

## **Funding programme for applied research, experimental development and innovation DELTA 2**

### 1. NAME OF PROGRAMME

DELTA 2 funding programme for applied research, experimental development and innovation (hereinafter the "Programme").

### 2. LEGAL FRAMEWORK FOR PROGRAMME

The Programme shall be implemented with regard to:

- Act No. 130/2002 Sb., on the Support of Research, Experimental Development, and Innovation from Public Funds and on Amendments to Certain Related Acts, as amended (hereinafter the "Act");
- Treaty on the Functioning of the European Union 2012/C 326/01, (in particular, Article 107, possibly Articles 93 and 106);
- Framework for State Aid for Research and Development and Innovation – Official Journal of the European Union C 198, 27 June 2014 (hereinafter the "Framework");
- Commission Regulation (EU) No 651/2014 of 17<sup>th</sup> June 2014 (as amended – Commission Regulation 2017/1084) declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty – Official Journal of the European Union L 187, 26<sup>th</sup> June 2014 (hereinafter the "Regulation"), in particular, Articles 25, 28 and 29;
- and other related laws and regulations.

The Programme is exempt from the notification requirement of Article 108(3) of the Treaty on the Functioning of the European Union, as it fulfils the conditions of the Regulation.

This Programme excludes the disbursement of individual aid to an enterprise:

- against which, following the decision of the European Commission under which the aid received from a provider from the Czech Republic was declared as illegal and incompatible with the internal market, a recovery order has been issued which is unpaid,
- meeting the definition of an "enterprise in difficulties" referred to in Article 2(18) of the Regulation.

For enterprises awarded public aid exceeding EUR 500,000 under the Programme, the information on the beneficiary and the aid awarded (to the extent specified in Annex III of the Regulation) shall be published on a central website as provided in Article 9 of the Regulation.

The Programme will be implemented in accordance with the National Research, Development and Innovation Policy of the Czech Republic for the period of 2016 to 2020 approved by Resolution of the Government of the Czech Republic No. 135 of 17<sup>th</sup> February 2016 (the Programme mainly aims at the fulfilment of specific objectives to Increase Internationalisation of Czech Research Environment and to Strengthen Research and Innovation Activities of Enterprises), National Priorities of Oriented Research, Experimental Development and Innovation adopted by the Resolution of the Czech Government No. 552 dated 19<sup>th</sup> July 2012 (hereinafter the "RDI Priorities"), updated National Research and Innovation Strategy for Smart Specialisation of the Czech Republic approved by the Resolution of the Czech Government No. 24 dated 11<sup>th</sup> January 2019 (the Programme

mainly aims at the fulfilment of objectives to Increase Research Quality and to Increase Economic Benefits of Public Research), Industry 4.0 principles acknowledged by the Government Resolution No. 729 dated 24<sup>th</sup> August 2016 (the Industry 4.0 field is one of the research fields supported by the Programme), Strategic Framework of Economic Restructuring of Usti, Moravian-Silesian and Karlovy Vary Regions and other national and sectoral strategies.

### 3. PROVIDER

The provider of the funding is the Technology Agency of the Czech Republic (hereinafter the "TA CR").

### 4. PROGRAMME IDENTIFICATION CODE

For the purposes of registration in the information system for research, experimental development and innovation, the Programme was assigned a "TM" code.

### 5. PROGRAMME PERIOD AND ANNOUNCEMENT DATES

The Programme is expected to run from 2020 to 2025.

The call for proposals in applied research, experimental development and innovation (hereinafter the "call for proposals") for selecting projects eligible for the Programme shall first be announced in 2019. Subsequent calls for proposals are expected to be announced annually from 2020 until 2023.

The estimated project implementation period is 36 months. The project duration shall not exceed the duration of the Programme itself.

