



BDI

The Voice of
German Industry



Position paper

German industry's experience two years
since the start of the Horizon 2020 programme

Foreword

Two years after the start of the 8th EU Framework Programme for Research and Innovation – Horizon 2020 – the first figures for participation and for the success rate of project applications submitted by industry have become available. The disappointing outcome is that the average success rate is just 12 to 14 percent¹. The 7th Research Framework Programme (FP7) had a success rate of 19 to 21 percent², i.e. a decline of almost one half has been observed. There are many reasons for this decline, inter alia cuts in national research budgets with an unchanged budget for the 8th EU Framework Programme for Research and Innovation.

Yet one thing is certain. If the success rate does not improve markedly, ever fewer companies will increasingly not participate in Horizon 2020. Furthermore, this development runs counter to the objectives associated with the Horizon 2020 programme of strengthening the competitiveness of EU Member States, of creating new jobs as well as of investing 3 percent of gross domestic product in research and development by 2020.

This position paper was drafted by experts of the BDI working group “European Research and Innovation Policy” on behalf of the BDI/BDA Committee for Research, Innovation and Technology policy. The paper describes first, unfortunately partly negative experiences of German industry with Horizon 2020. Furthermore, it gives concrete recommendations for improvement with view of the upcoming Midterm Review of Horizon 2020 in the years 2016 and 2017.

Berlin, December 15th 2015

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¹ Source: Science | Business, <http://www.sciencebusiness.net/news/77103/Exclusive-Horizon-2020-success-rates-slide-towards-12-percent->.

² Source: Science | Business, <http://www.sciencebusiness.net/news/77103/Exclusive-Horizon-2020-success-rates-slide-towards-12-percent->.

1. Heavy oversubscription³ leads to a lower success rate

After the first year of Horizon 2020, there is an important insight: whereas in FP7 one in every five applications submitted was successful – i.e. was given the green light – the equivalent figure for Horizon 2020 is one in eight. There are a number of reasons for this significant increase in the oversubscription of Horizon 2020 as compared with FP7. Decisive factors are cuts in national research budgets, in particular in the countries of southern Europe, but also the increasing number of public-private partnerships with a growing number of participants. Clearly, a further reason is also the sometimes inadequate quality of applications. In addition, mention can also be made to the long “funding pause” during the transition to Horizon 2020 and the incentive effect of nominally high funding rate of 100 percent which is not achieved in reality (projects in the area of basic research) and 70 percent (for close to market research). This issue is described in greater detail under point 3 below.

Companies are critical of the fact that the content of the “call topics” specified by the Commission is sometimes described in very general terms. As compared with FP7, the call topics in Horizon 2020 are formulated in a more open way in order to provide greater leeway in applications. The greater openness and flexibility in EU research programmes is generally welcome. Nevertheless, call topics which are too broadly formulated lead to more applications than in FP7 so that there is often a lack of clarity for applicants about the orientation of the funding. This means that there is a correspondingly greater bandwidth in the applications submitted, which in turn leads to less planning certainty about individual chances of success and reduces success rates.

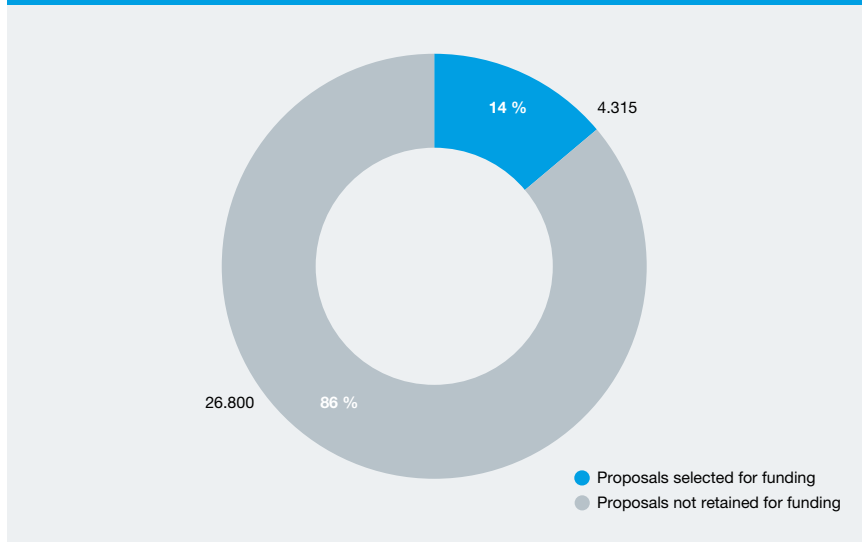
The content of calls should be open as to technology and/or solutions but formulated in a consistent and unambiguous manner and oriented clearly on relevant industrial research topics.

