

Policy Position

In 2020, France and Germany must take AI cooperation to the next level

20 December 2019

Paul-Jasper Dittrich, Policy Fellow

In the Aachen Treaty France and Germany have agreed to increase their bilateral cooperation on AI. 2020 will be a crucial year for this cooperation as ambitions have to be turned into concrete projects. In this policy position Paul-Jasper Dittrich explains why the cooperation is necessary and proposes a way forward for funding AI-projects in both countries.

#AI
#Funding
#Aachen

The Challenge of AI to the EU

“Artificial Intelligence” conceptualized in a broader sense as a general-purpose technology is already, or will soon be, applied in all sectors of the economy, as well as in administrative and military settings. Examples include health care, where AI can help automate the research of new pharmaceutical drugs and drug trials, as well as autonomous vehicles, better manufacturing and service robots, delivery drones and live translation programs.

While research into the technology is excellent, the EU is lagging behind regarding the commercial utilization of AI. [The US, China and Israel](#) are instead the top nations in terms of funding, start-ups and implementation of AI. The UK is home to about [one third of all AI start-ups](#) in the EU, meaning that the bloc will further fall behind after Brexit. Israel alone currently has more start-ups developing AI-powered software than France and Germany [combined](#). In international comparison EU and member state funding for AI is relatively low. The Chinese city of Tianjin [announced](#) it would invest more than 13 billion euro in AI until 2030. By way of comparison: the German government wants to spend a mere 3 billion euro until 2025 for the implementation of its AI-strategy.

The EU is also lacking in tech giants like Alphabet or Alibaba (except for SAP in Germany). These large global online platforms currently spearhead industrial research on AI in many areas. They acquire AI start-ups at impressive speed around the globe to increase their innovative capacities in the area, which further cements their technology lead on AI.

Time to act

From an economic and a geopolitical perspective, increased cooperation and a pooling and sharing of resources is therefore an absolute necessity for Europeans. Pooling and sharing key input factors like large and diverse process and industry datasets as well as computing power across the EU would help balance some of the European disadvantages compared to the US and China. Within Horizon Europe the EU will launch an enhanced [European Innovation Council](#) (EIC) to financially support companies in an early stage in order to scale up and AI will become a key focus of the EIC.

However, the need to speed-up investments in AI must also be flanked by bilateral cooperation projects between member states. Indeed, France and Germany are about to open a new chapter in the area of technology cooperation. If done right this would send a strong signal that the Franco-German friendship can be a driver of fruitful economic and political integration between the two countries, even in times of mutual differences and political uncertainty. The year 2020 will be crucial in this regard, as political ambitions, goals and plans will have to be translated into concrete measures and as potential funding of AI R&D is negotiated.

Artificial Intelligence and disruptive innovation are specifically mentioned in Article 21 of the [Aachen Treaty](#). In this so-called Elysée Treaty 2.0, France and Germany commit to intensifying their cooperation in the fields of research and the digital transformation. In June 2019, both countries agreed on a roadmap to develop a planned joint Research and Innovation Network on Artificial Intelligence (the “virtual centre”), including a timeline for further concrete steps towards enhanced cooperation until the end of 2020.

A key element of this roadmap is the creation of Franco-German sectoral ecosystems for AI, consisting of academia, industry and policy experts. In the first quarter of 2020, thematic working groups from both countries will work on sector-specific policies and build Franco-German networks in the area of mobility, health, environment and “Industry 4.0”. In October 2020, both governments will decide on a possible joint funding scheme for AI projects.

What needs to be done?

A central problem identified by both [France](#) and [Germany](#) in their respective AI strategies is the weak transmission between academic research and industrial application of AI-powered technology. Excellent academic research in both countries into new algorithms and processes often does not translate into new start-ups, mostly due to lack of financing. At the same time, corporations in both countries from established industries are relatively reluctant to take up new AI applications.

Developing sectoral ecosystems between academia, industry and policy experts is hence crucial to increase the speed of technology adoption and determine the right way forward. What is currently missing, however, is a more active role of both governments in funding innovative ideas for new AI applications and a structured approach to fund AI projects of high societal value.

Numbers are important and the money both countries spend on AI needs to be increased in the next years. How to spend the money most effectively however is the most important question right now. In their negotiations in 2020, France and Germany should therefore focus on concrete schemes to efficiently fund AI applications, industry-academia cooperation, and technology that serves a societal goal, for example, with respect to energy efficiency or mobility solutions.

The German Agentur für Sprunginnovationen and the French Conseil d'Innovation should play a key role towards achieving these goals. In order to increase public use of AI, they should develop a framework for joint public procurement of socially relevant AI solutions, for example in the area of mobility management for French and German cities.

In order to foster cooperation between industry and academic researchers, France and Germany should develop commercial AI research grants for R&D in the four sectors health, mobility, environment and Industry 4.0 in which Franco-German ecosystems are currently forming. The grants could be modelled on the approach of the Israeli Innovation Authority, whose approach is often [credited](#) as having kickstarted Israel's development into a "Start-Up Nation". Under this approach, companies submit commercial R&D proposals and grants are awarded competitively. The grants cover between 66 and 90 percent of the research costs and must subsequently be paid back by the companies.

Taking up such an approach for France and Germany would mean giving start-ups as well as larger companies a new opportunity to develop AI-applications in conjuncture with academic researchers that might at first be considered too risky from a commercial perspective.

Managing Editor: Henrik Enderlein • The document may be reproduced in part or in full on the dual condition that its meaning is not distorted and that the source is mentioned • The views expressed are those of the author(s) and do not necessarily reflect those of the publisher • The Hertie School cannot be held responsible for the use which any third party may make of the document • Original version • © Hertie School gemeinnützige GmbH, 2019