### 6. PROGRAMME FOCUS

The Programme focuses on supporting the cooperation which, according to Art. 25(2b and c) of the Regulation and Art. 1.3(e) of the Framework, falls under the category of applied research (including industrial research, experimental development or the combination of the two) through the support of joint projects of Czech enterprises and organisations for research and knowledge dissemination (hereinafter the "research organisation") under Art. 2(83) of the Regulation supported by TA CR and foreign participants with the expected (not implicitly imperative) support of foreign technology and innovation agencies or other similar institutions (hereinafter collectively the "partner agencies").

The cooperation between agencies depends on the agreement between the TA CR and the partner agency on the manner of support, proof of eligibility or other verification of the foreign partner and Czech participant. The specific conditions will be determined based on the agreement between the provider and the partner agency and specified in the relevant call for proposals.

The Programme itself does not have a topical focus; the topics of the joint projects may be determined ad hoc in individual call for proposals. The selection of topics will be designated separately for each individual partner agency and will reflect the priority areas of applied research in the participating countries. The overview of the priority areas, areas and sub-areas accepted within the Programme under National Priorities of Oriented Research, Experimental Development and Innovation is listed in Annex 1 to the Programme.

The Programme will help in implementing the public funds invested in applied research in order to yield economic or other social benefits. The knowledge gained will help in defining the factors and processes that determine and influence the functioning and development of

Czech society in the context of the ongoing European integration and globalisation. The implementation of the Programme mainly assumes the application of industrial research projects (also involving the necessary activities in oriented basic research) as well as the support of projects with a predominance of experimental development.

The Programme shall be available for synergetic and complementary effects as part of international schemes such as the H2020<sup>1</sup>, and other EU and international programmes complying with the focus of the Programme.

## 7. PROGRAMME OBJECTIVE

The Programme's objective is to increase the number of specific results in those areas of applied research where there is conformity with a foreign partner; such results will be implemented in practice, thus enhancing the competitiveness of the enterprises and research organisations involved in a bilateral, or multilateral, cooperation of Czech and foreign participants.

This objective will be achieved through the support of joint projects implemented by applicants from the Czech Republic and from those areas which are promising for the given countries.

The designated projects will aim at specific outputs in applied research, i.e. they will lead to acquiring new findings and skills for the development of new or substantially improved products, processes or services and to the creation of the new product, process or service. The selected project shall respond to the current and future needs of the given country.

The Programme will improve the access of Czech teams to international knowledge, know-how and foreign research authorities and facilitate penetration into foreign markets. The synergic effect of the Programme is also the transfer of "good practice" and time-proven practices from abroad to the Czech Republic.

## 8. JUSTIFICATION OF PROGRAMME OBJECTIVE

In the area of applied research and experimental development, the Czech Republic generally lags behind the world's elite represented by the USA and Japan as well as behind the European elite. Nevertheless, the Czech Republic offers several facilities within research organisations and enterprises implementing applied research in progressive disciplines.

The Programme objective is to offer these enterprises and research organisations as well as other ones the chance to work on joint projects with foreign teams, thereby improving their quality.

Ultimately, the Programme should aim to increase the overall competitiveness of the Czech Republic.

The Programme will significantly contribute to the Czech applied research navigating itself towards highly progressive disciplines as well as to the involvement of the Czech teams in international research projects, consortia and associations. It will, therefore, help to integrate the Czech research organisations and innovative enterprises among the elite of these fields. The Programme will also fulfil the National Priorities concerning the support of the involvement of the Czech research teams in international research. In line with the Priorities, public funds must also be used to support the participation of the Czech research teams (research organisations from the public sector and enterprises) in all international programmes and initiatives with a focus corresponding with the identified priority areas.

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<sup>1</sup> Subsequently, this should be available within the Framework Programme for Research and Innovation, which will replace Horizon 2020 starting from 2021.