³ The term “oversubscription” is defined by the European Commission as the ratio of EU requested funding in all project proposals to the indicative budget originally envisaged in the programme. This definition is also used by the relevant German ministries – BMBF (education and research) and BMWI (economic affairs and energy), source: BMBF’s EU office.

Success Rates

What percentage of proposals received funding?

Success rate of eligible full proposals to Horizon 2020



Source: https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/horizon_2020_first_results.pdf

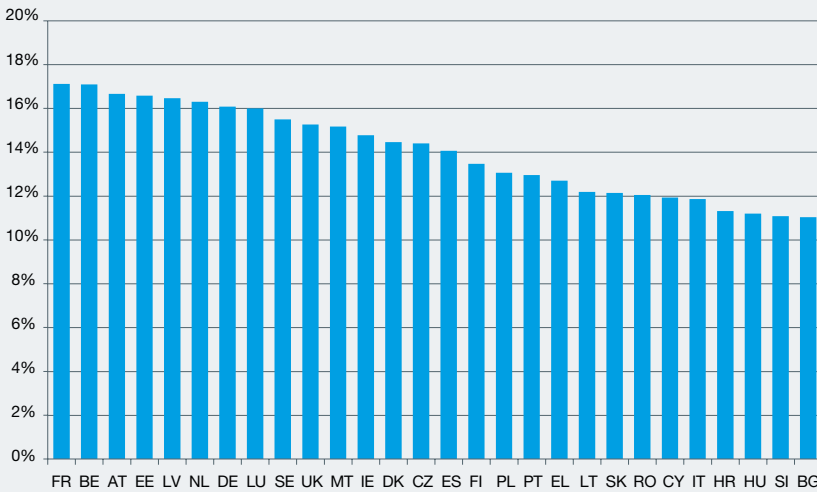


This chart concerns the 31.115 full proposals that were received, comprising 29.794 full proposals in single-stage calls and 1.321 full proposals in the second stage of the two-stage calls. Around 14 percent of full proposals were selected for funding, a success rate which reflects the very high number of eligible proposals made to the first 100 calls. The success rate of eligible proposals over the full seven-year duration of the Seventh Framework Programme for Research (FP7) was around 20 percent.

Success Rates

What are the success rates of the different Member States?

Success rates for applications to Horizon 2020 per EU Member State



Source: https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/horizon_2020_first_results.pdf



This chart shows for each Member State the overall success rate of its applications across all parts of Horizon 2020. Taking all applications from all Member States together, the overall success rate is approximately 16 percent. Please note that an organisation can submit multiple applications for funding if it is involved in more than one proposal, therefore the success rate for proposals (around 14 percent) differs from the rate for applications.

2. Need for improvement in the administrative effort associated with the application process

German industry has welcomed the Commission's intention to minimise the bureaucratic effort associated with the application process. This intention has also been realised insofar as, for instance, the time between the deadline for the proposal and signature of the financial assistance agreement ("time to grant") has been shortened and the general, often formal requirements on the application have been reduced. However, in practice the latter has not led to a reduction in the bureaucratic effort but has created new challenges.

Cutting the administrative requirements on the application is a good approach. Because this can essentially lead to an increased number of applications and hence to greater participation, subject to a corresponding increase in success rates. However, the substantive requirements must be coordinated with the formal criteria so that it is truly possible to speak positively of less red tape. The limitation on the number of pages in the application makes sense and is a good idea if it is nevertheless possible to do justice to the substantive requirements on the application. Yet applications under Horizon 2020 call for such detailed descriptions of the innovation in view and the state of the art that it is scarcely possible to remain within the target number of pages.

To this is added that shortening of the time to grant from 12 months in FP7 to a maximum of 8 months for Horizon 2020 projects – welcome in itself – leads to greater planning certainty for companies. However, at the same time this also impacts on the negotiating phase ("grant negotiations"). As a result of the streamlining of the grant negotiations, applications really need to be complete and fully developed so that any unclear points or omissions can be sorted out rapidly. Yet in Horizon 2020 there is no longer any room for this due to the separation of the formal and substantive requirements.

