



**INITIATIVE FOR STRENGTHENING  
EUROPEAN COMPETITIVENESS:**

**WEIMAR TRIANGLE OF INNOVATION**

Draft Proposal  
For a  
Joint French-German-Polish Approach  
Aiming at  
Strengthening the European Research Area  
And thus Leveraging Europe's Full Innovative Potential

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*In light of continuing fiscal and financial crises, the political discourse in Europe is being dominated by issues of public debt, financial market turbulence, and the fear of multidimensional uncertainty. At a time critical for shaping the economic, political, and social future of Europe, however, it is of utmost importance to focus on laying the foundations of competitiveness and long-term growth.*

*France, Germany, and Poland could enhance such efforts by intensifying their collaboration in research and innovation, and by jointly developing strategies for the further fostering of European integration.*

### ***Background: Competition in the Global Knowledge Economy***

In the context of globalized markets, Europe's countries are exposed to ever-stronger competition. In particular, the increasing competition from the so-called emerging markets in other regions of the world presents a challenge for the future prosperity of Europe.

Europe cannot engage in global competition by focusing on cost advantages. The focus must therefore lie on innovation. National approaches in this direction, however, no longer suffice. On the global scale, national economies of individual European countries are too small to meet the challenges of global competition. Therefore, patterns of intra-European zero-sum rivalries need to be overcome or at least complemented (competition and cooperation).

Hence, in order for Europe to participate successfully in the global knowledge economy and also in order to find answers to its intensifying societal challenges, priority needs to be designated to trans-national cooperation in research, development, and innovation. Targeted investments in research and development, as well as respective political measures, have demonstrated themselves as key factors for securing in a sustainable way the competitiveness of companies and national economies in many parts of the world.

At the level of the European Union, policy action is clearly pointing in this direction. However, forging compromises among 27 member states often proves to be difficult, thus delaying the implementation of future-oriented policies. In this context, deepened integration in bi- or tri-lateral constellations has shown to be beneficial (e.g. initiating a cooperation process in small groups of countries and later expanding it to additional countries and, ultimately, to the entire Union.)

### ***European Approaches to Cooperation in Research and Innovation***

The Europe 2020 strategy for smart, sustainable and inclusive growth – building upon the preceding Lisbon Agenda – seeks to build an economy based on knowledge and innovation by attaching high priority to joint European efforts in research and innovation. In this context, the Innovation Union flagship initiative of Europe 2020 aims to “complete the European Research Area, to develop a strategic research agenda (...), and to enhance joint programming with Member States and regions.” The European Framework Programmes for research and technological development – including the Horizon 2020 program currently under debate for the 2014-2020 period – are supporting these objectives. In addition, the successful work of intergovernmental schemes such as ERAC (European Research Area Committee, formerly CREST) as well as a multitude of complementary bilateral cooperation

programs and joint programming initiatives constitute important elements in tapping the research and innovation potential of Europe.

Notwithstanding such indispensable efforts on various political levels, the potential for European research and innovation cooperation remains underutilized due to a variety of structural barriers. Most critically, effective links between research and business need to be fostered. In addition, the effective openness of national research systems for researchers and institutions from other European countries should be further increased. In order to tap the full potential of European research and innovation, a speedy and resolute completion of the European Research Area (ERA) is an indispensable requirement. An open European labor market for researchers with transparent recruitment procedures and efficient modalities for the recognition of degrees and qualifications needs to be completed so as to favor cross-border mobility and to allow for an effective matching of complementary resources and competencies as a collective advantage. Likewise, in order to best utilize Europe's full scientific expertise for national programs, the cross-border accessibility and portability of competitive national grants should be enhanced in targeted ways; certainly without hampering the build-up of such expertise in the respective country. In addition, improved mechanisms for cross-border knowledge transfer are of equal importance.

