

**Joint Declaration of Intent
between
the Government of the Federal Republic of Germany
and
the Government of the Kingdom of Sweden
on a German - Swedish partnership for innovation
- Innovation and cooperation for a sustainable future -**

The Federal Government of the Federal Republic of Germany and the Government of the Kingdom of Sweden have jointly decided on the following as a basis for a renewed cooperation within the partnership for innovation.

In January 2017, Federal Chancellor Angela Merkel and Prime Minister Stefan Löfven decided on a comprehensive partnership for innovation. The partnership tackles societal challenges within key areas where Germany and Sweden have strong positions, and holds potential to develop the role of the EU. This includes perspectives within the areas of climate, health, digitalisation, industrial competitiveness and innovative societies. After two years, substantial progress has been made, notably in electric roads systems, identifying suitable freight corridors between the two countries and joint R&D project funding for small and medium sized enterprises. The partnership is hereby renewed and two additional areas will be included in the partnership: batteries and artificial intelligence (AI).

Germany and Sweden are close partners and share common values of inclusive and innovative societies strengthened by cooperation. This is underlined by Sweden's role as partner country at the 2019 HANNOVER MESSE, a key forum for innovation and industrial development.

This partnership reflects the need for cooperation at a time of increasingly fast changes globally. Both governments share the view that Europe must pool its strengths and be more united than ever. In addition to strengthened bilateral cooperation, the partnership indicates some areas of strategic importance in an ambitious future European industrial strategy.

Therefore, the two governments have come to the following understanding:

Batteries

Sweden and Germany will develop cooperation in - areas such as next generation battery research, development, testing and demonstration, sustainable production and recycling of batteries, as well as supportive battery ecosystems.

Efforts should support the work within the EU Battery Alliance as well as the European research project Batteries 2030+. The existing strong collaboration between infrastructures for advanced research in materials of common interest located in Germany (XFEL, Petra III) and in Sweden (MAX IV, ESS) is a vital resource.

This area will be coordinated between the German Federal Ministry for Economic Affairs and Energy and the Swedish Ministry of Enterprise and Innovation, and supported by the Swedish Energy Agency.

Artificial intelligence

In 2018 the German Government presented a comprehensive strategy for the development of artificial intelligence (AI) in Germany. The Swedish Government also launched its national approach for AI in 2018, which has since been translated into several actions.

Against this backdrop, the aim of the partnership is to deepen the long-standing cooperation of different research institutions and universities and create a network to exchange knowledge between Germany and Sweden. Key Swedish - stakeholders such as Research Institutes of Sweden (RISE), Linköping University, Chalmers University of Technology and KTH Royal Institute of Technology will initiate collaboration with German counterparts, such as the Universities of Munich and Berlin and the German Research Centre for Artificial Intelligence.

Both countries will cooperate with initiatives that foster the building of a strong European AI ecosystem, such as Applied AI Initiative/ UnternehmerTUM in Germany and RISE AI in Sweden. Best practices in research and development will be exchanged to support the transfer from research into applied AI. Research collaboration to promote broader application of AI will be explored. Opportunities to address the skills shortage within the area of AI will be explored, for example through AI courses within specialised niches.

This area will be coordinated by the German Federal Ministry for Economic Affairs and Energy together with the German Federal Ministry of Education and Research, and by the Swedish Ministry of Enterprise and Innovation, together with the Swedish Ministry of Education and Research.

Electric roads systems (ERS)

A declaration of intent has been developed between German Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU) und Swedish Transport Administration. A joint research and innovation programme has been initiated. It entails for

example the identification of suitable ERS freight corridors between Sweden and Germany, an assessment of different ERS concepts, an assessment of business models and financing strategies, recommendations for necessary policy actions and a study of the impact of ERS on the energy system and the environment. The programme involves several Swedish and German institutes and is funded and managed by the coordinating parties.

The declaration of intent between the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the Swedish Transport Administration will be renewed with the aim of continuing to develop ERS in a broader perspective.

Increased focus will be placed on standardisation of ERS at both European and international level, taking into account the outcome of respective ongoing research projects. The objective ahead is to identify suitable ERS freight corridors between Sweden and Germany.

The area will continue to be coordinated by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the Swedish Transport Administration.

Test beds

Cooperation to date has been focused on joint work on test beds for the advancement of Industrie 4.0 and Smart Industry and the better use of test beds structures in both countries.

The aim ahead is the joint promotion of a European strategy for testbeds, Testbed Europe, with the aim of fostering more efficient use of test and demonstration facilities in Europe and increasing collaboration between them as well as coordinating the development of important testbeds to be financed at European level. Such a process for prioritisation should draw on the experiences from the roadmap of the European Strategy Forum on Research Infrastructures (ESFRI). Sweden and Germany will thereby be joining forces to integrate and strengthen European applied research, test and demonstration facilities.

This area will continue to be coordinated by Research Institutes of Sweden (RISE) and Fraunhofer. In addition, LNI 4.0 (German Labs Network Industrie 4.0) will support the process.

eHealth

The focus of the knowledge exchange so far has included technical infrastructure for electronic patient records and electronic prescriptions, as well as telemedicine solutions, such as 'care at a distance' or remote expert consultation, monitoring and medical education.

The ambition within the partnership ahead is to develop an agenda for further cooperation on eHealth between the German and Swedish ministries, with special emphasis on AI applications. The agenda will outline a structure with areas and activities which will be the

basis of cooperation. It will contain cooperation initiatives with businesses and start-ups as well as strategic policy exchange elements.

This area will continue to be coordinated by the Swedish Ministry of Health and Social Affairs and the Swedish eHealth Agency on the Swedish side and the German Federal Ministry for Economic Affairs and Energy and the German Federal Ministry of Health on the German side. The bilateral exchange should be aligned with existing German and Swedish activities at EU level and within the European eHealth Network.

Innovation and cooperation of SMEs

To date this cooperation has been based on the development of a German-Swedish call for proposals for joint R&D projects by small and medium-sized enterprises by Sweden's Innovation Agency, Vinnova, and the German Federal Ministry for Economic Affairs and Energy. Two calls have been launched, in 2017 and 2018, offering companies access finance to and cross-border cooperation.

The ambition within the partnership ahead is to continue enabling joint R&D projects for small and medium-sized Swedish and German enterprises, as well as explore the potential for collaboration between cluster networks in areas of specific interest and high ambitions in both countries. A third joint call for proposals for joint R&D projects will be launched in the autumn of 2019.

This area will continue to be coordinated by the German Federal Ministry for Economic Affairs and Energy, Sweden's Innovation Agency, Vinnova, and the Swedish Agency for Economic and Regional Growth.

Cooperation follow-up

The joint efforts will be followed up at a joint high-level meeting on a regular basis and connections to an inclusive and innovative EU agenda will be made.

Hanover 1 April 2019

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