measures decided upon in this area remain dispersed across several public policies.

The acceleration strategy: an opportunity for a frugal, trust-based and more European approach

Although the national research strategy has not yet strengthened France's position at global level, the first component has prevented the country from falling behind in science terms since 2018. The second component is now crucial to improving France's position in AI in terms of global competition. This "AI acceleration strategy" is refocused on the objective of training talent- a priority that has received little attention to date. Total funding devoted to this priority amounts to €776m. However, the current limited number of high-level public trainers could impede these ambitions. The French approach would therefore benefit from being even more closely integrated into the European approach via various support programmes such as "Horizon Europe" and "For a Digital Europe". Trust – the fact that AI is interpretable, explainable, transparent and has a "responsible" identity – and frugality – the fact that it is sustainable and respects the environment – are two of the four key themes of the €73m Priority Research Equipment Programme (PEPR), which is part of the acceleration strategy. Lastly, the Court notes that, for the research component, the priorities have been refocused in this second phase on attracting talent and taking account of societal issues, such as trust in AI and frugality in its use.

[Read the report](#)

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