## 9. CRITERIA FOR COMPLIANCE WITH PROGRAMME OBJECTIVES

The achievement of the objectives of the programme shall be evaluated in accordance with the methodology for evaluating the results of the research organisations and the results of completed programmes valid at the time of evaluation of the programme, or the conditions set by the provider. Achieving the objectives of the Programme shall be evaluated, among other factors, on the basis of a set of indicators designed to monitor the progress of the Programme implementation and to evaluate its overall performance and success.

**Table 9. 1: Programme Indicators**

Indicator	Value
1. Average aid intensity for the Programme	74%
2. Minimum number of projects supported	100
3. Minimum rate of successfully completed projects	80%
4. Minimum number of outputs achieved	200
5. Minimum number of outputs implemented	150
6. Number of international connections created between the project participants under the Programme	350
7. Minimum enterprise participation rate within the supported organisations in the programme	40%

## 10. EXPECTED RESULTS AND BENEFITS

The Programme will only support those projects which are reasonably expected to achieve the applied results. At the same time, each project proposal usually expects at least one result. The Programme shall make it possible to achieve the following outputs in the form of results in compliance with the Methodology and the RIV (Register of Information on Results) valid at the time of their application:

P – patent;

Z – pilot plant, proven technology;

F – industrial and utility model;

G – technically implemented results – prototype, functional sample;

R – software;

S – specialized public database;

N – certified methodologies, procedures and specialised maps with professional content;

O – miscellaneous.

The outputs in the form of results according to the methodology and RIV type “O” must fulfil the condition of applicability in practice and such application shall then be tracked as part of monitoring the implementation plans. The evaluation of the planned outputs, or results, is a part of evaluating the project proposals.

However, due to the specific focus of the Programme on international cooperation in research, development, and innovation, there is a whole range of knowledge and skills in accordance with Section 2(2i) of the Support of Research, Development, and Innovation Act, which are expected to be the results of call for proposals. For this reason, the Programme shall be evaluated not only on the basis of outputs according to the current Methodology for evaluating the results of the research organisations and the results of completed programmes, but also based on outputs, results and impacts of the projects and the Programme as a whole.

Among the expected benefits of the Programme are mainly the improvement of the quality and number of research and development results that shall be implemented in practice in the form of innovative products, procedures, processes or services. The Programme should also help to increase the ability of the enterprises to apply the project outcomes which will result in a secondary improvement of indicators of the supported entities (e.g. growth, turnover, export etc.).

For collaborating research organisations, the benefits of the Programme will manifest, for example, in an increased number of the results applied, in the number of patents commercialised and other results, and in a growing commercial potential. A secondary effect can be seen in strengthening the effective transfer of know-how and technologies into practice.

The Programme will improve the access of Czech teams to international knowledge, know-how, and foreign research authorities and facilitate penetration into foreign markets. The synergic effect of the Programme shall also be the transfer of “good practice” and time-proven practices from abroad to the Czech Republic.

## 11. APPLICANTS AND PROOF OF ELIGIBILITY

Eligible applicants, or beneficiaries, of aid for projects pursuant to the Support of Research, Experimental Development, and Innovation Act, the Framework and the Regulation are:

**Enterprises** – legal and natural persons who are engaged in economic activity, regardless of their legal form (Annex 1 of the Regulation) and carry out the project alone or in collaboration with other participants and demonstrate the ability to co-finance the project from non-public sources.

**Research and knowledge dissemination organisations (hereinafter the “research organisations”)** – legal entities that meet the definition of research organisation pursuant to Article 2(83) of the Regulation and the Support of Research, Experimental Development, and Innovations Act and which manage the project alone or in collaboration with other participants. The research organisations may be individual applicants, or beneficiaries in exceptional cases adequately substantiated in the tender dossier for call for proposals (e.g. if such applicants are expected to commercialise the results and to return the invested funds).

Only those applicants who meet the eligibility conditions set out in Section 18 of Act No. 130/2002 Sb. may obtain aid for a project implemented under the Programme. If more than one applicant is involved in one project, eligibility must be proven for all of them. Eligibility shall be substantiated by the applicant in accordance with the Support of Research, Experimental Development, and Innovations Act, as determined by the provider in the tender dossier.

