



**Programme  
Johannes Amos Comenius**

# **PROGRAMMING DOCUMENT**

Programming period 2021-2027

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	<input checked="" type="checkbox"/> ESF+
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<sup>1</sup> The text of the programme is in line with the current proposal for a Regulation of the European Parliament and of the Council on common provisions for the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Maritime and Fisheries Fund and financial rules for those and the Asylum and Migration Fund, Internal Security Fund and the Border Management and Visa Instrument, in particular Annex V. Template for programmes supported from the ERDF (Investment for Jobs and Growth goal), ESF+, the Cohesion Fund and the EMFF – Article 16(3). Annex V defines the structure of the text, the order and numbering of the chapters and tables, and regulates the content of the chapters and subchapters, including the limits to the number of characters. After the final approval of the draft Regulation, the text of the operational programme will be adapted so that it is in line with the final wording.

## 1. PROGRAMME STRATEGY

**The aim of the Programme Johannes Amos Comenius is to support the development of an open and educated society built on knowledge, skills and equal opportunities and developing the potential of each individual which will in turn lead to a rise in competitiveness of the Czech Republic and to improved living standards of its residents.**

The Programme Johannes Amos Comenius (hereinafter referred to as “P JAC”) is based on documents defining the national policy in the field of education, research and development, and is a successor of the successful Operational Programme Research, Development and Education (hereinafter referred to as “OP RDE”). P JAC builds on the experience gained from OP RDE, the areas supported by it and the mechanisms created, and will further deepen and strengthen the positive impacts of the already implemented interventions and changes in the field of education, research and development.

Education is considered one of the key values and prerequisites for positive social and economic development. The original role of formal education is changing significantly with the onset of the 4<sup>th</sup> Industrial Revolution and requires more intensive cooperation among education stakeholders. The general goal is to create and develop an open education system that responds to the changing external environment and that provides relevant education content in a lifelong perspective.

Modernized goals and content of education, including the forms and methods of learning at all levels of the education system (i.e. from pre-school to tertiary and further education), together with ensuring equitable access to quality education and reducing segregation, inequalities and risk of excluding endangered groups from education, is a prerequisite for a good quality of life and long-term engagement of the individual in society and on the labour market. The goal of education in the next decade must be an individual equipped with basic knowledge and skills who can make the most of their potential in a dynamically changing world for the benefit of their own development as well as for the benefit of the development of society. In this respect, an indispensable part of their education, both initial and further education, is civic education.

The text of the P JAC is based on recommendations that have been formulated to in the text of and annexes to the Report on the Czech Republic 2019 and follow the European Pillar of Social Rights. Furthermore, P JAC interventions will also help to accomplish relevant United Nations Sustainable Development Goals<sup>2</sup> and relevant headline targets articulated during a summit of European Union countries held in May 2021 in Porto<sup>3</sup>.

In the field of research, development and innovation, the Czech Republic (hereinafter referred to as “CZ”) lags behind world leaders, it is ranked a so-called moderate innovator.<sup>4</sup> The goal of support for research and development must be the building of top capacities (both in infrastructure and especially in human resources, including the increased ability to better utilise potential of qualified women), deepening the knowledge potential of the entities in CZ, focusing on current and future societal challenges and on building a basis for future applicability of research and development results in practice which serves everyone without exceptions. Only that way can the Czech economy compete with developed countries in the long-term horizon.

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<sup>2</sup> UN Sustainable Development Goals. March 2022. online: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> [2022-30-03].

<sup>3</sup> Porto Social Summit: all partners commit to 2030 social targets. May 2021. online: <https://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=10004&furtherNews=yes> [2022-30-03].

<sup>4</sup> Maastricht Economic and Social Research Institute on Innovation and Technology – MERIT for European Commission: *European Innovation Scoreboard 2021*.

Top research and development must be supported especially in those areas that have the potential to contribute to a further development of the society and the economy and which will address societal problems not only at the national but also at the European level, and will thus contribute to greater competitiveness of CZ. These areas are identified in the National Research and Innovation Strategy for Smart Specialization of the Czech Republic 2021-2027 (hereinafter referred to as “National RIS3 Strategy”), the implementation of which is closely linked to the implementation of P JAC. Interventions in research, development and education are key prerequisites for exploiting the knowledge potential and ensuring a successful future. The key strategic document at the national level addressing all segments of research, development and innovation is the National Research, Development and Innovation Policy of the Czech Republic 2021+, which also provides important justification of interventions from the EU funds in the 2021-2027 programming period.

Where relevant, P JAC will support investments that successfully combine sustainability, aesthetics and inclusiveness principles of the New European Bauhaus<sup>5</sup> initiative in view of finding affordable, inclusive, sustainable and attractive solutions for climate challenges. During the implementation of the P JAC the Managing Authority of the P JAC (hereinafter referred to as “MA”) will promote the strategic use of public procurement to support chosen Policy Objectives (including efforts to solve the significant disparity between an organization’s goals and objectives by the professionalization of human resources). Beneficiaries should be encouraged to use more quality-related and lifecycle cost criteria. When feasible, environmental (e.g. green public procurement criteria) and social considerations as well as innovation incentives should be incorporated into public procurement procedures.

P JAC fulfils the horizontal enabling condition “Effective application and implementation of the EU Charter of Fundamental Rights.” All proposed priorities and specific objectives (hereinafter referred to as “SO”) of the programme respect the rights, observe the principles and promote their application in accordance with Article 51 of this charter and contribute to the better prevention and fulfilment of the fundamental rights. This compliance has been verified by human rights experts who reviewed the text of the entire programme.

The MA further ensures, that during the implementation of the P JAC the horizontal principles on gender equality, non-discrimination (based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation), and accessibility will be respected. During the implementation of the P JAC the Charter of Fundamental Rights of the European Union and the UN Convention on the Rights of Persons with Disabilities will be complied as well.

All relevant interventions will be guided by the principle of desegregation and will aim to tackle and combat spatial and educational segregation at all educational levels, dismantle segregated educational settings and focus on fostering access to high-quality mainstream non-segregated education at all levels, in particular for marginalized groups such as Roma, people with a migrant background, persons with disabilities and other special needs etc. There will be no interventions made in parallel services for specific groups or that can maintain or lead to segregation/isolation (such as, in special needs schools, in segregated Roma schools etc.).

All investments into infrastructure in the area of education within PO4 will be formulated following the results of mapping of the needs with a particular focus on territorial inequalities, educational and spatial segregation and demographic changes.

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<sup>5</sup> *New European Bauhaus*. October 2020. [https://europa.eu/new-european-bauhaus/system/files\\_en?file=2021-01/New-European-Bauhaus-Explained.pdf](https://europa.eu/new-european-bauhaus/system/files_en?file=2021-01/New-European-Bauhaus-Explained.pdf) [2022-01-04].

All P JAC-driven interventions will be set up to reflect the experience gained during the implementation of operational programmes within the responsibility of the Ministry of Education, Youth and Sports (hereinafter referred to as “MEYS”) in the previous programming periods.

## 1.1. MAIN DEVELOPMENT CHALLENGES AND POLICY RESPONSES

### 1.1.1. PERSISTENT INEQUALITIES IN EDUCATION

Inequalities in education are a persistent weakness of the Czech education system as well as one of its long-term problems despite a significant progress in the area especially in the last decade, consisting in the removal of a number of formal and informal barriers. CZ ranks among countries of the Organization for Economic Co-operation and Development (hereinafter referred to as “OECD”) with the largest educational inequalities which are reflected in a significant dependence of educational results on the social status of parents, significant differences in the results of pupils from different primary schools (hereinafter referred to as “PS”) and different regions and low intergenerational mobility in education.<sup>6</sup> We find a similar connection in the enrolment at higher education institutions (hereinafter referred to as “HEIs”), where, moreover, financial demands can be an obstacle not only for becoming a student but also for successful studies, even in a situation where tuition fees are not collected in public HEIs.<sup>7</sup>

Indicators of the education system structure (e.g. the structure of educational fields,<sup>8</sup> characteristics of teaching staffs,<sup>9</sup> the early school leaving rate<sup>10</sup> etc.) as well as the outcomes of education (both from across-the-board and sample tests)<sup>11</sup> show an increase in regional disparities, especially in regional education. The specific problems of the education system in this respect also include the relatively high number of pupils who reach very low levels of basic types of literacy at the end of primary school, as well as their high representation in some regions (especially in the Ústí nad Labem and Karlovy Vary Regions). Significant inequalities in the quality of schools, both between and within regions, largely determine individual educational outcomes and reduce the equality of opportunities to achieve quality education. The insufficient pre-school readiness of children from socially disadvantaged backgrounds and the limited capacity of state administration and local authorities to respond to risk factors on the part of the family further deepen this situation. The system is also characterized by a limited ability to develop gifted and exceptionally gifted pupils in mainstream primary schools, which reinforces the tendency to differentiate the school system.<sup>12</sup> Even though the Czech Republic ensures equal access of girls and boys to education, the educational pathways within the education system remain stereotypical - for example, girls choose humanities and medical sciences while boys aim for STEM.<sup>13</sup>

A persistent problem of the Czech education system is the high degree of academic failure in the first years of HEI studies, both for regular students and for students with special needs (hereinafter referred

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<sup>6</sup> PROKOP, D. - DVOŘÁK, T.: *Analysis of educational challenges in the Czech Republic*. Prague: Eduzměna, 2019, cf. also col.: *Quality and effectiveness of education and of the education system in the school year 2017/2018*. Prague: CSI, 2018.

<sup>7</sup> [https://www.eurostudent.eu/download\\_files/documents/EUROSTUDENT\\_VI\\_Synopsis\\_of\\_Indicators.pdf](https://www.eurostudent.eu/download_files/documents/EUROSTUDENT_VI_Synopsis_of_Indicators.pdf), Figure B7.5, p. 159, Figure B7.8, p. 163 [2020-01-07].

<sup>8</sup> CHMOUTOVÁ, D. et al.: *Employment of school leavers - 2018*. Prague: NÚV (National Institute for Education), 2019.

<sup>9</sup> Col.: *Main outputs from the Extraordinary Survey on the (Needed) Number of Teachers in Kindergartens, Primary Schools, Secondary Schools and Post-secondary Vocational Schools*. Prague: MEYS, 2019.

<sup>10</sup> *Early leavers from education and training*. April 2019. EUROSTAT, online: [https://ec.europa.eu/eurostat/statistics-explained/index.php/Early\\_leavers\\_from\\_education\\_and\\_training](https://ec.europa.eu/eurostat/statistics-explained/index.php/Early_leavers_from_education_and_training) [2020-01-07].

<sup>11</sup> Col.: *Quality and effectiveness of education and of the education system in the school year 2017/2018*. Prague: CSI, 2018.

<sup>12</sup> PROKOP, D. - DVOŘÁK, T.: *Analysis of educational challenges in the Czech Republic*. Prague: Eduzměna, 2019; coll.: *Quality and effectiveness of education and of the education system in the school year 2017/2018*. Prague: CSI, 2018.

<sup>13</sup> STEM is an abbreviation for four fields: Science, Technology, Engineering and Mathematics.

to as “SNs”). The main reason is the not entirely appropriate choice of the study programme stemming from an inaccurate idea of the study, insufficient work with potential applicants and insufficient readiness of academic and non-academic staff to work with students at risk of failure.<sup>14</sup> A very high students’ academic failure rate caused to a large extent by economic factors also appears in postgraduate studies.

Inequalities also show in the different conditions in which education is provided. A significant part of schools has insufficient information and communication technology equipment that does not meet the current needs of teaching. In this respect, support is needed in particular for modernizing and managing the equipment of regional education in order to reduce inequalities between schools and in the context of pressure to increase the quality of education across the education system and regions.<sup>15</sup> Disparities show also in the availability, offer and quality of leisure education.

Higher education still has an insufficient infrastructure base and a sub-optimal state of equipment needed to ensure quality conditions for study in the time of rapidly evolving technologies. The main reason is the long-term underfunding of this area and the differences in the level of investment between the capital city of Prague and the other regions in the 2007-2013 programming period. Although significant investments have been made in recent years, the development of new technologies and forms of teaching continues to require significant support for this area as well as a follow-up on already implemented interventions from previous programming periods. Moreover, many HEIs still do not have sufficient equipment to enable studying and to provide the necessary motivation to study for students with SNs, i.e. both students with disabilities and students from economically and socially disadvantaged backgrounds.