The Commission should review and better coordinate the formal and substantive requirements of the application procedure so that they also lead to a reduced administrative effort in practice.

3. Project cost calculation and final reporting procedures lead to planning uncertainties for companies

Even during the discussions on what concrete form should be given to Horizon 2020, German industry called for a simplification of the final reporting provisions and recognition of national rules for establishing cost rates as a basis for project cost calculation.⁴ Recital 20 of EU Regulation No 1291/2013⁵ also states that simplification is a central aim of Horizon 2020 and that this should be fully reflected in its design, rules, financial management and implementation. Simpler funding rules should reduce the administrative costs for participation and contribute to the prevention respectively reduction of financial errors.

This intention is welcome. Nevertheless, it is not made reality in Horizon 2020 for project cost calculation and the final reporting procedure. The calculation of individual costs (in particular payroll costs) and the blanket approach to overheads under Horizon 2020 differ markedly from the way companies usually calculate costs and also from the calculation method in FP7. As a result, parallel book-keeping is necessary in all project phases, i.e. the internal full costs in accordance with the usual business standard and the costs which are eligible for the Horizon 2020 project must be calculated in parallel in a cumbersome way. This also applies for the costs of in-house services which are generally passed on to the customer via an internal charging system in industrial businesses. This internal charging is based on a full-cost calculation and not on the calculation method specified under Horizon 2020.

⁴ See joint position paper of BDI, DIHK, ZDH “Vorfahrt für die Wirtschaft – Politische Aspekte zur Ausgestaltung von Horizon 2020”, 2012.

⁵ Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 (2014-2020) and repealing Decision No 1982/2006/EC.

The consequences are more difficult decision-making among companies as well as uncertainty about correct implementation. In particular SMEs, which are supposed to enjoy special attention and support in Horizon 2020⁶, have difficulties in implementing and completing the requisite reporting. They often lack the human resource and other capacities for parallel book-keeping and hence are unable to meet the requirements of the Horizon 2020 provisions properly.

This is also likely to be one reason why a massive decline in grants to SMEs can be observed in Horizon 2020 as compared with FP7. Whereas the share of grants to SMEs in FP7 was still as high as 14 percent⁷, this figure is now just 8 percent in Horizon 2020⁸ – and this with almost identical participation of SMEs in FP7 with a share of 18 percent⁹ against 17 percent in Horizon 2020¹⁰.

The recommended daily recording of activities in projects supported under Horizon 2020 also poses difficulties for companies, in particular SMEs. Because without time records in businesses or some other record of activities, such a listing is almost impossible. Apart from that, the associated control of employees' performance by technical devices is permissible only under certain conditions, if at all.

⁶ See Recitals 11, 34 and 35 as well as Article 22 of Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 (2014-2020) and repealing Decision No 1982/2006/EC.

⁷ Source: FP7 contract database, version (final): 06.10.2014 – NKS KMU; DLR [national contact point for SMEs; (German) national aeronautics and space research centre]

⁸ Source: Horizon 2020 application database, version (final): 04.03.2015 – NKS KMU; DLR [national contact point for SMEs; (German) national aeronautics and space research centre]

⁹ Source: FP7 contract database, version (final): 06.10.2014 – NKS KMU; DLR [national contact point for SMEs; (German) national aeronautics and space research centre]

¹⁰ Source: Horizon 2020 application database, version (final): 04.03.2015 – NKS KMU; DLR [national contact point for SMEs; (German) national aeronautics and space research centre]

Moreover, the actual contribution to the costs can no longer be deduced directly because of the marked difference between the nominal and the effective funding rate. The funding rates of 70 percent or 100 percent newly introduced in Horizon 2020 promise more on paper than they actually deliver. As a rule, only projects eligible for 100 percent funding of direct and indirect costs ensure a similar effective funding rate as under FP7, i.e. around 50 percent. As a result, this circumstance leads to a high level of planning uncertainty in companies and poses a considerable risk for them. The problem lies in the fact that the real full costs for the company differ from eligible project costs under Horizon 2020. Among other things, this results from the distinction between “direct costs” such as payroll costs and “indirect costs” such as site rental costs and differences in cost reimbursement. Through the blanket reimbursement of indirect costs at the rate of 25 percent, not all a company’s real indirect costs are covered so that a difference between the nominal and effective funding rates arises. Similarly, the number of “productive hours” has an influence on the funding level. Productivity requirements¹¹ differ from those usual among businesses and as a rule lead to a reduction in the effective funding rate.