### ***The Potential of Intensified French-German-Polish Cooperation in Research and Innovation***

France, Germany, and Poland, as the three large economies at the heart of Europe, have the potential of further deepening research and innovation cooperation in Europe. Due to the complementarity of the three countries' research resources and competencies, a targeted removal of the remaining barriers and an effective implementation of systemic interoperability would be particularly beneficial in the French-German-Polish context. So far, however, the potential for research and innovation cooperation in the 'Weimar Triangle' remains underutilized. Complementarities remain unexploited. Most dramatically, Poland's significant human innovative potential stays way below its means due to an apparent lack of integration into European research and innovation networks.

Alongside a beneficial utilization of complementary resources, an acceleration of politically desired convergence processes among the three partner countries could also be expected.

### ***Background: Research and Innovation Resources in Germany, France and Poland***

*In the field of research and development, large discrepancies can be observed between France and Germany, on one hand, and Poland on the other. This is not*

*surprising, since France's and Germany's investments for research and development together constitute half of the investments of the 27 countries of the European Union.*

	Germany	France	Poland
<b>Research and Development</b>			
Total R&D expenditures in Mio.EUR (2010) <sup>1</sup>	69,810	43,633	2,608
Total R&D expenditures as % of GDP (2010) <sup>2</sup>	2.82	2.26	0.74
Share of company expenditures to total expenses for R&D in % (2009) <sup>3</sup>	66.1	52.4	27.1
Number of R&D personnel <sup>4</sup>	550,300 (2010)	390,374 (2009)	81,843 (2010)
Patent registrations PCT (2009) <sup>5</sup>	16,213	7,069	176
<b>Education</b>			
Public expenditures for education as % of GDP (2008) <sup>6</sup>	4.6	5.6	5.1
Number of persons enrolled in tertiary education in the regular education system of the country (all subjects) in Mio. (2009) <sup>7</sup>	2.439	2.173	2.150
Number of higher education graduates in natural and engineering science subjects – ISCED 5(2008) <sup>8</sup>	113,408	156,474	87,782
<b>International Technological Competitiveness</b>			
High-tech BOP in Mio. EUR (2009) <sup>9</sup>	+13,482	+9,086	-7,029
Export/Import ratio of high-tech industries in % (2009) <sup>10</sup>	113.6	115.3	44.3
High-tech share of exports in % (2008) <sup>11</sup>	12.4	16.4	4.3

<sup>1</sup> Eurostat

<sup>2</sup> Eurostat

<sup>3</sup> Eurostat

<sup>4</sup> Eurostat

<sup>5</sup> OECD Statistics

<sup>6</sup> OECD Statistics

<sup>7</sup> Eurostat

<sup>8</sup> European Commission, Innovation Union Competitiveness Report 2011

<sup>9</sup> Eurostat, "Science, technology and innovation in Europe", Edition 2012

<sup>10</sup> Eurostat, "Science, technology and innovation in Europe", Edition 2012

<sup>11</sup> Eurostat, "Science, technology and innovation in Europe", Edition 2011

*The Polish expenditures for research and development, at present are standing at 0.74% of Polish GDP. In other words, Poland's national R&D expenditures are barely a third of the EU-27 average of 2%, and far below the French and German figures. A similar relationship is demonstrated in the number of R&D personnel: There are 82 researchers in France and 72 researchers in Germany per 1,000 employees. In Poland, however, only 44 per 1,000 employees are qualified scientists and engineers (QSE). Regarding the competitiveness of industrialized countries, the share of industrial research and development (R&D) of the total expenditures for research and development is a particularly crucial indicator. In Poland, this figure amounts to a mere 27.1% (France 52.4%, Germany 66.1%, EU-27 54.1%). Furthermore, a distinct discrepancy between France and Germany on one side and Poland on the other side demonstrates itself when comparing technological competitiveness.*

*Understanding the broader picture of the research and innovation potential within the triangle calls also for an analysis of central education indicators. The number of Polish students (persons enrolled in tertiary education in the regular education system of the country), 2.15 million, is almost identical with France and similar to Germany – a country with more than twice the population of Poland. The absolute number of higher education graduates in natural and engineering science subjects is also a strong point in favor of Poland. The relatively high level of public expenditure for education is a function of the priorities established for the Polish educational system – especially in the natural scientific technical field. It augurs well for the future development of Poland's research and innovation activities in the years ahead.*

The Heads of State of Poland and of France, Presidents Bronisław Komorowski and François Hollande as well as the German Chancellor Angela Merkel have declared their intention to reactivate the French-German-Polish Cooperation as a matter of urgency.