The tender dossier for the call for proposals may narrow down the range of applicants compared to the Programme. Other conditions for participating in the Programme:

- There must always be at least one applicant from the country where the partner agency resides and at least one applicant from the Czech Republic in the project consortium. The preferred cooperation model is the participation of an enterprise in cooperation with a research organisation.
- The participation ratio of all the Czech partners on the project (participation on the activities, budget and results) shall be balanced and in the case of cooperation of an enterprise with a research organisation, the requirements (at least one of them) under Art. 2.2.2(28) of the Framework shall be met.
- The project proposal must be submitted by the foreign applicant to the partner agency, or the foreign partner shall already implement the project with the support of the partner agency on a given topic. The participation of applicants for aid within the Programme is not conditioned by foreign partners obtaining the aid from the partner agency, i.e. the foreign partners may finance their participation in the project implementation from other, e.g. their own, funds. The participants from the Czech Republic shall accompany the project proposal with the information on the part of the project implemented by the foreign partner including the method of financing the participation of the foreign partner in the joint project.
- The project proposal must be implemented in a field which the tender dossier lists among the selected fields of cooperation for the respective call for proposals.

## 12. EXPENDITURE OF PROGRAMME

The total expenditure on the Programme is scheduled for the duration of the Programme in accordance with the planned progression of announcements of individual call for proposals in research, development, and innovation.

The total expenditure on individual projects and enterprises is calculated according to Article 4 of Commission Regulation (EU) No 651/2014 of 17<sup>th</sup> June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, the so-called General Block Exemption Regulation.

**Table 12. 1: Programme Budget [rounded to mil. CZK]**

	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
Total expenditure	203	338	338	372	270	135	<b>1,656</b>
Public funds	150	250	250	275	200	100	<b>1,225</b>
Non-public resources	53	88	88	97	70	35	<b>431</b>

## 13. AID INTENSITY

The average intensity of the total aid provided to the Programme is expected to be 74%. The aid intensity, determined as a percentage of the project's recognised costs, shall be calculated for each project, for each beneficiary and for each other participant separately; aid provided to enterprises under the Regulation shall not exceed the maximum allowable aid intensity specified therein. The expected maximum amount of financial support spent per project for the Czech participants amounts to CZK 25 million.

**Table 13. 1: Maximum allowable aid intensity rates for industrial research, experimental development and innovation by categories of participants**

Categories of activities	Beneficiaries			
	Small enterprise*	Medium-sized enterprise*	Large enterprise*	Research organisations**
Industrial research	70%	60%	50%	100%
Industrial research in case of effective cooperation	80%	75%	65%	100%
Experimental development	45%	35%	25%	100%
Experimental development in case of effective cooperation	60%	50%	40%	100%
Innovation for small and medium-sized enterprises	50%	50%	-	-
Process and organisational innovation	50%	50%	15%***	100%

**Note:** \*Small and medium-sized enterprises are defined in Article 2(2) of the Regulation and its Annex 1; large enterprises are defined in Article 2(24) of the Regulation.

\*\* Research organisations are defined in Article 2(83) of the Regulation. The indicated aid intensity rate refers to the non-economic activities of the research organisations (see also items 19 and 20 of the Framework).

\*\*\* Aid to large enterprises for process and organisational innovation is provided only under the conditions stipulated in Article 29(2) of the Regulation.

**Source: Regulation**

#### 14. ELIGIBLE AND RECOGNISED COSTS

The aid shall be granted against the recognised costs of the project, i.e. the eligible costs which the provider approves, which are justified and remain within the amounts necessary for the purposes of the project. The applicant may propose as eligible costs only those costs defined in accordance with Art. 25(3), Art. 28(3 and 4) and Art. 29 (2 and 4) of the Regulation and the conditions of the relevant public tender.