A challenge for the entire education system is the long-term growing number of foreign children, pupils and students and the need for their support, as well as the support of education staff in the teaching of foreigners.<sup>16</sup>

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<sup>14</sup> VLK, A. et al.: *Academic failure at HEIs: theoretical background, empirical findings and recommendations*. Prague: Sociological publishing house SLON, 2017. Additional data focusing on academic failure are available via the following links: <https://statis.msmt.cz/statistikyvs/neuspesnost.aspx>, resp. <https://statis.msmt.cz/statistikyvs/prubezh.aspx>.

<sup>15</sup> E.g. *Thematic Report - Use of digital technologies in nursery, primary, secondary and post-secondary vocational schools*. Prague: CSI, 2017, or also *Secondary analysis - Conditions for distance teaching of Czech pupils in an international comparison*. Prague: CSI, 2021. Despite the PS received a 1.3 billion CZK subsidy from the state budget in 2020 for purchases of mainly mobile devices allowing distance education, the issues related to schools’ connectivity and ICT administration have not improved significantly.

<sup>16</sup> In the last 5 years, the number of foreigners in the education system has increased by 23%. The situation is most significant at kindergartens and primary schools, where the number of foreigners between the school years 2015/2016 and 2019/2020 increased by 49% in kindergartens, respectively 45% in primary schools, as evidenced by data from the MEYS, see [https://www.czso.cz/documents/11292/32508273/c04R41\\_2019.pdf/8a13691e-e367-4c61-be02-797a099e9374?version=1.0](https://www.czso.cz/documents/11292/32508273/c04R41_2019.pdf/8a13691e-e367-4c61-be02-797a099e9374?version=1.0).

**P JAC will contribute to reducing educational inequalities, to maximizing the development of the potential of each individual and to reducing study failure in order to:**

- reduce inequalities in educational attainment and increase equity in access to education, focusing on fair and equal chances and access to quality education for all children, pupils and students;
  - reducing regional and intra-regional disparities in the quality of the education system;
  - strengthening the quality of education at all levels of the education system;
  - strengthening an accessible and quality education of children, pupils and students from socially disadvantaged backgrounds, among other by employing principles formulated in the Coordinated Approach to Social Exclusion 2021+;
  - strengthening the ability of the education system and cooperating services to identify in a timely manner the negative impacts of the family background on educational outcomes and, using appropriate measures, to minimize them in a link to reducing socio-pathological phenomena in education;
  - strengthening gender equality in education;
  - strengthening the capacity of the education system to take care of the school climate and the mental health of children, pupils, students and teachers.
- maximize the development of each individual's potential throughout life with regard to their specific needs and talents;
- reduce the early school leaving rate and study failure, streamline systematic work with potential applicants for HEI study.

The above goals are currently proving to be highly extrapolated due to the COVID-19 pandemic. Its impacts will be long-lasting and P JAC, as it is proposed, will significantly contribute to overcoming them as well as building subsequent resilience to similar threats.

### **1.1.2. NECESSITY TO MODERNIZE THE METHODS, FORMS AND CONTENT OF EDUCATION**

Technologies are transforming all sectors of the economy and fundamentally changing all aspects of life.<sup>17</sup> These profound changes are often called the 4<sup>th</sup> Industrial Revolution. The skill sets that are needed for both traditional and new occupations are changing.<sup>18</sup> The whole labour market, i.e. how and where people work, is also being transfigured.<sup>19</sup> The COVID-19 pandemic has significantly affected and changed both the working conditions and the requirements placed on employees, especially in terms of digitalization. The children, pupils and students who are educated in schools today are significantly different from previous generations.<sup>20</sup> The common socialisation feature of this generation is primarily the use of digital technologies from an early age with an unlimited source of information. Members of this generation learn quickly in areas that interest and entertain them, and are more adaptable, open to change and new ideas.<sup>21</sup>

These trends inevitably lead to the need to adapt the environment in which education takes place as well as to change the educational content and the ways in which it is delivered.<sup>22</sup> We need to support an

<sup>17</sup> BRYNJOLFSSON, E.: *Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. Brno: Jan Melvil Publishing, 2015.

<sup>18</sup> Col.: *The future of education and skills. Education 2030*. Paris: OECD, 2018.

<sup>19</sup> WEF: *The Future of Jobs Report 2018*, [https://www.vlada.cz/assets/evropske-zalezlosti/umela-inteligence/NAIS\\_kveten\\_2019.pdf](https://www.vlada.cz/assets/evropske-zalezlosti/umela-inteligence/NAIS_kveten_2019.pdf); <https://www.weforum.org/reports/the-future-of-jobs-report-2018> [2020-01-07].

<sup>20</sup> VESELÝ, A.: From a matter-of-course to co-responsibility: changes in the perception of public services. In: HLAVÁČEK, P. (ed.): *A non-obvious nation?* Prague: Academia, 2019.

<sup>21</sup> PÎNZARU, F. et al.: Millennials at work: Investigating the specificity of generation Y versus other generations. *Management Dynamics in the Knowledge Economy*, 4 (2), 2016, pp. 173–192.

<sup>22</sup> Col.: *Trends Shaping Education 2019*. Paris: OECD, 2019.

education system that copes with external changes and is able to continuously respond to the changing educational needs of pupils and students, use modern technologies to increase its effectiveness and enable pupils to acquire key competences<sup>23</sup>, knowledge, skills and attitudes in their interconnectedness and complexity, which are usable in personal, civic and professional life. Education and pedagogical work must comply, in terms of its content, forms and methods employed, with principles of non-discrimination and equal opportunities (gender, social status, ethnic etc.), at all levels of education.

Current education still focuses on the acquisition of knowledge and less on interlinking it into a holistic concept of competences. The conclusions of the Czech School Inspectorate (hereinafter referred to as “CSI”) point to the fact that more demanding tasks requiring a deeper understanding appear rarely in class, while tests and tasks that require memory-based reproduction predominate. Teachers often prefer content-based knowledge of subjects and the predominant frontal method of teaching. Pupils are little guided to discover new knowledge independently and to be creative.<sup>24</sup> The TALIS (Teaching and Learning International Survey) showed that procedures that activate more demanding cognitive processes in students are rather less widespread.<sup>25</sup> The pace of introducing new and innovative methods in education is not uniform, which further deepens inequalities in education.<sup>26</sup>

With regard to the initiated revision of the curriculum, it is necessary to prepare and sufficiently support schools that will have to transform their existing way of teaching in connection with modernizing the education content.<sup>27</sup> This support must be accompanied with modernization and equipment of schools.

Higher education institutions must also adapt to the changes brought about by the third decade of the 21<sup>st</sup> century in order to prepare a skilled workforce. As in regional education, digital literacy and so-called soft skills and entrepreneurial competences of students are insufficiently developed also in higher education, students are often insufficiently able to apply the acquired knowledge and skills in practice. Traditional forms of teaching still persist (frontal teaching in in-person types of study, often inappropriate setting of the combined or distance form of study, a large part of study programmes still purely academically focused without sufficient practice), although the dynamics of the 21<sup>st</sup> century require new approaches and innovative teaching methods.<sup>28</sup> It is, therefore, necessary to place more emphasis on soft competences, the development of digital literacy, students' language skills and especially the practical focus of study and sufficient opportunities in terms of quality practically-focused education. Practical education should involve potential employers to a greater extent in order to ensure maximum possible preparedness of graduates/school leavers to apply their skills at work. The key is the introduction of new teaching methods into study programmes, pressure for developing new skills of academic staff who will use these methods in teaching, and the development of cooperation with industry, both in the preparation of study programmes and in their implementation. There is also a growing pressure for interdisciplinarity, a need to create new interdisciplinary study programmes. This often requires cooperation not only within one educational institution but also between HEIs of different specializations, which can bring a new perspective on the reality. In this area, Czech HEIs often lag significantly behind top tertiary education institutions abroad. HEIs are still relatively little open to the foreign environment, their lack of openness is often due to the low

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<sup>23</sup> Col.: Council Recommendation on key competences for lifelong learning, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604\(01\)&rid=7](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&rid=7) [2021-08-16].

<sup>24</sup> Col.: *Quality and effectiveness of education and of the education system in the school year 2017/2018*. Prague: CSI, 2018; Col.: *Quality and effectiveness of education and of the education system in the school year 2018/2019*. Prague: CSI, 2019; Col.: *Quality and effectiveness of education and of the education system in the school year 2019/2020*. Prague: CSI, 2020.

<sup>25</sup> Col.: *Results of TALIS 2018*. Prague: CSI, 2019.

<sup>26</sup> STUHLÍKOVÁ, I. (ed.): *Evaluation of Implementing the Strategy for the Educational Policy of the Czech Republic until 2020*. Prague: MEYS, 2018.

<sup>27</sup> Col.: *Guidelines of the Educational Policy of the Czech Republic 2030+*, <http://www.msmt.cz/file/51582/> [2020-01-07]. Revised Framework Educational Plan for Primary Education in the field of informatics and digital literacy: <http://www.nuv.cz/t/rvp-pro-zakladni-vzdelavani>.

<sup>28</sup> Col.: *OECD Economic Surveys: Czech Republic 2020*. Paris: OECD, 2020, p. 63,, <https://doi.org/10.1787/1b180a5a-en>.

language skills of their academic and non-academic staff and is one of the limiting factors of their development.

The development of new forms of teaching, the pressure to digitize and the rapid development of technology in general increase the inadequacy of the equipment of Czech HEIs in comparison with quality HEIs abroad. The equipment is often outdated, inadequate for modern teaching trends, and does not guarantee the conditions for providing high quality educational processes.

In a rapidly changing environment, it will be necessary for people to be educated throughout their lives. In this respect, equipping children, pupils and students with learning competences for lifelong learning within initial education is a crucial step. We can also expect that not only schools (including HEIs) and school facilities but also libraries and memory institutions (especially museums) will play a significantly more active role in providing non-vocational education services (especially civic education) and lifelong learning/education.

The aim of civic education is to equip the citizen with the competences needed for a responsible life in a democratic society, i.e. the skills and knowledge to hold and promote democratic values and attitudes. The aim should also be to increase the use of modern technologies in education, while being aware of their pros and cons. In this respect, the field of adult education should also be supported through a sufficient offer and availability of non-vocational education courses.

HEIs must be centres of education with the most up-to-date information on trends in the fields of education they focus on, and should naturally become one of the main providers of quality lifelong education (hereinafter referred to as “LLE”) in those fields. However, this area is underdeveloped so far, reserves are seen both in the breadth of the offer and in the attractiveness of the courses themselves, in the infrastructure equipment and in the approach of academic and non-academic staff to specific target groups.

Where relevant, education interventions will respond to the needs of the National RIS3 Strategy.

**P JAC will contribute to the modernization of content and methods of education in order to:**

- adjust the education system so that it can adapt more quickly to a dynamic environment and developments associated with processes such as the development of new technologies, digitization, internationalization or sustainable development;
  - focusing education more on acquiring transversal competences needed for an active civic, professional and personal life;
  - developing competences and all basic literacies - reading, mathematic, language, social literacy, STEM skills and critical thinking with the aim of gaining the ability to work critically and effectively with information;
  - increasing the level of digital skills, digital literacy and computational thinking of children, pupils, students and teachers;
- increase the relevance, modernization and innovation of educational methods;
  - increasing the quality of education at all levels of the education system;
  - strengthening the area of career counselling cross-sectionally in primary and secondary education;
  - improving the quality of practical education in schools;
  - enhancing the work with potential applicants for higher education study;
  - improving the study environment in all types of schools and increasing the motivation and overall well-being of pupils and students;
  - strengthening and developing combined and distance forms of higher education;
  - strengthening the element of internationalization, improving the conditions for internationalization in HEIs;
  - strengthening the elements of applicability of the acquired knowledge and skills and cooperation with employers/industry;
- strengthen the field of lifelong learning / further education, including civic education, especially in schools and school facilities;
- reduce various forms of disadvantages (gender-based, social, ethnic etc.)