The European ministers of the three countries have dwelled on the need for trilateral cooperation on science and technology related issues so far on two occasions, both in Warsaw:

1. On May 26, 2003, the Polish, French and German ministers in charge of European Affairs – Danuta Hübner, Noelle Lenoir and Hans-Martin Bury – agreed *“that further scientific and cultural cooperation was needed, and that the results of such cooperation should be made available to the general public.”*
2. On February 1, 2010, the Polish Secretary of State Mikołaj Dowgielewicz and his counterparts Pierre Lellouche, French Secretary of State for European Affairs, and Werner Hoyer, German Minister of State for European Affairs, when meeting in Warsaw, examined *inter alia* the cooperation between civil societies of the Weimar Triangle countries. The ministers stated at that time

*“that common cultural, research and education projects, as well as youth exchanges, are beneficial to the Weimar Triangle cooperation and should be enhanced and supported. They discussed practical steps towards these objectives.”* Regrettably, no concrete trilateral initiatives in this area have been known since and no intensified cooperation scheme aiming to involve Poland into the well-established French-German scientific and technological cooperation has been launched.

And yet, in contrast to many other political fields, consultations among the French, German, and Polish ministers in charge of science and research have not taken place up until now.

So far, cooperation of individual researchers and institutions is being performed mainly on a bilateral basis between Germany and France as well as, to a lesser extent, between Germany and Poland, and between France and Poland. Here, the channels for cooperation are primarily consisting of personal networks of the participating researchers. In trilateral constellations, conferences and dialogue forums are occurring within individual scientific fields; the “Marie Skłodowska-Curie Symposium on the Foundations of Physical Chemistry” held in November 2011 in Warsaw is one such rare example. A strategic approach that could result in both

- an improved coordination and harmonization of research landscapes of the three countries and Europe as a whole, as well as
- in the development of synergies and systematic complementarities

is missing.

Furthermore, there is urgent need for a stronger application- and innovation-orientation and consequently a stronger inclusion of business into research cooperation.

### ***Strategic Approach for French-German-Polish Cooperation***

Research- and innovation policy experts of all three countries have witnessed the experience that in order to fully exploit the potential of international research cooperation, neither bottom-up approaches alone (decentralized project cooperation) nor top-down approaches alone (political planning) are enough. A combined, strategic approach is instead necessary – an approach that reconciles the concrete interests of scientists and companies with strategic, political considerations. Consequently, it is of utmost importance to ensure that strategic political guidelines are in line with the expectations and needs of the researchers and entrepreneurs constituting ultimately the target audience. Within the scope of the Horizon 2020 program, such approach is being envisioned by means of so-called ‘open calls’.

The Committee for the Promotion of French-German-Polish Cooperation ('Weimar Triangle') has presented to the Ministers of Foreign Affairs on the occasion of their meeting in Bydgoszcz on May 20, 2011 a detailed "French-German-Polish Agenda 2021", in which – among other vital issues – policies on research and university cooperation of the three countries have been elaborated.

Building upon this agenda, the Weimar Triangle Committee is herewith proposing a strategic approach to support research- and innovation policy cooperation between France, Germany, and Poland in particular and within the European Union as a whole. It is felt that through such a strategic approach –supporting European initiatives, particularly those aiming at a completion of the European Research Area – the present proposal could stimulate a debate aiming ultimately towards building the foundations for sustainable competitiveness and growth in the three countries and in Europe as a whole. Within this context, the initiative aims to make available the complementary potential, resources and competencies of France, Germany and Poland as a collective advantage.