The provisions on project cost calculation and final reporting must be urgently adjusted to reflect the usual accounting rules and practices among companies. As an alternative to final reporting of one-size-fits all costs, it should essentially be possible to report the real indirect costs¹² actually incurred by the business.

¹¹ Source: AGA 6.2.A Calculation (a)

¹² As already called for in the joint BDI and BDA discussion paper “Zum Entwurf der EU-Kommission für ein neues Forschungsrahmenprogramm, Horizon 2020” of 27 April 2012.

4. Intellectual property rights (joint ownership) in funded research projects

It is difficult to reach agreement with the research partners on exploitation of research results, in particular inventions, jointly developed in funded projects under Horizon 2020. The reason can be found in long-lasting contract negotiations, reporting and compensation obligations which often are to the financial disadvantage of industry partners engaged in funded research compared to partners from academia. The default clause for joint ownership of jointly developed intellectual property ownership (joint ownership) of research results often leads to long-lasting negotiations on the consortium agreement. This scenario deters potential applicants – especially from industry – from taking part in confidence-based and fruitful cooperation with especially partners from academia.

It is of decisive importance that each co-owner of jointly developed research results is free to exploit these results without giving advance notice nor paying compensation to the other co-owner for the use of joint research results.

A default clause must not contain any burden which leads to the circumvention of joint research and to the preference of individual research. Especially with regard to co-ownership of jointly developed research results, there must be no default clause which is merely to the advantage of project partners from academia.

5. Conclusion

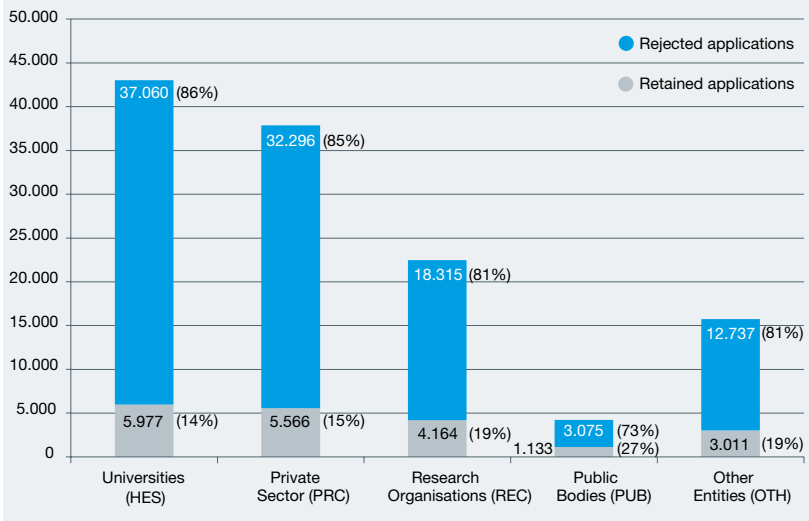
German industry generally takes a positive stance vis-à-vis Horizon 2020 and is highly interested in participating in innovation projects funded from the European level. This can be seen not least in the oversubscription of Horizon 2020 and in the lower approval rate as compared with FP7. Since the EU's industrial research programmes – in particular Horizon 2020 – have not been allocated budget increases as compared with FP7, the EU should urgently earmark more budget for industrial research. Furthermore, if the problem points set out above are also not addressed rapidly, e.g. no adjustment of the project cost calculation and final reporting to the usual accounting practices of companies, lower participation on the part of industry can be expected. This would certainly not correspond to the intentions and objectives of the European Commission's research and innovation policy.

With a view to the mid-term review of Horizon 2020 to take place in 2016 and 2017, a thorough debate on the strategic orientation and instruments of EU research and innovation policy should be held. As German industry's leading umbrella organisation, BDI will contribute actively to this discussion on broad principles.

Success Rates

Which types of organisations applied to Horizon 2020?

Number of applications to Horizon 2020 per type of organisation



Source: https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/horizon_2020_first_results.pdf



Universities are in first place in terms of the overall number of eligible applications, followed by the private sector and research organisations.

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