

MINISTERSTVO PRO MÍSTNÍ ROZVOJ

Národní orgán pro koordinaci

Executive Summary
Ex-post evaluation
of the programming period 2007 – 2013
(research and development)

Říjen 2018



EVROPSKÁ UNIE
Fond soudržnosti
Operační program Technická pomoc



MINISTERSTVO
PRO MÍSTNÍ
ROZVOJ ČR

Executive Summary

The report presents a comprehensive evaluation of the benefits of the interventions of the Operational Programme research and Development for innovation (OP RDI) in the field of research and development. Specifically, the evaluation focuses on the interventions of priority axes (PO) 1 and 2, which have the object of promoting the emergence and development of Centres of Excellence (CE) and Regional Research centres (RRC).

The assessment of interventions focused on the main aspects related to the expected benefits of interventions, namely:

- enhancing the internationalisation and international competitiveness of research organisations
- rate and quality of cooperation of supported centres with application sphere and educational institutions
- rate and quality of cooperation of supported centres with educational institutions
- benefits of interventions in terms of overall research and development potential of the Czech Republic

The evaluation design was built on a combination of qualitative and quantitative methods. The evaluation used data sources from statistics and relevant databases and outputs of case studies and expert panel. The limit for evaluation was, in particular, the limited availability of data on the centres themselves, which do not dispose of legal personality. The specificity of the evaluation laid in the high influence of external factors influencing the performance of research organizations. For this reason, the evaluation put a high emphasis on the introduction of the findings into the overall R&D context in the Czech Republic and in some respects also brought findings concerning the overall system of R&D funding in the Czech Republic.

Based on the evaluation carried out, it can be concluded that the interventions corresponded to the original intended focus and direction. A total of eight centres of excellence and forty regional research centres were erected. The centres were equipped with modern equipment, thanks to which one of the biggest handicaps of Czech facilities to the developed Western countries has been compensated – insufficient infrastructure and technology amenities. The supported centres are currently equipped with modern technologies of European and sometimes world-class level. In terms of orientation and targeting of the centres, it is necessary to highlight the different motivation of centres focused on top basic research (especially CE and some RRC) and regional applied research (especially the RRC and partially some CE).

The centres of excellence and some regional research centres supported by OP RDI have progressively established themselves on the European and international stage and are engaged in prestigious international projects. The evaluation confirmed that, according to the original assumptions, facilities with higher potential were supported. The interventions have made it possible to further develop this potential. As the results of the evaluation show, in addition to the most modern equipment that the centres can offer to their partners, active promotion and building of PR abroad is essential. In this way, centres are gradually increasing awareness of their existence and possibilities among potential partners.

The internationalisation of centres oriented towards excellent basic research also contributes to ensuring the impact of a significant share of foreign scientists but is linked to limits on significantly increased wages and administrative and cultural obstacles. Some centres also start to create

international consultative bodies, made up of experts in the field, along the lines of foreign institutions.

Regional research centres and partly some centres of excellence are primarily focused on cooperation with the application sphere. Cooperation with the application sphere takes place, in addition to other modes of cooperation, mainly on the basis of collaborative and contractual research. As case studies have shown, collaborative research is carried out almost exclusively within the framework of projects financed from public sources (in particular TAČR). In the course of the implementation of the programme, contract research was significantly limited by the change of public support rules at EU level (the limit of 20% of the entity's total annual capacity, and the research infrastructure for economic activities). The level of contract research has thus actually reached a much lower share of the total revenues of the centres (14.3%) than originally anticipated (29.7%). Other limits for increasing cooperation with the application sphere are unclear or internally strictly interpreted conditions and limits of cooperation with business entities.

Inconsistent setting of the system of R&D funding in the Czech Republic and original objectives and assumptions of the focus of regional research centres proved to be a significant systemic handicap. The objectives of the regional centres established under universities (i.e. primarily focusing on developing cooperation with the application sphere) do not correspond to the setting of the evaluation and financing system, which is primarily aimed at valuing the results in the field of basic research.

In assessing the impact of selected interventions under OP RDI, it is necessary to consider the complexity of the whole R&D support System. It is not possible to separate the intervention from the ESI Funds from the overall Ramp; D funding system in the Czech Republic. The evaluation showed that the performance of the supported institutions and centres was, to a large extent, influenced by the financing conditions and the related motivational factors at the level of the system. The need for a systemic alignment of objectives and different forms of funding is highlighted in the recommendations to complement them appropriately.

In terms of setting the conditions for granting support, a major obstacle seems to be the bureaucracy and formalism in the approaches of the management and control authorities. Here, based on the findings, we point out that the objectives of the beneficiaries and the providers of subsidies should be identical – to increase the quality and relevance of the Czech science. Bearing this in mind, the setting of conditions for grants and controls should also be approached. The grant provider should be a partner for the beneficiary and the common aim should be to maximise the effectiveness and efficiency of the intervention (project) and not the bureaucratic control, which does not respect the original objectives and is often oriented only on the formal aspect of the case (formalism).

The evaluation shows the different ways of integrating the centres into the parent organisations and their degree of autonomy. As the case studies have shown, autonomy significantly influences the own activity and the economy of the centre. Higher autonomy allows centres for more progressivity in implementing and fulfilling their visions. Centres that do not have their own autonomy in decision-making are often "hindered" by rigid approaches characteristic for the procedures of founding (parental) organizations. In this sense, the centres often show a more progressive approach compared to other parts of the research organisation. It can be concluded that the centres create an environment more objective (result) oriented with the rules of performance evaluation in place. Many centres, which have lower autonomy, then operate on the basis (efforts) of shaping good relations with the parent organization.

The evaluation of financial sustainability centres clearly refutes the idea "that the centres should make their living". It turns out that cutting-edge science requires increased financial demands – for foreign workers, ongoing modernisation of equipment, international cooperation, appropriate professional administrative support, etc. In this respect, it is necessary to set up an appropriate system of funding centres after the completion of the national sustainability Programmes (NPU I and II) after 2020. The fundamental finding is that the centres are now unable (or NPU) to generate funds for reinvestment to ensure the sustainability of their top-level position in terms of infrastructure and equipment.

Financial sustainability is linked to the finding that the original objective of interventions in terms of concentration to a limited number of high-level facilities has not been met, on the contrary, interventions have contributed to fragmentation and increasing the number of research centres in the Czech Republic. This situation brings increased demands for financing the entire R&D system from public funds.

In relation to the interventions of OP RDI, we can conclude that in the Czech Republic there are scientific facilities, which thanks to the support of OP RDI qualitatively increased their performance and parameters of their activities. Likewise, there are institutions that achieve top-level results in international comparisons that have financed their development from other sources, or that have not received support under OP RDI for various reasons.

The main findings from the evaluation are summarised within each topic and in the final chapter, which provides a synthesis of findings and sets them into the overall context of the R&D system in the Czech Republic. Based on the findings, recommendations are formulated at the end of the report, aiming in particular at prioritising the interventions over the next programming period, with some recommendations generally relating to the R&D support system in the Czech Republic. For example, a more thorough connection of future interventions with the setting of R&D system, concentration of research capacities, continuation of cooperation of the research sector with the application sphere, strengthening of international cooperation or continuation in multiobjective financing.