Specifically, a trilateral French-German-Polish research project is being proposed seeking to

- Identify the obstacles to closer European integration in the field of research and innovation by analyzing
  - National, regional and EU-level interests in related policy areas, as well as political principles, paradigms and traditions in France, Germany and Poland;
  - Institutional set-ups of national and regional research and innovation systems, with a special focus on their international interoperability; and
  - Domains of common interest, i.e. societal challenges (such as energy supply, demographic transformations, health care etc.) or complementary/similar objectives and competencies of research institutions and companies from the three countries, constituting viable entry points for enhancing forms of cooperation

in order to

- Provide for a thorough understanding of specific challenges in designing future research and innovation policy, and – on this basis – to
- Formulate policy recommendations for viable instruments, models and strategies to tap Europe's full innovation potential in pursuit of long-term growth and competitiveness.

It is felt that a French-German-Polish consortium– due to the distinct differences in the three countries' historical experiences, their economic and institutional structures,



and specifically their focus areas of research –would constitute an ideal constellation for such endeavor. Specifically, a tripartite consortium consisting of a leading institution of applied research from each country – focusing on the configuration and development of innovation systems and the international interplay of science, business, and policy-making – appears to be particularly conducive to the success of such project.

France and Germany have jointly assumed responsibility as a so-called “engine of European integration” for half a century. With the EU having grown more diverse over the decades, most notably with the accession of the 10 Central and Eastern European Countries in 2004 and 2007, Poland – being the largest of the EU-10 – has the potential to become an integral part of an enlarged “engine”. Together, France, Germany, and Poland could contribute impulses and experiences from very diverse perspectives, thus ensuring that joint proposals take account of the diversity of views in Europe.

The ceremonies on September 7, 2012 at the Presidential Palace in Warsaw on the occasion of the awarding of the Adam-Mickiewicz Prize 2012 in the presence of President Bronisław Komorowski and one day earlier, i.e. on September 6, 2012, at the Adam Mickiewicz University (AMU) in Poznan, when the first *Annual Adam-Mickiewicz Memorial lecture to sustain the French-German-Polish Cooperation* will be delivered, are welcome opportunities to rally public support for this initiative.

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**For further reading:**

Standke, Klaus-Heinrich,

Trójkąt Weimarski w Europie. Współpraca polsko-niemiecko-francuska (red.),  
Wydawnictwo Adam Marszalek, Toruń 2010

Das Weimarer Dreieck in Europa, Die deutsch-französisch-polnische  
Zusammenarbeit (Hrsg.), Adam Marszalek Verlag, Thorn 2010

Chapter 9.7.1

K-H Standke, Wissenschaft und Technologie im Weimarer Dreieck. Einführung, pp.  
739-750

K-H Standke, Trójkąt Weimarski - współpraca naukowa i techniczna, pp.751-762

Chapter 9.6.1

K-H Standke, Die Rolle der Hochschulen im Weimarer Dreieck, pp. 685-708

K-H Standke, Rola szkół wyższych w Trójkącie Weimarskim, pp.709-730

Chapter 9.3.1

Helena Wyligala, Regionale Zusammenarbeit im Rahmen des Weimarer Dreiecks.  
Eine Einführung, pp.583-586

**The Committee for French-German-Polish Cooperation ('Weimar Triangle'),** a non-governmental organization (NGO), has been established in 2002 under the auspices of the three former Foreign Ministers Hans-Dietrich Genscher (Germany), Roland Dumas (France) and Krzysztof Skubiszewski (Poland), the so-called 'Founding Fathers' of the Weimar Triangle. The Committee serves as a platform of the civil society in France, Germany and Poland. The members of the Committee are working 'pro bono'. The Committee is organizing seminars and conferences in France, Germany and Poland and covers on a wide range of topics in response to needs felt by the civil society. The results of the work of the Committee are being published in form of books or articles in journals or in other media. The Committee awards annually the prestigious "Adam Mickiewicz Prize" to reward individuals or organizations for outstanding achievements in the trilateral cooperation. The results of all activities of the Committee are being published in the Homepage <http://www.weimarer-dreieck.eu> which reports also on any other initiative – governmental or non-governmental – concerning the Weimar Triangle brought to the attention of the Committee.