### **1.1.3. INSUFFICIENT SUPPORT FOR TEACHERS AND SCHOOLS**

According to available empirical findings, the quality of the teachers themselves is an entirely decisive factor in the quality of the education provided. A common characteristic of education systems generally considered successful is the significant attention paid to the selection, initial training and ongoing professional support of teachers.<sup>29</sup> Despite significant progress in recent years, the Czech school system faces a number of problems in the area of education, employment and further development of teachers. One of them is the low attractiveness of the teaching profession in regional education, despite the systematic increase in salaries. The situation is also complicated by the limited options of career advancement and by questioning the opportunity for self-realization. Comprehensive support for the development of the profession and training should be pursued through a coherent system of support for the professional development of teachers, covering all areas of the so-called professionalisation continuum - attracting quality prospective students of teaching; quality initial teacher training leading to the use of modern teaching methods; induction into the teaching profession; further education and professional development of teachers, including

<sup>29</sup> Col.: *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*. Paris: OECD, 2005; HATTIE, J.: *The applicability of Visible Learning to higher education. Scholarship of Teaching and Learning in Psychology*, 2015, pp. 79–91.

mentoring.<sup>30</sup>

In response to the above, it is necessary to support a well-thought-out system of educational paths that could stimulate interest in the teaching profession, capture potential applicants with various previous experience and effectively prepare them for the dynamically changing work of teachers.<sup>31</sup> It is necessary to focus on supporting the development of headmasters' competences and the system of support for their work, as the person of the headmaster and the way of their pedagogical leadership significantly influences the work of teachers and the quality of the school. There is still a lack of adequate support for teachers' work by other professionals - such as psychologists or special pedagogues.<sup>32</sup> There is a need to ensure effective support for beginning teachers, as about a third of them consider leaving the teaching profession.<sup>33</sup> Subjectively perceived professional competence of Czech teachers in the field of motivation and active engagement of pupils in class activities is well below average in comparison with the states of the European Union (hereinafter referred to as "EU") and is one of the lowest in the whole TALIS. The current system of further professional training is not sufficiently effective and its offer is dominated by one-off short-term activities implemented outside the school environment.<sup>34</sup> On the other hand, experience from other school systems and research show that the most effective is mutual professional sharing and support carried out on an ongoing basis directly in schools.<sup>35</sup> This presupposes teamwork and cooperation of teachers, cooperation of schools and other actors in the territory.

The CZ has the most decentralized management of schools, or the highest degree of school autonomy in the world.<sup>36</sup> This high degree of autonomy brings a number of benefits, such as the ability to adapt the content and way of teaching to the needs of pupils and students in a given place and to respond quickly to changing needs. However, it also brings challenges: the already mentioned overload of headmasters and teachers with administration, fragmentation of professional and support capacities, competition among schools, growing differences between schools and regions, difficult communication among multiple actors and difficult implementation of any national strategy. In this respect, the concentration of professional capacities in the territory is absolutely crucial. Its main aim should be to provide or coordinate methodological support to schools; to support cooperation between schools, their mutual communication and sharing experience; to help coordinate the intentions and activities of individual schools in a given territory; to provide legal advice; to support positive innovations and experiments in schools in the given territory, to help with their evaluation and further dissemination.

At HEIs, teachers are important experts in their field of interest, but their didactic competences are not always at a sufficient level, which can result in that they do not reflect new teaching methods and in high academic failure. Also, the language skills of academic staff are still low and do not allow for full internationalization of study programmes, and there are shortcomings in communication with SN students.

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<sup>30</sup> STUHLÍKOVÁ, I. (ed.): *Evaluation of Implementing the Strategy for the Educational Policy of the Czech Republic until 2020* Prague: MEYS, 2018.

<sup>31</sup> Col.: *Trends Shaping Education 2019*. Paris: OECD, 2019.

<sup>32</sup> Col.: *Main outputs from the Extraordinary Survey on the (Needed) Number of Teachers in Kindergartens, Primary Schools, Secondary Schools and Post-secondary Vocational Schools*. Prague: MEYS, 2019.

<sup>33</sup> HANUŠOVÁ, S. et al.: *Do they want to stay or leave? Beginning teachers in Czech primary schools*. Brno: Masaryk University, 2017.

<sup>34</sup> Col.: *Initial analysis of Further Training of Teachers within the pre-project preparation of the IMKA project*. Prague: National Institute for Further Education, 2017.

<sup>35</sup> Col.: *International Survey TALIS 2018 - Experience, opinions and attitudes of teachers and headmasters*. Prague: CSI, 2020. For more cf. LIKOWSKI, K. et al.: Expert views on the implementation of teacher professional development in European countries. *Professional Development in Education*, 37, 2011, pp. 685-700.

<sup>36</sup> Col.: *How decentralised are education systems, and what does it mean for schools?* Paris: OECD, 2018.

**P JAC will contribute to increasing the attractiveness of the teaching profession, to the professional development of school leaders and to deepening the professional competences in order to:**

- make the teaching profession more attractive by improving undergraduate education and supporting beginning teachers as well as their further training and professional development;
  - improving preparatory professional training in the context of dynamically changing conditions while reflecting the development of the education system (both the professional and practical component);
  - improving the conditions for the pedagogical work of the school using pedagogical diagnostics and the corresponding educational strategy, formative evaluation and self-evaluation;
- ensure professional development of the school leaders and school facilities, oriented towards overall management and pedagogical management of institutions with a focus on improving the quality of education;
- increase professional competences, develop communication competences, strengthen quality cooperation and build mutual trust between all key actors in education.

#### **1.1.4. WEAK STRATEGIC MANAGEMENT OF RESEARCH, DEVELOPMENT AND INNOVATION AT THE NATIONAL AND REGIONAL LEVELS**

The Czech Republic has great potential to become one of the leaders in the field of research and development (hereinafter referred to as “R&D”) on a global scale. It has great knowledge potential, it is developing technologically, since joining the EU it has made significant investments especially in R&D infrastructure.<sup>37</sup> But it still faces drawbacks that prevent it from approximating the most successful countries.

The basic precondition for the area of R&D to produce quality results is targeted and coherent strategic management of this area, both at the national (central) and regional level. At the national level, fragmentation persists in the support of research, development and innovation (hereinafter referred to as “R&D&I”) and insufficient coordination of R&D actors in setting clear priorities and taking into account future trends and needs,<sup>38</sup> which hinders the efficient functioning of the whole system and its innovation performance.<sup>39</sup> Despite partial progress in this area (e.g. the increasing importance and scale of implementation of the National RIS3 Strategy), a significant part of this issue still remains insufficiently addressed. Greater targeting of R&D&I support in line with horizontal and vertical priorities of National RIS3 Strategy needs to be further encouraged<sup>40</sup> (especially to the smart specialization domains) based on analytical data, entrepreneurial discovery process (hereinafter referred to as “EDP”) and the cooperation of actors within the triple/quadruple helix (including the research and business sectors), as well as technology assessment and technology foresight. The Czech Republic has considerable reserves in setting up and implementing Open Science<sup>41</sup>, while insufficient preparedness may be a hindrance for future support from Horizon Europe as well as for the rapid development of R&D&I across the EU<sup>42</sup>. The Czech Republic has insufficient infrastructure facilities and capacities and readiness of human resources at the national level and

<sup>37</sup> Col.: *Innovation Strategy of the Czech Republic 2019–2030*. Prague: Office of the Government - RDI Council, 2019.

<sup>38</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021–2027*. Prague: MIT, 2021.

<sup>39</sup> Col.: *Country specific recommendations 2019*. Brussels: European Commission, 2019.

<sup>40</sup> Col.: *OECD Economic Surveys: Czech Republic 2020*. Paris: OECD, 2020 p. 49, <https://doi.org/10.1787/1b180a5a-en>.

<sup>41</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021–2027*. Prague: MIT, 2021.

<sup>42</sup> Col.: *A new ERA for Research and Innovation*. Brussels: European Commission, 2020.

within research organizations (hereinafter referred to as “ROs”), especially for the implementation of the European Open Science Cloud initiative (EOSC) and data management policy in accordance with the FAIR principles (Findable, Accessible, Interoperable, Reusable).<sup>43</sup> The difficult access to the still fragmented information, bibliometric, library and analytical resources and systems usable in R&D&I and in the search for innovation opportunities is also limiting.<sup>44</sup>

A significant barrier is the persistently high administrative burden associated with R&D financing, complemented by insufficiently coordinated procedures of various support providers.<sup>45</sup>

The regional level of strategic management of National RIS3 Strategy, which must complement the national level and whose structures were built mainly in the 2014-2020 programming period, is still insufficiently anchored in most regions. In countries and regions that figure among innovation leaders, the "soft infrastructure" supporting new ideas, knowledge sharing and dissemination, or talent concentration is an important asset. Some global companies purposefully place their research, development and other strategic capacities in regions with a developed infrastructure of this type, which further stimulates (not only) the economic development of such regions and countries.<sup>46</sup> In the Czech Republic, innovation policy is still a new agenda for most regions, as they started dealing with it only in recent years.<sup>47</sup> The South Moravian Region has systematically supported the innovation environment in the long term and as such serves as an inspiration for the other regions. According to analyses, the development of innovation ecosystems at regional level needs to be supported through a focused innovation strategy, systematically, without interruption and over the long term (more than 10 years) before regional management/support structures and tools are sufficiently stabilized and can deliver measurable results.<sup>48</sup> Quality of regional institutions and government is proven to be a key factor and precondition for successful implementation of RIS3 Strategy and regional development fostered by RIS3 Strategy – insufficient development and quality of these institutions and central and regional government sector is a significant burden for strengthening of smart specialisation in many less developed regions/countries, especially in EU13 including the Czech Republic.<sup>49</sup> The research and innovation performance thus continues to show significant differences among Czech regions.<sup>50</sup>

The absence of effective mechanisms and functional tools for managing and coordinating the implementation of R&D&I policy has a significant impact on the entire R&D&I system. Therefore, the support of strategic management in this area is a pre-condition for the development of R&D in CZ.<sup>51</sup> An important way of supporting R&D&I in CZ is also the strengthening of international visibility and science & research marketing, which is currently insufficient.<sup>52</sup>

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<sup>43</sup> Col.: *National Strategy for the Open Access of the Czech Republic to Scientific Information for the Period 2017-2020*. Prague: Office of the Government - RDI Council, 2017; col.: *Action plan for the implementation of the National Strategy for the Open Access of the Czech Republic to Scientific Information for the Period 2017-2020*. Prague: Office of the Government - RDI Council, 2019. Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>44</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>45</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>46</sup> Col.: *Mapping the Innovation Capacity of the Czech Republic - INKA*. Prague: TACR, 2016.

<sup>47</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>48</sup> Col.: *Evaluation of the call Smart Accelerator*. Prague: OP RDE MA, 2018; *Evaluation of the overall benefits of the Regional Innovation Strategy of the South Moravian Region*. Prague: Technology Center of the Czech Academy of Sciences, Technopolis Group, IREAS centre, 2018.

<sup>49</sup> Foray D., Morgan, K., Radošević, S.: *The role of Smart Specialisation in the EU research and innovation policy landscape*. European Commission, 2018.

Kettner T., Rodríguez-Pose A.: *Institutional change and the development of lagging regions in Europe*. Regional studies, 2020.

Blazek, J., Morgan, K.: *The institutional worlds of entrepreneurial discovery*. Routledge, 2019.

<sup>50</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>51</sup> OECD (2020), OECD Economic Surveys: Czech Republic 2020, p. 48, OECD Publishing, Paris, <https://doi.org/10.1787/1b180a5a-en>.

<sup>52</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

**P JAC will contribute to creating a functional and coordinated R&D&I management system and will enhance the image of the Czech Republic as a country with high innovation potential.**

- Strengthening strategic intelligence and competences for the management of R&D&I policy and support for innovation ecosystems at the national and regional level.
- Building the environment and capacities for the implementation of Open Science, including in particular the transition to a new model of making R&D&I results available in the Open Access mode, implementation of the EOSC initiative and access to research data in accordance with the FAIR principles and a systemic solution at the national level to ensure interconnection of information, bibliometric, library and analytical resources and systems usable in R&D&I.
- Strengthening the domestic and foreign image of CZ as a highly innovative country.

#### **1.1.5. PERSISTENT INSUFFICIENT CAPACITY FOR TOP RESEARCH WITH APPLICATION POTENTIAL**

The research system in CZ still remains relatively closed.<sup>53</sup> The involvement of research teams of Czech ROs in international research cooperation is significantly lower than in countries that are referred to as innovative leaders, i.e. countries with top-level R&D&I. The share of researchers from abroad in Czech public research institutions has long ranged only around 10-12%.<sup>54</sup> The lower involvement in international cooperation is also evident from the low participation of Czech entities in the European Horizon 2020 programme<sup>55</sup> or from the low number of joint scientific publications and patents created in international cooperation.<sup>56</sup> The figures of Czech ROs are below the European average and below the average of OECD countries.

