

Roadmap
for a
Research and Innovation Network on Artificial Intelligence
between the Governments of
the French Republic and the Federal Republic of Germany

On 22 January 2019 Germany and France signed the Aachen Treaty to strengthen the Franco-German cooperation and integration. The treaty includes the cooperation in the field of Artificial Intelligence (AI).

Article 21 of the Treaty reads as follows:

The two countries shall intensify their cooperation in the field of research and digital transformation, including in artificial intelligence and disruptive innovation. They will promote ethical guidelines for new technologies at the international level. They shall establish Franco-German initiatives to support innovations open to cooperation at European level. The two countries shall establish a coordination process and common funding mechanisms to promote joint research and innovation programmes.

Part of the priority projects within the implementation of the Treaty is the establishment of a “Research and Innovation Network on Artificial Intelligence” (in the following: joint AI network), which will form the model of cooperation between France and Germany.

This roadmap stipulates the basis for cooperation in the form of the joint AI network.

I. As objectives for the joint AI network, the German and French Governments strive:

1. to strengthen ties between existing structures.

The governments recognise their countries’ leading research in the field of AI. They will deepen ties in existing structures deployed on the basis of their national AI strategies.

2. to create a common AI ecosystem to bring about new cooperation projects.

Together, they will combine their efforts on the basis of their national strategies to create the relevant landscape for new research and industry cooperation projects.

3. to share common positions on AI policy at EU level and promote a coherent European action at international level.

The joint network will lead to better understanding of what is needed in the field of AI. Both governments will jointly introduce their findings to European and international work on AI.

II. To achieve these objectives, both governments concur in the following approach:¹

1. to support common events and projects.

Both governments will initiate, support and promote common events and projects in order to foster dialogue and cooperation between research institutions and industrial partners in the field of AI.

The French AI network and the German Competence Centers for AI will set up a Memorandum of Understanding in order to promote and deepen joint research in the field of artificial intelligence. A first call for proposals will be launched in 2020.

Both governments will launch in 2020 initiatives aimed at supporting projects based on recommendations from German and French AI centres or research and innovation and industrial partners. Focus of such initiatives is to create and support consortia of French and German technology buyers, technology providers, and academics.

Both governments intend to cooperate on breakthrough innovations in the field of artificial intelligence, building on the launch of their national initiatives, the Conseil de l'Innovation and the Agentur für Sprunginnovationen and taking into account the work of the European Innovation Council. They will encourage the Conseil de l'Innovation and the Agentur für Sprunginnovationen to develop joint methods and explore common projects in 2020.

Both governments will invite industry and research for a business roundtable on AI in 2019 to allow for consolidated contacts among experts and identify projects.

2. to establish sectorial focus groups to intensify concrete AI cooperation projects.

France and Germany concluded their national strategies in 2018. Both strategies recognise the horizontal meaning of AI affecting the society and industry as a whole.

In 2019, both governments intend to take concrete action in order to assess sector-specific needs together through the work of the joint AI network. With the work of the joint AI network of innovation centres and industry, both governments will aim at taking a decision on the feasibility of a Franco-German funding scheme in 2020.

In addition to that, both governments will intensify their common activity on a secure and trustworthy data infrastructure as a basis for a digital ecosystem where data can be made available, collated and shared in a trusted environment, aiming for a joint endeavour in early 2020, and launch a data sharing initiative on a specific sector as a first project of the piloting phase of such infrastructure.

3. to develop common recommendations and inspire actions at European level

The EU Commission's Coordinated Plan on AI sets the framework for national AI strategies and cooperation schemes between EU Member States. With its network, France and Germany aim to bolster the European cooperation in AI and provide meaningful joint input for the EU's initiatives in the field of AI. In this sense, France and Germany will leverage the potential of AI for promoting sustainable development and tap the potential of AI to address major challenges, e.g. climate change and the scarcity of resources.

Germany and France intend to encourage the promising joint work of standardisation organisations DIN, DKE and AFNOR on AI topics, which should lead to a coordinated approach to jointly influence European and international standardisation bodies by the end of 2020.

¹ Cf. list of actions detailed in annexes 1 and 2.

In a working group, both governments will foster the exchange of views on legislative aspects in the field of AI to submit by the end of 2019 a common approach to the European Commission as input to its upcoming proposals.