#### 15. INCENTIVE EFFECT

In order to meet the objectives of the Programme and the conditions of the Regulation, the provider shall assess the presence of the incentive effect of the aid under Article 6 of the Regulation as part of the initial evaluation of project proposals.

#### 16. METHOD AND GENERAL CRITERIA FOR ASSESSING PROJECT PROPOSALS

The project proposals shall be comprehensively evaluated by the TA CR in accordance with the Support of Research, Experimental Development, and Innovations Act. Each project proposal shall be evaluated by at least two independent evaluators. In order to evaluate the

project proposals applying for the call for proposals, the TA CR shall establish the Expert Council Body.

Suggested general criteria for evaluating project proposals:

- compliance with the conditions of the call for proposals,
- usefulness of the project and its contribution to the fulfilment of the programme objectives;
- the expected benefit and quality of the project outcome;
- the feasibility of the project and its implementation procedure.

More details on the evaluation of project proposals, scoring and the threshold values for individual evaluation criteria are set out in the tender dossier for the relevant call for proposals.

In order to assess possible duplicities, links, complementarities, and synergies with various other projects and project proposals already implemented, the provider shall use data management and analytical tools.

The project proposals shall be evaluated according to the rules applicable in each country.

Considering the competence of the Ministry of Education, Youth and Sports (hereinafter the "MEYS") as the administrator of the international cooperation in research, development and innovation (within the meaning of the provisions of Section 7(1) of Act No. 2/1969 Sb., on the Establishment of Ministries and Other Central Government Authorities of the Czech Republic, as amended, and the provisions of Section 33(2a) of Act No. 130/2002 Sb., on the Support of Research, Experimental Development, and Innovation from Public Funds and on Amendments to Certain Related Acts), the necessity for national coordination of such cooperation regarding the foreign partners and the elimination of possible overlaps with international cooperation programmes of MEYS and TA CR shall conclude a memorandum of cooperation within the implementation of DELTA 2 and define the framework for the preparation of calls for proposals. In the past, there has been established a working group for international cooperation between TA CR and MEYS which meets regularly even with the participation of other ministries (e.g. Ministry of Foreign Affairs). This working group coordinates the respective activities. The MEYS representatives shall also be members of the Expert Council Body for the evaluation of project proposals.

In order to exclude possible overlaps of projects fulfilling the priority area "Safe society" in areas 1. Safety of citizens, 2. Security of critical infrastructures and resources, 3. Crisis management and security policy within this Programme with programmes of the Ministry of Interior (MI) focused on security research, the set-up of individual calls for proposals shall be executed with the cooperation of TA CR with MI. MI representatives shall be members of the Expert Council Body for the evaluation of project proposals. The processing establishment of the representation of MI representatives including the mechanism of cooperation and coordination in the preparation of the call for proposals including the veto right in the area in question shall be incorporated into the Statute and Rules of Procedure of the Expert Council Body.

## 17. COMPARISON OF CURRENT SITUATION IN CZECH REPUBLIC AND ABROAD

The support of projects with international cooperation where each country finances its own national teams is nothing new in the world. However, the EU member states focus their support primarily on the cooperation within the European Union and on using the funds from the Seventh Framework Programme, the EU's Framework Programme for Research and Innovation – Horizon 2020 and other mechanisms of cooperation within the European Research Area or the Eureka Programme.



The bilateral cooperation between enterprises or research organisations and entities from non-European countries is supported by a lower number of agencies. The cooperation may work in two basic ways:

a) through bilateral programmes within which the calls for proposals are announced by both agencies at the same time and the evaluation process is performed jointly. Only projects selected by both countries may be supported. This method of support is used e.g. by the French OSEO or the Spanish CDTI.

b) through programmes from which it is possible to finance research projects of enterprises or research organisations which wish to cooperate with partners from non-European countries. The evaluation and funding are carried out independently of the partner countries, or it is not dependent on the support of the project in the partner country. This method of support is provided e.g. by the Dutch NL Agency, the Finish TEKES or the British Technology Strategy Board. This option may still be modified by incorporating the international dimension into the “usual” funding programmes and by designating part of the funds to projects involving the non-European partner.