A significant part of Czech ROs still do not have sufficient long-term and stable ties with research institutions from abroad. This entails not only a lower ability to participate and succeed in international grant programmes but also a closed research environment which is then less able to develop dynamically due to insufficient absorption of experience from abroad. The institutional environment of Czech ROs, which is not sufficiently internationalized,<sup>57</sup> is more prone to inbreeding, lagging behind and lower potential to produce excellent R&D results (represented, inter alia, by the low share (10%) of the world's most cited publications in the total number of publications - in 2018 it reached only less than 44% of the EU average in this indicator - a very below-average value)<sup>58</sup> and come up with innovative solutions that are applicable in practice and have the potential to succeed in international competition. Despite the support for the arrival of new scientists from abroad in recent years, the limited internationalization remains one of the most pressing problems of the Czech research system.<sup>59</sup>

One of the reasons for the inability to attract or retain a larger number of excellent researchers or promising young scientists from abroad is the insufficient preparedness of conditions in the Czech ROs for the arrival

<sup>53</sup> Col.: *National Policy for Research, Development and Innovation of the Czech Republic 2021+*. Prague: Office of the Government - RDI Council, 2020.; Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>54</sup> Col.: *Research and development indicators for 2019*. Prague: Czech Statistical Office, 2020.

<sup>55</sup> Col.: *From Horizon 2020 to Horizon Europe*. Brussels: European Commission, 2018 + *Exploring the performance gap in EU Framework Programmes between EU-13 and EU-15 Member States*, Brussels: European Parliament, 2020.

<sup>56</sup> Col.: *Macroeconomic and Sectoral Analysis of the Czech Republic*. Prague: MoRD-NCA, 2019.

<sup>57</sup> Col.: *Perspectives of Czech Science 2018, View of Researchers and Science Managers on the Czech Research Area in International Context*. České Budějovice: Biological Center of the Czech Academy of Sciences - University of South Bohemia in České Budějovice, 2018.; Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021;

<sup>58</sup> Maastricht Economic and Social Research Institute on Innovation and Technology – MERIT for European Commission: *European Innovation Scoreboard 2021*. Col.: *A new ERA for Research and Innovation*. Brussels: European Commission, 2021.

<sup>59</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021;

Col.: *National Policy for Research, Development and Innovation of the Czech Republic 2021+*. Prague: Office of the Government - RDI Council, 2020. Col.: *A new ERA for Research and Innovation*. Brussels: European Commission, 2020.

and retention of such workers. The necessary infrastructure to ensure the integration of researchers from abroad in the Czech environment is lacking, frequent obstacle being also the insufficient language skills of RO employees and their low openness.

The motivation of ROs to step up action towards internationalization should be also increased in the coming years by the newly set system of RO evaluation from the national level, but many of them face insufficient capacity to adapt to this trend. It is, therefore, necessary to support a change in the institutional environment of the ROs, a change in the setting of processes and the development of employees' competences so that the environment is attractive and favourable in the long term for foreign researchers and other qualified RO staff. At the same time, emphasis must be placed on active international mobility which will not only help the personal career development of researchers or their ability to formulate and implement research projects with new approaches, but also is a tool for establishing and developing international links for the ROs.

Significant weaknesses of the research and innovation system in CZ include the insufficiency in long-term cooperation of companies with public research area,<sup>60</sup> which is evident both from the low share of publications created in co-authorship of the public and private sector and the low expenditure of the business sector on research and development of public ROs (corporate funding spent on R&D in the government and higher education sector accounted for approximately 4% of total corporate R&D expenditure<sup>61</sup>). In both of the above parameters, CZ is well below the average of EU countries.<sup>62</sup> Revenues from the commercialization of results or knowledge transfer make up on average about 4.45% of total revenues of Czech ROs, which indicates a very limited interaction between research and application sector.<sup>63</sup> Mutual distrust of the actors persists, long-term cooperation of research and application sector is insufficiently built, and mutual functional mobility of workers is rather an exception. The so-called transition phase from research activities to commercialization (proof of concept phase, prototype verification, certification, etc.), interconnectedness and proportionality of the innovation chain from oriented research, through innovation and product up to profit and further reinvestment in research is insufficiently addressed.<sup>64</sup> The development of activities in this critical area must be substantially stimulated so that the potential of ROs for the applicability of their research results and the long-term orientation of their activities on areas usable in practice is fully utilized.<sup>65</sup>

Czech ROs also lag behind top European institutions in the area of their strategic management.<sup>66</sup> ROs are not sufficiently prepared for new challenges, such as the increasing pressure to protect intellectual property, closer cooperation with application sector or the implementation of Open Science/Open Access and Open Data.<sup>67</sup> Not enough attention is paid to human resource management and effective setup of processes.<sup>68</sup> Only some of the Czech ROs actively work with gender equality plans and only a limited number of them are able to boast about achieving the HR Award (HR Excellence in Research Award) granted by the European Commission for quality care for HR in the research environment.<sup>69</sup> For researchers, this award is a guarantee

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<sup>60</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021;

Col.: *National Policy for Research, Development and Innovation of the Czech Republic 2021+*. Prague: Office of the Government - RDI Council, 2020.

<sup>61</sup> MANA, M. – ŠTAMPACH, M.: *Research and development indicators 2019*. Prague: Czech Statistical Office, 2020

<sup>62</sup> Maastricht Economic and Social Research Institute on Innovation and Technology – MERIT for European Commission: *European Innovation Scoreboard 2020*

<sup>63</sup> MANA, M. – ŠTAMPACH, M.: *Research and development in the Czech Republic*. Prague: Czech Statistical Office, 2018.

<sup>64</sup> Col.: *Innovation Strategy of the Czech Republic 2019–2030*. Prague: Office of the Government - RDI Council, 2019.

<sup>65</sup> Col.: *A new ERA for Research and Innovation*. Brussels: European Commission, 2020

<sup>66</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>67</sup> Col.: *National Policy for Research, Development and Innovation of the Czech Republic 2021+*. Prague: Office of the Government - RDI Council, 2020.; Col.: *ESFRI White Paper 2020: Making Science Happen – A New Ambition for Research Infrastructures in the European Research Area*. Milano: ESFRI, 2020. Col.: *A new ERA for Research and Innovation*. Brussels: European Commission, 2020.

<sup>68</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>69</sup> As of 11 February 2021, 42 Czech research organizations or their parts received the HR Award. The first institution received this award in November 2018 - Euraxess Czech Republic.

of the European standard and can significantly contribute to attracting workers from abroad and to building long-term links with quality ROs abroad. The existence of gender equality plans is currently one of the conditions for receiving project funding from the Horizon Europe programme. Researchers are often overburdened with administration,<sup>70</sup> which hampers their research work, they often have only very limited prospects of career advancement (this fact is perceived mainly by young/beginning researchers), the environment is not sufficiently motivating. There is a lack of long-term and systematic support for the professional development of adequate administrative/project support teams. Czech ROs still have limits in the field of gender equality and they provide insufficient support for reconciling private and professional life and support for the return of parents from maternity and parental leave.<sup>71</sup>

The Czech Republic does not have a sufficient number of quality research and technical staff.<sup>72</sup> Highly qualified human resources are one of the basic pillars of quality research, without their sufficient quantity and adequate structure it is not possible to develop and stay at the forefront of international competition in the research areas on which CZ wants to focus. Therefore, interventions must not only support the influx and retention of quality researchers, but also create optimal conditions for strengthening up-to-date master's and doctoral degree programmes.

Despite the considerable advancement of the infrastructure for the implementation of quality research and development, the infrastructure in the Czech Republic still does not fully meet current needs, especially with regard to the speed of advancement of the infrastructure for excellent research and development in Europe and the world.<sup>73</sup> In previous programming periods, significant investments have been made in the establishment and development of ROs, but in connection with rapid technological development, their equipment needs to be constantly supplemented, upgraded and adapted to new trends, in order to make a full use of the already built infrastructure and to maximize the benefit from past investments this way.<sup>74</sup> CZ's ambition to rank among countries with the highest science and research performance in Europe can only be fulfilled if the infrastructure for top research applicable in practice meets the demanding requirement of owning up-to-date and state of the art technologies. The key backbone infrastructure should then be used to the maximum extent by all ROs in the Open Access mode. For reasons of effectiveness and focus on priority areas, it is necessary to maintain the entirely unique knowledge and technological level of the so-called large research infrastructures<sup>75</sup> that require continuous modernization in order to maintain an internationally competitive level in the long run.<sup>76</sup>

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<sup>70</sup> Col.: *Macroeconomic and Sectoral Analysis of the Czech Republic*. Prague: MoRD - NCA, 2019; Col.: *Perspectives of Czech Science 2018, View of Researchers and Science Managers on the Czech Research Area in International Context*. České Budějovice: Biological Center of the Czech Academy of Sciences - University of South Bohemia in České Budějovice, 2018.; Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>71</sup> Col.: *National Policy for Research, Development and Innovation of the Czech Republic 2021+*. Prague: Office of the Government - RDI Council, 2020.; Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021; OECD (2020), OECD Economic Surveys: Czech Republic 2020, p. 54, OECD Publishing, Paris, <https://doi.org/10.1787/1b180a5a-en>. Col.: *A new ERA for Research and Innovation*. Brussels: European Commission, 2020

<sup>72</sup> Col.: *National Policy for Research, Development and Innovation of the Czech Republic 2021+*. Prague: Office of the Government - RDI Council, 2020.; Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>73</sup> Col.: *Innovation Strategy of the Czech Republic 2019–2030*. Prague: Office of the Government - RDI Council, 2019.

<sup>74</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

<sup>75</sup> Col.: *ESFRI White Paper 2020: Making Science Happen - A New Ambition for Research Infrastructures in the European Research Area*. Milano: ESFRI, 2020. Col.: *A new ERA for Research and Innovation*. Brussels: European Commission, 2020.

<sup>76</sup> Col.: *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021-2027*. Prague: MIT, 2021.

**P JAC will contribute to increasing the competitiveness of the Czech Republic in the field of research and development by strengthening capacities for quality research and future usability of R&D&I results.**

- Strengthening internationalization and developing the institutional environment of research organizations.
- Increasing the openness of the research system and strengthening the involvement of research teams from Czech research organizations in international projects.
- Strengthening the cooperation of research organizations with application sector, strengthening the applicability of R&D&I results and strengthening the orientation of research in ROs on areas with high potential for applicability in practice.
- Ensuring a sufficient number of qualified staff in research and development including using women's potential.
- Ensuring up-to-date research infrastructure.
- Strengthening research excellence in areas identified as national priorities for R&D&I.

## **1.2. JUSTIFICATION FOR THE SELECTION OF POLICY OBJECTIVES AND THE RELATED SPECIFIC OBJECTIVES**

P JAC consists of two substantive priorities. The first priority is focused on supporting R&D, i.e. developing the infrastructure base and building capacities for R&D, as well as developing strategic management of ROs, developing human resources in R&D and building and strengthening cooperation with application sector and foreign partners, and will be financed by the European Regional Development Fund (hereinafter referred to as "ERDF").

The second priority aims to support all levels of education - from pre-school to postgraduate education – and will be funded by both the ERDF and the European Social Fund Plus (hereinafter referred to as "ESF+"). The specific objectives were chosen with regard to the weaknesses of the Czech education system and the R&D system identified above and will have positive impact on strengthening gender equality.

The contribution of the P JAC to the EU Strategy for the Danube Region (hereinafter referred to as "EUSDR") is only indirect, in areas where the supported interventions EUSDR in the field of education and R&D (7 Developing the knowledge society through research, education and information technology and 9 Investing in people's development and skills) overlap with the interventions in SO 1.1, SO 1.2 and SO 2.1., there are partial complementarities. Coordination mechanisms will be provided by membership in the relevant groups of EUSDR, in the Monitoring Committee of EUSDR or by ad hoc consultations.

P JAC will also support the implementation of Integrated territorial investments (hereinafter referred to as "ITI") in Priority 1. Based on the evaluation of interventions from the previous programming period and the analysis of the planned activities of the P JAC, the area of development of intersectoral cooperation in R&D was identified as the area with the greatest potential for the development of agglomerations. The implementation of the ITI will be carried out in accordance with the procedures set out in Chapter 10 of the Partnership Agreement.