Both countries will work together to strengthen Europe in the development and application of leading edge technologies, esp. in the field of AI. To this end, opportunities for European initiatives will be explored.

III. The German and French governments aim to operate the joint AI network as follows:

The actions of the joint AI network will be coordinated by the French Ministry for Higher Education, Research and Innovation, the German Federal Ministry for Research and Education, the French Ministry for Economy and Finance, and the German Federal Ministry for Economic Affairs and Energy.

Signed in Toulouse on 16 October 2019 in two copies in the English language.

For the
Federal Government of the
Federal Republic of Germany

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Annex 1 – Way forward to foster cooperation in research

The French AI network and the German Competence Centers for AI intend to set up a Memorandum of Understanding in order to promote and deepen joint research in the field of artificial intelligence.

The subject of the individual research and development activities as well as their financing will be agreed on by the governments in each individual case. Unless expressly agreed upon otherwise, each country will bear its own costs incurred for the performance of this Memorandum of Understanding, including but not limited to the costs of the planning and preparation of projects.

The cooperation between the French AI network and German Competence Centers for AI may comprise the following:

- (1) joint research projects with regard to the abovementioned fields,
- (2) exchange of information to prepare technology transfer subject to separate agreements,
- (3) other forms of cooperation to be mutually agreed by the French AI network and German Competence Centers for AI.

Fields and forms of Cooperation may include:

- Joint bilateral calls (i.e. the call cofounded by ANR and DLR/PT in 2019 and 2020)
- Joint submission (with other countries) to calls for proposals within the EU FP (e.g. the ICT-48-2020 call for networking among European labs)
- Graduate programs: e.g. mutual visits of PhD students
- Visiting professors and researchers
- Summer schools/Hackathons/Workshops
- Support each other in acquiring international conferences
- Exchanging teaching experience aiming at a curricula coordination for the mutual recognition of degrees
- Methods for transfer to industry, developing pre-competitive use cases
- Increasing visibility, e.g. lectures (online), visualization of scientific landscape, newsletter etc.
- Installation of bilateral AI clusters focusing in specific industries (e.g. healthcare, environment, mobility)

Annex 2 – Way forward to achieve transfer to businesses

As European leaders in the development of artificial intelligence, France and Germany will strengthen their capacity to innovate, based on their dense and dynamic ecosystem. The innovative capacity in the field of AI in France and Germany will benefit from joint governance and adequate funding, in order to become powerful drivers for technology transfer to small and medium-sized enterprises, and the creation of new products and business models at European level.

To this end, working groups with a sectorial focus will be set up to enhance the exchange between businesses and research entities in both governments. The implementation of joint initiatives will foster links between the actors, paving the way for a dense and dynamic bilateral AI network. In addition to that, both governments will constitute a steering group joining their efforts in funding decisions. This process could then also lead to a decision on the feasibility of a Franco-German funding scheme.

The French Ministry for Economy and Finance (MEF) and the German Federal Ministry for Economic Affairs and Energy (BMWi) intend to set up a way forward to deliver, in a bottom-up approach, concrete projects aimed at strengthening the AI business applications in both governments. The common work will focus on the following four topics: 1) cross-border experimental zones; 2) data sharing; 3) exchange of best practices; 4) ethical and technical standards.

November-December 2019

Before the end of the year 2019, the joint AI network will set up thematic working groups on the four following sectors:

1. Mobility;
2. Health;
3. Environment, Climate, Energy and Agriculture;
4. Industry 4.0.

The network will consist of innovative AI projects funded by each ministry on the basis of their national strategy. With the workshops the actors take part in an exchange with a specific sectorial focus and contribute to the evolution of a AI ecosystem.

In parallel, both governments will invite to a business roundtable in AI to feed their coordinated approach and identify common projects.

January-March 2020

The working groups will establish an action plan to be launched on every sector. The action plan will be composed of two parts:

- 1/ a list of concrete actions to be launched, identifying the actors ready to participate in the project, and;
- 2/ recommendations based on the support needed for the actions identified.

April 2020

The ministries will announce the next steps to take in order to incentivise bilateral consortia with industrial and research partners. A common initiative could be developed on data sharing or innovation issues in the context of AI.

October 2020

Both governments will decide on the feasibility of a Franco-German funding scheme for 2021 and present the new way ahead.