The agencies from EU member countries often collaborate with partner agencies from Asian countries, in particular, from China, Japan, South Korea, and India, as well as agencies from Brazil, Russia, and the Republic of South Africa. An example is the cooperation of the Finish agency TEKES with Russia to support research and development in the nanotechnology field within the Nanotech Finland-Russia Programme. The programme is focused on supporting joint RDI projects between the Finnish and Russian small and medium-sized enterprises. The Finish TEKES also cooperates with India, for example, in the RDI area focused on the support of diagnostics and with China in the area of nanotechnologies.

## 18. ANNEX 1

Overview of the priority areas, areas, and sub-areas accepted within the Programme under National Priorities of Oriented Research, Experimental Development and Innovation.

### Priority Area – Competitive knowledge-based economy

Area	Sub-Area
<b>1. Application of new knowledge from the field of General Purpose Technologies</b>	1.1 GPTs for innovation of processes, products and services
<b>2. Strengthening sustainability of production and other economic activities</b>	2.1 Efficiency, effectiveness and adaptability
	2.2 Product and service utility
<b>3. Enhancement of safety and reliability</b>	3.1 Safety and reliability of products and services
	3.2 Safety and reliability of services

### Priority Area – Sustainability of energy and material resources

Area	Sub-Area
<b>1. Sustainable Energy</b>	1.1 Renewable energy sources
	1.2 Nuclear energy sources
	1.3 Fossil energy sources
	1.4 Electricity networks including energy storage
	1.5 Production and distribution of heat/cold, including cogeneration and trigeneration
	1.6 Energy in transport
	1.7 System development of energy in the Czech Republic in the context of EU energy development
<b>2. Reduction in energy demand of the economy</b>	2.1 Reduction in energy demand of the economy
	2.2 New technologies and practices with potential application in energy
<b>3. Material base</b>	3.1 Advanced materials

### Priority Area – An environment for quality life

Area	Sub-Area
<b>1. Natural Resources</b>	1.1 Biodiversity
	1.2 Water
	1.3 Soil
	1.4 Air
	1.5 Mineral resources and the effects of mining on the environment
<b>2. Global Changes</b>	2.1 Methods of mitigation and adaptation to global and local changes
	2.2 Biogeochemical cycles of nitrogen and phosphorus
	2.3 Hazardous substances in the environment
<b>3. Sustainable development of</b>	3.1 Green infrastructure – Stable landscape structure

Area	Sub-Area
landscape and human settlements	3.2 Agriculture and forestry
	3.3 Urbanism and intelligent human settlements
4. Environmental technologies and eco-innovation	4.1 Environmentally friendly technologies, techniques and materials
	4.2 Biotechnology, material, energy and emissions-efficient technologies, products and services
	4.3 Minimisation of waste generation and its reuse
	4.4 Removal of hazardous substances – old environmental damage
	4.5 Minimisation of risks from chemicals
5. Environmentally friendly company	5.1 Consumption patterns of the population
	5.2 Tools of environmentally favourable growth

#### Priority Area (priority) – Safe society

Area	Sub-Area
1. Safety of citizens	1.1 Protection of the population
	1.2 Protection against crime, extremism and terrorism
2. Security of critical infrastructures and resources	2.1 Protection, resilience and restoration of critical infrastructures
	2.2 Communications and links between critical infrastructures
3. Crisis management and security policy	3.1 Development of the state security policy and Czech security system
	3.2 Threat and risk assessment, creation and development of scenarios, procedures and measures
	3.3 Systems of analysis, prevention, response and recovery
	3.4 Legislative and legal issues