**Table 1: Policy objectives and justification**

Policy objective	Specific objective	Justification (summary)
<p><b>Priority 1 focused on policy objective 1</b></p> <p>A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT interconnectedness</p>	<p>SO 1.1</p> <p>Developing and enhancing research and innovation capacities and the uptake of advanced technologies</p> <p>(a) i))</p>	<p>The selection of the specific objective follows the main strategic materials in the field of R&amp;D&amp;I, especially the National R&amp;D&amp;I Policy of the Czech Republic 2021+, the National RIS3 Strategy and the Innovation Strategy of the Czech Republic 2019-2030, Gender Equality Strategy for 2021-2030. It also reflects the findings and recommendations from country-specific recommendations. The main issues identified that should be addressed under this specific objective are:</p> <ul style="list-style-type: none"> <li>• the lack of openness of CZ's research system and low internationalization, a lower involvement in international cooperation, which result in inbreeding and lower performance of the entire system;</li> <li>• insufficient strategic management of ROs, insufficient readiness of the conditions for integration of researchers from abroad, insufficient human resources management and development also with regard to gender-related issues, insufficient project support;</li> <li>• insufficient cooperation of research with application sector, persistent mutual mistrust between actors, insufficient interconnection of the innovation chain resulting in a low orientation of research on the application potential and fewer applicable research results;</li> <li>• low number (in international comparison) of excellent centres and teams that carry out top research and development with high potential for applicability of their results in innovative products and services with high added value;</li> <li>• research and development infrastructure that does not fully meet current needs;</li> <li>• insufficient readiness and capacities of individual ROs as well as of national coordination for Open Science implementation;</li> <li>• insufficient capacities to implement the EOSC initiative, both at the level of backbone arrangements and at the level of individual research organizations;</li> <li>• fragmentation and disconnection of information, bibliometric, library and analytical resources and</li> </ul>

		<p>systems usable in R&amp;D&amp;I;</p> <ul style="list-style-type: none"> <li>• low level of communication of R&amp;D&amp;I achievements and results at the national and international level.</li> </ul> <p>In the specific objective 1.1 the MA did not identify the relevant potential for the use of financial instruments. Due to the nature of planned interventions characterized by high social benefits they are not expected to generate additional income or savings that would make them suitable for the use of financial instruments. Maintaining a non-repayable form of support in the form of a grant therefore seems to be the most appropriate. However, the MA plans to ensure that the ex-ante assessment of the use of financial instruments is updated.</p>
	<p>SO 1.2</p> <p>Developing skills for smart specialization, industrial transition and entrepreneurship</p> <p>(a) iv))</p>	<p>The selection of the specific objective follows the main strategic materials in the field of R&amp;D&amp;I, especially the National R&amp;D&amp;I Policy of the Czech Republic 2021+, the National RIS3 Strategy and the Innovation Strategy of the Czech Republic 2019-2030. It also reflects the findings and recommendations from country-specific recommendations. The main issues identified that should be addressed under this specific objective are:</p> <ul style="list-style-type: none"> <li>• fragmented strategic R&amp;D&amp;I management at national level, insufficient focus in line with National RIS3 Strategy;</li> <li>• still not fully anchored functional management of R&amp;D&amp;I and of developing the innovation environment at the regional level, which has a fundamental impact on R&amp;D&amp;I development and on progress towards smart specialization in the regions and thus in CZ as a whole. The persistent regional disparities in this area also need to be removed.</li> </ul> <p>In the specific objective 1.2 the MA did not identify the relevant potential for the use of financial instruments. Due to the nature of planned interventions characterized by high social benefits they are not expected to generate additional income or savings that would make them suitable for the use of financial instruments. Maintaining a non-repayable form of support in the form of a grant therefore seems to be the most appropriate. However, the MA plans to ensure that the ex-ante assessment of the use of financial instruments is updated.</p>

<p><b>Priority 2 focused on policy objective 4</b></p> <p>A more social and inclusive Europe implementing the European Pillar of Social Rights</p>	<p>SO 2.1</p> <p>Improving equal access to inclusive and quality services in education, training and lifelong learning through developing infrastructure, including by fostering resilience for distance and on-line education and training</p> <p>(d) ii))</p>	<p>The specific objective was selected following the basic strategic documents in the field of higher education, specifically the “Strategic Plan for Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions of the Czech Republic 2016-2020” and the “Strategic Plan of the Ministry for Higher Education 2021+”. It also reflects the findings and recommendations from country-specific recommendations. The main issues identified that should be addressed under this specific objective are:</p> <ul style="list-style-type: none"> <li>• insufficient accessibility of the higher education environment for students with SNs, including the necessary aids for such students;</li> <li>• outdated existing educational capacities (including instrumentation and aids) that do not match new trends in education, uncompetitive educational infrastructure compared to HEIs from developed countries;</li> <li>• Inadequate/outdated specialized infrastructure for vocational education and training in HEIs, not matching the current technological trends (especially in areas where technologies are developing rapidly).</li> </ul> <p>In the specific objective 2.1 the MA did not identify the relevant potential for the use of financial instruments. Due to the nature of planned interventions characterized by high social benefits they are not expected to generate additional income or savings that would make them suitable for the use of financial instruments. Maintaining a non-repayable form of support in the form of a grant therefore seems to be the most appropriate. However, the MA plans to ensure that the ex-ante assessment of the use of financial instruments is updated.</p>
	<p>SO 2.2</p> <p>Improving the quality, inclusiveness effectiveness and labour market relevance of education and training systems, including through validation of non-formal and informal learning, to support</p>	<p>The specific objective was selected following the Strategy for the Education Policy of the Czech Republic until 2030+, the Strategic Plan of the Ministry for Higher Education 2021+, the National Reform Programme, the Report on the Czech Republic, Gender Equality Strategy for 2021-2030, and the so-called country-specific recommendations. The main issues identified that should be addressed under this specific objective are:</p> <ul style="list-style-type: none"> <li>• stagnant or declining literacy scores in international testing;</li> <li>• increasing percentage of pupils not achieving the</li> </ul>

	<p>acquisition of key competences, including entrepreneurial and digital skills, and by promoting the introduction of dual-training systems and apprenticeships</p> <p>(e))</p>	<p>basic literacy levels;</p> <ul style="list-style-type: none"> <li>• insufficient support for the development of digital literacy and computational thinking;</li> <li>• insufficiently developed teaching of key competences;</li> <li>• highly differentiated and specialized secondary vocational education;</li> <li>• predominant frontal teaching with a lower involvement of teaching aids and modern didactic methods and forms of teaching and with a lower use of activities requiring independent active approach of pupils;</li> <li>• insufficient consideration of gender equality in the content, form and methods of education;</li> <li>• insufficient support dedicated to preventing transmission of gender stereotypes which result in stereotypical educational pathways;</li> <li>• low support for professional development of school leaders;</li> <li>• low representation of study programmes that are taught in foreign languages or in cooperation with foreign HEIs;</li> <li>• low internationalization of HEIs and low language skills of HEI students and staff;</li> <li>• insufficiently developed effective cooperation with industry in study programmes offered by HEIs; low number of study programmes involving practice;</li> <li>• insufficient emphasis on the development of digital, soft and entrepreneurial competences of HEI students and on inclusion of new methods in teaching;</li> <li>• inappropriate setting of the structure of study programmes that are offered in the combined/distance form of study, their low number;</li> <li>• insufficient readiness of HEI staff to work with a specific target group studying in combined/distance study programmes;</li> <li>• insufficiently developed work with potential applicants for HEI study;</li> <li>• high rate of academic failure at all levels of study;</li> <li>• high rate of graduates who work outside their area of specialization within the first 3 years.</li> </ul> <p>In the specific objective 2.2 the MA did not identify the</p>
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		<p>relevant potential for the use of financial instruments. Due to the nature of planned interventions characterized by high social benefits they are not expected to generate additional income or savings that would make them suitable for the use of financial instruments. Maintaining a non-repayable form of support in the form of a grant therefore seems to be the most appropriate. However, the MA plans to ensure that the ex-ante assessment of the use of financial instruments is updated.</p>
	<p>SO 2.3</p> <p>Promoting equal access to and completion of quality and inclusive education and training, in particular for disadvantaged groups, from early childhood education and care through general education and vocational education and training, to tertiary level, as well as adult education and learning, including facilitating learning mobility for all and accessibility for persons with disabilities.</p> <p>(f))</p>	<p>The specific objective was selected following the Strategy for the Education Policy of the Czech Republic until 2030+, the Strategic Plan of the Ministry for Higher Education 2021+, the National Reform Programme, and the Report on the Czech Republic and the country-specific recommendations. The main issues identified that should be addressed under this specific objective are:</p> <ul style="list-style-type: none"> <li>• lack of openness and equity of the education system, which prevents adequate development of everyone's potential throughout their lives;</li> <li>• significant inequalities in the quality of schools as well as disparities within regions;</li> <li>• unsatisfactory share of early school leavers and a high academic failure rate of students;</li> <li>• early selection of children and pupils for different types of schools and classes, which to a large extent predetermines their further educational and professional paths;</li> <li>• insufficient material equipment of schools and school facilities that does not meet the current needs of teaching and training;</li> <li>• insufficient readiness of teachers and educators to work with heterogeneous groups;</li> <li>• absence of an adequate scope of support for the teacher's work by school psychologists and other specialists;</li> <li>• absence of systematic long-term analyses monitoring the effectiveness of tools designed to achieve equal access to quality and inclusive education and training;</li> <li>• inadequacy of the data base built in longer time series for the evaluation of tools and measures aimed at achieving equal access, from the national level to the level of schools, including</li> </ul>

		<p>the context of international comparison;</p> <ul style="list-style-type: none"> <li>• low permeability of information systems of institutions and other actors of the educational system as a barrier to effective sharing of source data and results of their processing;</li> <li>• insufficient participation of persons with SNs in the higher education environment;</li> <li>• insufficient interest of students with SNs in participating in mobility schemes.</li> </ul> <p>In the specific objective 2.3 the MA did not identify the relevant potential for the use of financial instruments. Due to the nature of planned interventions characterized by high social benefits they are not expected to generate additional income or savings that would make them suitable for the use of financial instruments. Maintaining a non-repayable form of support in the form of a grant therefore seems to be the most appropriate. However, the MA plans to ensure that the ex-ante assessment of the use of financial instruments is updated.</p>
	<p>SO 2.4</p> <p>Promoting the socio-economic integration of marginalised communities, such as Roma people</p> <p>(j))</p>	<p>The specific objective was selected following the Strategy for the Education Policy of the Czech Republic until 2030+, the Strategy for Equality, Integration and Participation of the Roma Communities 2021-2030 (The Roma Integration Strategy), the National Reform Programme, and the Report on the Czech Republic and the so-called Country-specific recommendations. The main issues identified that should be addressed under this specific objective are:</p> <ul style="list-style-type: none"> <li>• persisting inequalities in access to education between individual schools and within the schools;</li> <li>• inability of schools and school facilities to sufficiently compensate for the influence of the pupil's socio-economic background;</li> <li>• insufficient participation of children from socially disadvantaged backgrounds, especially the Roma communities and other marginalized groups in all grades of pre-school education and their insufficient preparedness for further education in primary schools;</li> <li>• low motivation of children, pupils and students to learn, especially during transition between individual stages of educational system;</li> </ul>

		<ul style="list-style-type: none"> <li>• insufficient preparedness of educational staff in terms of working with children, pupils and students from marginalized backgrounds, such as the Roma, or with children, pupils and students from socially disadvantaged backgrounds or those at risk of academic failure;</li> <li>• low participation rate of parents (or legal guardians) in the education process of children, pupils and students from Roma communities and from other marginalized backgrounds.</li> </ul> <p>In the specific objective 2.4 the MA did not identify the relevant potential for the use of financial instruments. Due to the nature of planned interventions characterized by high social benefits they are not expected to generate additional income or savings that would make them suitable for the use of financial instruments. Maintaining a non-repayable form of support in the form of a grant therefore seems to be the most appropriate. However, the MA plans to ensure that the ex-ante assessment of the use of financial instruments is updated.</p>
	<p>SO 2.5</p> <p>Promoting lifelong learning, in particular flexible upskilling and reskilling opportunities for all taking into account entrepreneurial and digital skills, better anticipating changes and new skills requirements based on labour market needs, facilitating career transitions and promoting professional mobility (g))</p>	<p>The specific objective was selected following the basic strategic documents in the field of higher education, specifically the “Long-term plan of educational, scientific, research, development and innovation, artistic and other creative activities for higher education of the Czech Republic 2016-2020” and the Strategic Plan of the Ministry for Higher Education 2021+, together with the overarching Strategy for the Educational Policy of the Czech Republic until 2030+ and the Report on the Czech Republic and the so-called Country-specific recommendations. The main issues identified that should be addressed under this specific objective are:</p> <ul style="list-style-type: none"> <li>• insufficient offer and availability of civic education;</li> <li>• insufficient offer of training on the possibilities of use and application of modern technologies;</li> <li>• low support for civic education;</li> <li>• insufficient preparedness of the academic staff for teaching in lifelong education programmes;</li> <li>• insufficient offer of lifelong education programmes in HEIs;</li> <li>• low support for lifelong education programmes in relation to their management in HEIs;</li> </ul>

		<ul style="list-style-type: none"> <li>• insufficient material, technical and personnel provision for lifelong education programmes.</li> </ul> <p>In the specific objective 2.5 the MA did not identify the relevant potential for the use of financial instruments. Due to the nature of planned interventions characterized by high social benefits they are not expected to generate additional income or savings that would make them suitable for the use of financial instruments. Maintaining a non-repayable form of support in the form of a grant therefore seems to be the most appropriate. However, the MA plans to ensure that the ex-ante assessment of the use of financial instruments is updated.</p>
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## 2. PRIORITIES

Table 2: Programme structure

ID	Title	TA	Basis for calculation	Fund	Category of region supported	Specific objective selected <sup>77</sup>
1	Priority 1 – Research and Development	No	Total eligible expenditure	ERDF	More developed	SO 1.1 (i)) Developing and enhancing research and innovation capacities and the uptake of advanced technologies
					Transition	
					Less developed	
		No	Total eligible expenditure	ERDF	More developed	SO 1.2 (iv)) Developing skills for smart specialisation, industrial transition and entrepreneurship
					Transition	
					Less developed	
2	Priority 2 – Education	No	Total eligible expenditure	ERDF	More developed	SO 2.1 (ii)) Improving equal access to inclusive and quality services in education, training and lifelong learning through developing infrastructure, including by fostering resilience for distance and on-line education and training
					Transition	
					Less developed	
		No	Total eligible expenditure	ESF+	More developed	SO 2.2 (e)) Improving the quality, inclusiveness, effectiveness and labour market relevance of education and training systems including through validation of non- formal and informal learning, to support acquisition of key competences including entrepreneurial and digital skills, and by promoting the introduction of dual-training systems and apprenticeships
					Transition	
					Less developed	
		No	Total eligible expenditure	ESF+	More developed	SO 2.3 (f)) Promoting equal access to and completion of, quality and inclusive education and training, in particular for disadvantaged groups, from early childhood education and care through general and vocational education and training, to tertiary level, as well as adult education and learning, including facilitating learning mobility for all and accessibility for persons with disabilities
					Transition	
					Less developed	
		No	Total eligible expenditure	ESF+	More developed	SO 2.4 (j)) Promoting the socio- economic integration of marginalised communities such as Roma people
					Transition	
					Less developed	
		No	Total eligible expenditure	ESF+	More developed	SO 2.5 (g)) Promoting lifelong learning, in particular flexible upskilling and reskilling opportunities for all taking into account entrepreneurial and digital skills, better anticipating change and new skills requirements based on labour market needs, facilitating career transitions and promoting professional mobility
					Transition	
					Less developed	
3	Priority 3 – Technical assistance	Yes	Total eligible expenditure	ERDF	More developed	SO 3.1 Not applicable
					Transition	
					Less developed	
4	Priority 4 – Technical assistance	Yes	Total eligible expenditure	ESF+	More developed	SO 4.1 Not applicable
					Transition	
					Less developed	

<sup>77</sup> The specific objective number is the internal designation of the MA, the specific objective number in brackets is the designation referring to Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions.

## 2.1. PRIORITY 1 - RESEARCH AND DEVELOPMENT (P1)

### 2.1.1. SO 1.1 DEVELOPING AND ENHANCING RESEARCH AND INNOVATION CAPACITIES AND DEPLOYING ADVANCED TECHNOLOGIES

#### 2.1.1.1. Interventions of the Funds

##### *The related types of actions*

SO 1.1 is focused on supporting the development of facilities and capacities of the research environment in CZ so that sufficient-quality conditions are created for the development of top research, the results of which respond to current needs and trends. Interventions should lead to the applicability of research results in practice in the long term so as to strengthen the competitiveness of CZ.

The key areas are support for the development and setting of the institutional environment of ROs so that modern principles of human resources management for the needs of implementation of National RIS3 Strategy are implemented, including measures to promote and achieve gender equality, creation of a favourable environment for attracting and retaining foreign workers and for effective cooperation with application sector. Interventions will also address supportive environment for R&D&I activities, including e.g. technical staff. Moreover, interventions will strengthen the internationalization of the research environment, both by building long-term relationships with foreign ROs and building research teams that include foreign workers, or at the project level by supporting participation in international R&D programmes. Furthermore, the interventions will support the development of the application potential of ROs, especially establish cooperation with entities from application sector, and strengthen the ability to create and effectively use research results in practice. Support will be provided towards creating conditions for the development of priority excellent R&D&I centres that will carry out top internationally competitive R&D with significant socio-economic impacts and with an influence on the development of the innovation potential of CZ. A significant part will be support for developing the infrastructure equipment of so-called large research infrastructures that are open by their operators to all potential users on the principle of open access and are thus an important basis for R&D&I in CZ as well as drivers of regional development.

The research environment will be further supported by systemic measures at the national level, aimed in particular at preparing the research environment for the implementation of Open Science, including preparation for a paradigmatic change in the model of making source R&D&I data available in the Open Data mode, in line with the EOSC initiative and FAIR principles, and a systemic setting of more effective coordination, accessibility and work with information sources and data in R&D&I. When preparing the systemic measures, the already implemented activities within relevant national projects (so called “shared activities projects”) and other activities of entities on national level will be considered in order to prevent their duplicity.

Coordination and a systematic approach to the presentation of R&D&I achievements and results at the national and international level will also be strengthened, both towards the professional and general public.

All interventions will be implemented in line with the priorities defined in the National RIS3 Strategy.

##### **The interventions will result in:**

- an attractive, fair and motivating institutional environment of ROs;
- opening the CZ research area to international cooperation;

- higher involvement of Czech ROs in international initiatives and programmes;
- more intensive cooperation between ROs and application sector;
- increase of the potential and ability to apply research results in practice;
- increase of the number of excellent research teams;
- quality infrastructure meeting the needs of top research;
- an environment adapted for the implementation of Open Science;
- global visibility of CZ as a country with high research and innovation potential.

#### **Examples of the supported activities:**

Institutional environment of ROs, internationalization and development of human potential:

- the HR Award gain, measures supporting gender equality including creation and implementation of gender equality plans for the ROs;
- development of tools for R&D human resources management for the needs of implementation of the National RIS3 Strategy;
- training in professional and other skills relevant for priorities of the National RIS3 Strategy such as skills for international and cross-sectoral cooperation of ROs, effective knowledge and technology transfer, competences in the field of intellectual property rights, entrepreneurial skills of researchers etc.;
- language training of RO employees;
- development of specialised capacities supporting research teams in their advancement, development and internationalisation, in their research work and in increasing of usability of their R&D outcomes in applications (e.g. welcome offices, CTOs);
- development of favourable conditions for young researchers to build their own research groups after graduation;
- promotion of R&D&I results;
- international and cross-sectoral mobility;
- development of know-how to increase participation in international grant programmes, including support for engaging in international cooperation projects in R&D;
- involvement of students (i.e. future researchers) in research projects;
- development of conditions for the arrival and adaptation of researchers and technical and other professional staff from abroad;
- support for the reconciliation of professional and private life and reducing gender inequalities in R&D&I.

Development of the application potential of ROs:

- oriented research projects with application potential, including the proof-of-concept phase;
- oriented research projects in cooperation with entities from application sector, including installations of the necessary infrastructure;
- setting up favourable conditions for applying knowledge transfer / technology transfer in practice (including conditions for establishing start-ups / spin-offs) within the RO;
- establishment / development of structures and platforms enabling effective cooperation of research with application sector;
- establishment / development of partnerships / cooperation with partners from application sector, including mobility of workers;

- development of cooperation between HEIs and ROs and application sector already during the process of future researchers training (within postgraduate study), development of favourable environment for the Knowledge Transfer Partnership;
- preparation of joint project proposals with entities from application sector for national and international grant schemes;
- dissemination of R&D results carried out jointly with entities from application sector.

#### Excellence in research:

- multi-annual interdisciplinary research projects with high potential for top R&D&I results, including support for human resources development, cooperation with foreign partners, involvement of young promising researchers, provision of the necessary infrastructure equipment.

#### Complementarity to Horizon Europe programme:

- co-financing of projects supported under the specific implementation instruments of the Horizon Europe framework programme, requiring financial participation of Member States;
- financing of high-quality project proposals submitted to Horizon Europe, which have not been funded due to a lack of budgetary resources on the part of the European Commission (including Seal of Excellence projects);
- other synergies with Horizon Europe.

#### Infrastructure for R&D&I:

- modernization of research equipment, both as part of research projects and in terms of developing the infrastructure base for R&D&I (support of so-called large research infrastructures in line with the actual Roadmap of Large Research Infrastructures of the Czech Republic);
- development of infrastructure for training of future researchers;
- necessary expansion of the infrastructure following trends in strategic management of R&D&I;
- in-kind contributions to research infrastructures in connection with specific research projects or membership in international consortia of research infrastructures.

#### Systemic measures at national level to support the research and innovation environment:

- development of strategic R&D&I management on national level, reflecting the role of the Research, Development and Innovation Council<sup>78</sup>;
- establishment / development of an aggregating, search and analytical apparatus for interconnecting the particular information, bibliometric, library and analytical resources and systems following the needs of R&D&I and on the basis of Open Science principles;
- preparation for the implementation of the EOSC initiative, including:
  - support for Data Management Plans;
  - support for repositories necessary for the implementation of Open Science and the FAIR principles;
  - support for human resources for Open Science development;
- promotion of Open Access / Open Science within the research community, enabling its implementation;
- promotion of the R&D&I results and achievements in CZ and abroad;

<sup>78</sup> In accordance with Act No. 130/2002 Coll., on the Support of Research and Development from Public Funds, and on the amendment of certain related Acts (the Research and Development Support Act), as amended.

- promotion/popularization of global R&D&I results and the innovation trends arising from them.

The above-mentioned examples of the related types of activities were considered as compatible with the 'do not significant harm' (DNSH) principle, due to their nature they are not expected to have any significant negative effect on the environment.

#### **Link to other programmes**

In accordance with the Partnership Agreement the link (mutual complementarity of support) in the R&D field is set between P JAC and the Programme Technologies and Application for Competitiveness (hereinafter referred to as "P TAC"), the Programme Fisheries, the Programme Just Transition (hereinafter referred to as "P JT") and the National Recovery Plan (hereinafter referred to as "NRP"). At the same time, a link to Horizon Europe is expected in the area of R&D support.

#### ***The main target groups***

##### **The main target groups are:**

- RO staff;
- HEI students;
- application sector's staff;

#### ***Actions to ensure equality, inclusion and non-discrimination***

The planned activities include creation and implementation of gender equality plans, introduction of the sex and gender perspective into the R&D&I sector, support for work-life balance of the researchers, support for parents returning from maternity/parental leave, reduction of gender inequalities in R&D&I, etc. In general, compliance with the horizontal principles will be assessed in each project.

#### ***Specific territories targeted, including the planned use of territorial tools***

Activities supported under the specific objective will be implemented in all CZ regions including the Capital City of Prague, i.e. in more developed, less developed and transition regions of CZ.

Under the specific objective only operations with impact on more than one category of regions will be supported (the options provided by Article 63 (3) of the Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy (hereinafter referred as of "General Regulation") will be fully applicable).

These operations will be financed as a combination of allocations from all categories of regions. These are operations whose main goal is the development of cooperation between the academic and application sphere (especially corporate), as an objective indicator the amount of R&D expenditures in the business sector will be used. For other planned interventions, the primary objective of which is to develop the capacity (infrastructure and personnel) of research organizations and related systemic measures either at the level of the whole research environment (systemic interventions/IPs) or at the level of specific research organizations, the proportion of R&D workplaces in individual categories of regions will be used.

Selected interventions will be implemented using the ITI instruments for metropolitan areas and agglomerations. In particular, specific intervention for ITI within the framework of support of long-term inter-sectoral cooperation is to be implemented.

### The interregional and transnational actions

Selected activities can be carried out in cooperation/partnership with entities from other EU Member States or non-EU countries.

### The planned use of financial instruments

The possibilities of using financial instruments (hereinafter referred to as “FIs”) are limited in this SO.

In 2018, the Managing Authority of the OP RDE (hereinafter referred to as “MA OP RDE”) performed a preliminary assessment of the pilot use of FIs in the OP RDE (in accordance with Regulation (EU) No. 1303/2013 of the European Parliament and of the Council).<sup>79</sup> Based on an analysis and after careful consideration of all related risks and the current phase of implementation of the OP RDE, the MA decided not to continue with the implementation of FIs. In the second half of 2021, the MA started updating the ex-ante assessment for the programming period 2021-2027. An updated ex-ante assessment of the use of FIs in P JAC should be prepared during the first half of 2022.

#### 2.1.1.2. Indicators

Table 3: Output indicators

Priority	Specific objective	Fund	Category of region	ID	Indicator	Measurement unit	Milestone (2024)	Target (2029)
P1	1.1	ERDF	More developed	RCO06	Researchers working in supported research facilities	Annual FTEs	23	224
			Transition				42	400
			Less developed				35	336
			More developed	244 001	Number of research organizations supported	Organizations	4	16
			Transition				9	29
			Less developed				8	25
			More developed	215 012	Number of newly created strategic R&D&I management products	Products	0	46
			Transition				0	86
			Less developed				0	88
			More developed	RCO08	Nominal value and innovation equipment	Euro	2 470 588	125 752 941
			Transition				4 588 235	233 541 176
			Less developed				4 705 882	239 529 412
			More developed	RCO74	Population covered by projects in the framework of strategies for integrated territorial development	Persons	0	844 700
			Transition				0	1 439 120
			Less developed				0	844 700
			More developed	RCO75	Strategies for integrated territorial development supported	Contributions to strategies	0	2,43
			Transition				0	4,14
			Less developed				0	2,43

<sup>79</sup> Col.: Ex ante assessment of the pilot use of financial instruments in the Operational Programme Research, Development and Education 2014-2020. Prague: Deloitte, 2019, <https://opvvv.msmt.cz/download/file2625.pdf> [2020-01-01].

**Table 4: Result indicators**

Priority	Specific Objective	Fund	Category of region	ID	Indicator	Measurement unit	Baseline or reference value	Reference year	Target (2029)	Source of data	Comments
P1	1.1	ERDF	More developed	244 011	Number of institutions affected by interventions	Institutions	0	2021	23	Project implementation report	
			Transition				0		43		
			Less developed				0		39		
			More developed	RCR08	Publications from supported projects	Publications	0	2021	1 901	Project implementation report	
			Transition				0		3 481		
			Less developed				0		3 322		
			More developed	RCR06	Patent applications submitted	Patent applications	0	2021	35	Project implementation report	
			Transition				0		64		
			Less developed				0		61		

### 2.1.1.3. Indicative breakdown of the programme resources (EU) by type of intervention

**Table 5: SO 1.1: Dimension 1 – intervention field**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P1	ERDF	More developed	1.1	04	68 402 823
		Transition			252 080 464
		Less developed			174 245 478
		More developed		12	31 156 377
		Transition			114 818 563
		Less developed			79 995 315
		More developed		23	11 329 592
		Transition			41 752 205
		Less developed			29 089 205
		More developed		28	22 659 183
		Transition			83 504 409
		Less developed			58 178 411
		More developed		29	8 071 919
		Transition			29 746 916
		Less developed			22 106 659

**Table 6: SO 1.1: Dimension 2 – form of financing**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P1	ERDF	More developed	1.1	01	138 035 060
		Transition			508 691 603
		Less developed			354 410 856
		More developed		03	3 584 834
		Transition			13 210 954
		Less developed			9 204 212

**Table 7: SO 1.1: Dimension 3 – territorial delivery mechanism and territorial focus**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P1	ERDF	More developed	1.1	03	9 058 318
		Transition			33 382 029
		Less developed			23 257 615
		More developed		33	132 561 576
		Transition			488 520 528
		Less developed			340 357 453

**Table 8: SO 1.1: Dimension 7 – ESF+, ERDF, CF and JTF and gender equality dimension**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P1	ERDF	More developed	1.1	01	5 642 656
		Transition			20 794 511
		Less developed			14 487 757
		More developed		03	135 977 238
		Transition			501 108 046
		Less developed			349 127 311

## 2.1.2. SO 1.2 DEVELOPING SKILLS FOR SMART SPECIALIZATION, INDUSTRIAL TRANSITION AND ENTREPRENEURSHIP

### 2.1.2.1. Interventions of the Funds

#### *The related types of actions*

SO 1.2 is focused on supporting further strengthening of strategic management and implementation of National RIS3 Strategy at the national and regional level and their functional and coordinated interconnection.

Support under this specific objective will strengthen capacities and competences for the implementation of effective, triple/quadruple-helix modelled and coordinated management of the National RIS3 Strategy at the national level and its interconnection with the regional level. At the regional level, support will focus on so-called soft infrastructures such as Smart Accelerator, which contribute to creating conditions for enhancing smart specialization, developing innovation ecosystems and developing cooperation between the triple/quadruple helix actors (especially research institutions, educational institutions, companies and the public sector) within regions.

When preparing the systemic measures, the already implemented activities within relevant national projects (so called “shared activities projects”) and other activities of entities on national level will be considered in order to prevent their duplicity.

All interventions will be implemented in line with the priorities defined in the National RIS3 Strategy.

#### **The interventions will result in:**

- strengthening of a functional and coordinated management at the national level, including its functional and coordinated interconnection with the regional level;
- new concept features shifting the National RIS3 Strategy from the “S3” towards the “S4”<sup>80</sup> concept, including RIS3 missions pilot;

<sup>80</sup> Mccann, P. and Soete, L., *Place-based innovation for sustainability*, Publications Office of the European Union, Luxembourg, 2020, <https://publications.jrc.ec.europa.eu/repository/handle/JRC121271> [2022-01-04].

- the transfer of best practice from abroad in the field of R&D&I policy management and implementation of modern R&D&I support tools and targeting towards smart specialisation;
- strengthened cooperation between business, academia and the public sector in the EDP and enhancement of the EDP management tools;
- development of local innovation ecosystems and strengthened smart specialization through targeted (tailor-made) interventions/tools at regional level;
- stronger interconnection and cooperation of actors across the triple/quadruple helix sectors forming the regional innovation systems;
- strengthening of cooperation of Czech Republic with foreign countries in the priority areas of National RIS3 Strategy;
- increase of public research relevance reflecting the needs and potential of application sector and maximization of its economic and societal benefits.

#### **Examples of the supported activities:**

Strengthening strategic intelligence, qualifications and competences to ensure strategic and coordinated management and implementation of the National RIS3 Strategy on the national level and its functional interconnection with the regional level to safeguard continuous fulfilment of the RIS3 enabling condition subcriteria<sup>81</sup> throughout the entire programming period, primarily via:

- enhancement of the (continuous) EDP involving actors/stakeholders of the so-called triple/quadruple helix in the processes of effective and future-oriented prioritization of the R&D&I policy in accordance with the smart specialization principles;
- development of cooperation between institutions (including specialized national and regional agencies, etc.) responsible for the strategic management of the National RIS3 Strategy and for the preparation and implementation of R&D&I support instruments at the national and regional level, including cooperation with experienced foreign institutions of this type;
- acquisition of foreign experience and good practices; support of international cooperation of Czech Republic with foreign countries in the priority areas of National RIS3 Strategy;
- advanced mapping and analysing the research and innovation environment, evaluating current and future needs of the economy and society, identifying opportunities and threats (using foresight and other modern methods and using the interconnection of various information/data sources and analytical tools), utilising the findings for the National RIS3 Strategy as well as for its implementation tools and their effective targeting, monitoring and evaluation;
- evaluation of policies and strategies focused on R&D&I and technologies and their tools, use of the evaluation results for strategic management of the National RIS3 Strategy;
- strategic development of new elements in the National RIS3 Strategy shifting the “S3” concept towards “S4”, including element of “mission -oriented approach”, aiming to react on great societal challenges and megatrends evaluation of the impact of new technologies on society in accordance with the principles of responsible research and innovation;
- networking of actors in the research and innovation environment, removing of identified barriers and increase of relevance of research to the needs of the economy and society;

<sup>81</sup> In accordance with Annex IV of the General Regulation – Policy objective 1, Specific objectives 1.1 and 1.4.

- support for the design/preparation and of pilot verification processes for specific new/innovated regional strategic instruments/interventions to enhance regional innovation systems and strengthen the smart specialization of regions in line with their RIS3 Strategies – e.g. in the following areas<sup>82</sup>:
  - facilitation of overcoming the barriers between the sectors of the triple/quadruple helix, networking among actors in the innovation environment, strengthening those links and supporting/facilitating the emergence of new projects or other forms of cooperation inside and outside the region (including abroad);
  - promotion of regions as an environment with innovation potential - attractive for qualified professionals and for innovative entrepreneurship, linkage to marketing/promotion of R&D&I at the national level;
  - promotion and support of entrepreneurship and increase of the innovation potential of different innovation ecosystem actors (including ROs, firms, beginning entrepreneurs, schools/HEIs, public administration etc.);
  - support for quality increase, openness and relevance of public research reflecting the needs and potential of application sector;
  - support of human resources and competences/skills following the needs of R&D&I, smart specialization, industrial transition and entrepreneurship;
  - support of assistance services for the arrival of qualified (especially foreign) workers in the region;
  - support for the popularization of research and innovative entrepreneurship.

The above-mentioned examples of the related types of activities were considered as compatible with the 'do not significant harm' (DNSH) principle, due to their nature they are not expected to have any significant negative effect on the environment.

#### **Link to other programmes**

In accordance with the Partnership Agreement, the link (mutual complementarity of support) in the area of support of competencies/skills/knowledge is set among P JAC and P TAC, Programme Employment Plus (hereinafter referred to as “P E+”), P JT and NRP.

#### ***The main target groups***

##### **The main target groups are:**

- actors in the research and innovation ecosystem (quadruple-helix).

#### ***Actions to ensure equality, inclusion and non-discrimination***

In general, compliance with the horizontal principles will be assessed in each project.

#### ***Specific territories targeted, including the planned use of territorial tools***

Activities supported under the specific objective will be implemented in all CZ regions including the Capital City of Prague, i.e. in more developed, less developed and transition regions of CZ.

Only operations with impact on more than one category of region will be supported under the specific objective (the options provided by Article 63 (3) of the General Regulation will be fully applicable). These operations will be financed as a combination of allocations from all categories of regions according to the indicator of R&D expenditure in the business sector. This indicator was chosen with regard to the fact that

<sup>82</sup> This is not a final list, specific regional instruments are the result of the bottom-up RIS3 priorities of individual regions and their invention in the design of new instruments or transfer of new instruments from foreign best practice.

the goal of interventions in the SO is primarily the development of cooperation between the academic and application sphere, especially corporate.

### ***The interregional and transnational actions***

The planned activities under the specific objective do not foresee the involvement of beneficiaries from other EU Member States or non-EU countries.

### ***The planned use of financial instruments***

The possibilities of using FI are limited in this SO.

In 2018, the MA OP RDE performed a preliminary assessment of the pilot use of FIs in the OP RDE (in accordance with Regulation (EU) No. 1303/2013 of the European Parliament and of the Council).<sup>83</sup> Based on an analysis and after careful consideration of all related risks and the current phase of implementation of the OP RDE, the MA decided not to continue with the implementation of FIs. In the second half of 2021, the MA started updating the ex-ante assessment for the programming period 2021-2027. An updated ex-ante assessment of the use of FIs in P JAC should be prepared during the first half of 2022.

## **2.1.2.2. Indicators**

**Table 9: Output indicators**

Priority	Specific objective	Fund	Category of region	ID	Indicator	Measurement unit	Milestone (2024)	Target (2029)
P1	1.2	ERDF	More developed	215 012	Number of newly created strategic R&D&I management products	Products	0	26
			Transition				0	46
			Less developed				0	26
			More developed	RCO16	Number of participations of institutional stakeholders in entrepreneurial discovery process (EDP)	Participations of institutional stakeholders	35	138
			Transition				58	234
			Less developed				35	138

**Table 10: Result indicators**

Priority	Specific objective	Fund	Category of region	ID	Indicator	Measurement unit	Baseline or reference value	Reference year	Target (2029)	Source of data	Comments
P1	1.2	ERDF	More developed	244 011	Number of institutions affected by interventions	Institutions	0	2021	40	Project implementation report	
			Transition				0		67		
			Less developed				0		40		

<sup>83</sup> Col.: Ex ante assessment of the pilot use of financial instruments in the Operational Programme Research, Development and Education 2014-2020. Prague: Deloitte, 2019, <https://opvvv.msmt.cz/download/file2625.pdf> [2020-01-01].

### 2.1.2.3. Indicative breakdown of the programme resources (EU) by type of intervention

**Table 11: SO 1.2: Dimension 1 – intervention field**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P1	ERDF	More developed	1.2	23	12 130 941
		Transition			44 705 365
		Less developed			31 146 704

**Table 12: SO 1.2: Dimension 2 – form of financing**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P1	ERDF	More developed	1.2	01	12 130 941
		Transition			44 705 365
		Less developed			31 146 704

**Table 13: SO 1.2: Dimension 3 – territorial delivery mechanism and territorial focus**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P1	ERDF	More developed	1.2	33	12 130 941
		Transition			44 705 365
		Less developed			31 146 704

**Table 14: SO 1.2: Dimension 7 – ESF+, ERDF, CF and JTF and gender equality dimension**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P1	ERDF	More developed	1.2	03	12 130 941
		Transition			44 705 365
		Less developed			31 146 704

## 2.2. PRIORITY 2 – EDUCATION (P2)

### 2.2.1. SO 2.1 IMPROVING EQUAL ACCESS TO INCLUSIVE AND QUALITY SERVICES IN EDUCATION, TRAINING AND LIFELONG LEARNING THROUGH DEVELOPING ACCESSIBLE INFRASTRUCTURE, INCLUDING BY FOSTERING RESILIENCE FOR DISTANCE AND ON-LINE EDUCATION AND TRAINING

#### 2.2.1.1. Interventions of the Funds

##### *The related types of actions*

The interventions will serve as supplemental investment support for activities implemented in SO 2.2, SO 2.3 and SO 2.4 (financed from ESF+) at HEIs, or the interventions will follow on from similar activities of projects financed in the previous programming period or from similar activities implemented in connection with the Strategic Plan of the Ministry for Higher Education 2021+. Without the above shown linkages, it will not be possible to implement activities under SO 2.1. Support will be provided towards investments in the reconstruction and completion of unsuitable educational spaces, spaces for practical and collaborative learning, acquisition of study aids, or equipping libraries with study resources and adaptation of spaces

(incl. acquisition of equipment) serving to support work with potential applicants for studying at HEIs. The purpose of the support is also to make the spaces (and accommodation) accessible for students with SNs and to purchase equipment for such students.

The currently predominant interior design of HEI buildings, which provides a good environment especially for the frontal way of teaching, is usually not suitable for interactive and innovative methods of education. Those methods often require specific infrastructure facilities, such as makerspaces, simulators, field workplaces, facilities for practical training, instrumentation, electronic resources or spaces in which students can meet over team projects.

The approval of the grant applications from HEIs will also include an evaluation of the condition and use of their existing buildings and equipment. The need for investment must follow the strategic plan of the particular HEI.

**The interventions will result in:**

- increase of the number of infrastructures that effectively reflect new teaching methods;
- improved accessibility of the infrastructure for students with SNs.

**Examples of the types of supported activities:**

- reconstruction and adaptation of unsuitable educational spaces (including equipment) for the needs of students with SNs;
- making HEIs' premises (including accommodation facilities) accessible for students with SNs (typically barrier-free access);
- modernization and completion of teaching facilities (including field teaching facilities - e.g. greenhouses, animal housing, outdoor teaching spaces - and spaces for collaborative learning - e.g. makerspaces) and facilities enabling introduction and application of new teaching methods;
- acquisition of study aids and information resources for new teaching methods;
- measures to foster access for marginalized students (such as Roma, people with a migrant background, persons with disabilities and other special needs etc.) to mainstream non-segregated education.

The above-mentioned examples of the related types of activities were considered as compatible with the 'do not significant harm' (DNSH) principle, due to their nature they are not expected to have any significant negative effect on the environment.

**Link to other programmes**

In accordance with the Partnership Agreement the link (mutual complementarity of support) in the area of investment support for educational infrastructure is set among the P JAC and the NRP.

***The main target groups***

**The main target groups are:**

- academic and non-academic HEI staff;
- ROs' staff;
- HEI students;
- HEI students with SNs;
- primary and secondary school pupils.

### ***Actions to ensure equality, inclusion and non-discrimination***

The planned activities include reducing inequalities in access to higher education through adaptation of the premises and acquisition or adaptation of the equipment and aids for students with special needs. In general, compliance with the horizontal principles will be assessed in each project.

### ***Specific territories targeted, including the planned use of territorial tools***

Activities supported under the specific objective will be implemented in all CZ regions including the Capital City of Prague, i.e. in more developed, less developed and transition regions of CZ.

Only operations with impact on more than one category of region will be supported under the specific objective (the options provided by Article 63 (3) of the General Regulation will be fully applicable). These operations will be financed as a combination of allocations from all categories of regions following the indicator determined on the basis of the representation of HEIs students according to permanent residence in individual categories of regions. This indicator was chosen with regard to the fact that the goal of interventions in the SO is primarily the development of tertiary education in the Czech Republic, which has an impact on all regions.

### ***The interregional and transnational actions***

The planned activities under the specific objective do not foresee the involvement of beneficiaries from other EU Member States or non-EU countries.

### ***The planned use of financial instruments***

The possibilities of using FI are limited in this SO.

In 2018, the MA OP RDE performed a preliminary assessment of the pilot use of FIs in the OP RDE (in accordance with Regulation (EU) No. 1303/2013 of the European Parliament and of the Council).<sup>84</sup> Based on an analysis and after careful consideration of all related risks and the current phase of implementation of the OP RDE, the MA decided not to continue with the implementation of FIs. In the second half of 2021, the MA started updating the ex-ante assessment for the programming period 2021-2027. An updated ex-ante assessment of the use of FIs in P JAC should be prepared during the first half of 2022.

## **2.2.1.2. Indicators**

**Table 15: Output indicators**

Priority	Specific objective	Fund	Category of region	ID	Indicator	Measurement unit	Milestone (2024)	Target (2029)
P2	2.1	ERDF	More developed	RCO67	Classroom capacity of new or modernized education facilities	Persons	700	10 220
			Transition				1800	26 280
			Less developed				2500	36 500
			More developed	500 701	Number of supported buildings	Buildings	0	22
			Transition				0	58
			Less developed				0	80

<sup>84</sup> Col.: Ex ante assessment of the pilot use of financial instruments in the Operational Programme Research, Development and Education 2014-2020. Prague: Deloitte, 2019, <https://opvvv.msmt.cz/download/file2625.pdf> [2020-01-01].

**Table 16: Result indicators**

Priority	Specific objective	Fund	Category of region	ID	Indicator	Measurement unit	Baseline or reference value	Reference year	Target (2029)	Source of data	Comments
P2	2.1	ERDF	More developed	RCR71	Annual users of new or modernized education facilities	Users/year	0	2021	28 000	Project implementation report	
			Transition				0		72 000		
			Less developed				0		100 000		
			More developed	500 601	Institutions with improved quality or accessibility of infrastructure	Institutions	0	2021	11	Project implementation report	
			Transition				0		29		
			Less developed				0		40		

### 2.2.1.3. Indicative breakdown of the programme resources (EU) by type of intervention

**Table 17: SO 2.1: Dimension 1 – intervention field**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ERDF	More developed	2.1	123	34 301 428
		Transition			142 463 571
		Less developed			238 214 128

**Table 18: SO 2.1: Dimension 2 – form of financing**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ERDF	More developed	2.1	01	34 301 428
		Transition			142 463 571
		Less developed			238 214 128

**Table 19: SO 2.1: Dimension 3 – territorial delivery mechanism and territorial focus**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ERDF	More developed	2.1	33	34 301 428
		Transition			142 463 571
		Less developed			238 214 128

**Table 20: SO 2.1: Dimension 7 – ESF+, ERDF, CF and JTF and gender equality dimension**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ERDF	More developed	2.1	03	34 301 428
		Transition			142 463 571
		Less developed			238 214 128

## **2.2.2. SO 2.2 IMPROVING THE QUALITY, INCLUSIVENESS, EFFECTIVENESS AND LABOUR MARKET RELEVANCE OF EDUCATION AND TRAINING SYSTEMS INCLUDING THROUGH VALIDATION OF NON-FORMAL AND INFORMAL LEARNING, TO SUPPORT ACQUISITION OF KEY COMPETENCES INCLUDING ENTREPRENEURIAL AND DIGITAL SKILLS, AND BY PROMOTING THE INTRODUCTION OF DUAL-TRAINING SYSTEMS AND APPRENTICESHIPS**

### **2.2.2.1. Interventions of the Funds**

#### ***The related types of actions***

In view of the significant changes in society caused by the dynamic development of modern technologies, it is necessary to adapt the content and methods of education to this development.<sup>85</sup> The interventions will enable pupils and students to reach their full potential in a school that ensures an appropriate development of their knowledge and skills. Support will mainly go towards activities that respond to the strategic and socially necessary areas defined primarily by the Strategy for the Education Policy of the Czech Republic until 2030+, Strategic Plan of the Ministry for Higher Education 2021+ or the National RIS3 Strategy.

Interventions will also target the internationalization and promotion of education, preparing graduates for long-term employability, strengthening combined/distance forms of study (relevant to higher education), strengthening internships in the study programmes, transitions between levels of education, reducing gender segregation of educational pathways and tackling study failure and early school leaving.

The internationalization of studies should become an integral part of every individual's education, and the main goals should include not only strengthening the language skills of children, pupils, students and staff, but also promoting mobilities of all groups involved in education. Specifically, for the HEI environment, it will be necessary to broaden the offer of subjects taught in a foreign language and the implementation of study programmes in cooperation with foreign entities.<sup>86</sup>

An equally important component that connects all levels of the education system is preparation for a profession, consisting mainly of long-term, creative and non-stereotypical work with pupils, which will motivate them and prepare them for further education and choice of study.<sup>87</sup>

The connecting element should be the area of action planning and cooperation. This concept has already been launched in the OP RDE through the tools Local Action Planning (hereinafter referred to as "LAP") and Regional Action Planning (hereinafter referred to as "RAP").

#### **The interventions will result in:**

- adjustment of the education system so that it can adapt more quickly to a dynamic environment and developments;
- increase of the level of digital literacy and computational thinking;
- increase of the relevance of education content, modernization and innovation in education;
- provision of the professional development of school leaders in the management and leadership of institutions and management focused on the quality of education;
- increase of professional competences, development of communication, improvement of cooperation and building of mutual trust among all key actors in education;
- improvement of the educational activities of HEIs by intensifying internationalization and applying modern teaching trends to teaching;

<sup>85</sup> OECD (2020), OECD Economic Surveys: <sup>85</sup>Czech Republic 2020, p. 61, OECD Publishing, Paris, <https://doi.org/10.1787/1b180a5a-en>.

<sup>86</sup> Complementarity with the Erasmus+ programme will be possible.

<sup>87</sup> OECD (2020), OECD Economic Surveys: <sup>87</sup>Czech Republic 2020, p. 63, OECD Publishing, Paris, <https://doi.org/10.1787/1b180a5a-en>.

- quality improvement of the study programmes which deliver professional qualification to perform the regulated profession of a pedagogical worker;
- increase of the competences of HEI students through the creation of new and the development of existing study programmes, including practically focused study programmes and programmes with practice integrated within the curriculum;
- reduction of academic failure and the early school leaving rate;
- improvement of work with potential applicants for HEI study and easier orientation in the offered study programmes.

#### **Examples of the types of supported activities:**

##### **Regional education**

Transforming the content of education:

- support for pre-literacy in pre-school education;
- development of key competences and development of basic literacy skills;
- support for the general component of education, with an emphasis on quality assurance at all levels of education;
- innovation in teaching and modernization of teaching methods and forms leading to the development of critical and creative thinking of children, pupils and students and strengthening formative assessment;
- developing digital literacy and computational thinking;
- support of STEM skills and basic vocational knowledge at primary and secondary schools;
- expanding and ensuring the quality of foreign language teaching;
- development of entrepreneurship and entrepreneurial skills in schools;
- development of career guidance;
- support for cooperation among schools and employers and social partners in the preparation and implementation of training, including practical teaching in the out-of-school environment;
- support for identification of gender inequalities in education and for tools to address them and implementation of gender perspective into the content of education, including supporting instruments and activities aiming to facilitate gender desegregation of educational pathways;
- support of sustainable development-related education (including environmental and development education, e.g. implementation of educational programmes taking environmental competencies into account and other cross-cutting themes of the FEP);
- support for schools and school facilities in increasing their capacity to implement lifelong learning;
- support for open education;
- linking formal and non-formal (including leisure or artistic) education, including the building of supportive professional networks;
- creating conditions for increasing the participation of children, pupils and students in international programmes.

Educational staff:

- ensuring a system of support for the professional development of the managers of schools and school facilities with a focus on quality;
- support for the comprehensive professional development of pedagogical and academic staff through a coherent support system that includes all areas of the so-called professionalization continuum;

- support for the participation of employees in education in the less used forms and topics of their further education;
- ensuring comprehensive support for pedagogical leadership and professional capacities in the use of digital technologies in education;
- support for alternative educational paths towards pedagogical qualification (complementary to pedagogical studies);
- support for non-certified teachers in acquiring and supplementing their professional qualifications, especially in primary and secondary education;
- creating conditions for increasing the participation of employees in training programmes within the system of further education, including participation in international activities.

#### Education management:

- support for the processes of action planning for the development of education in the territories and for functional cooperation in the territories;
- improving the accessibility of the data base for all actors in all types and forms of education;
- strengthening the R&D in the field of education and supporting pedagogical research in the areas of modernization of the goals, content and methods of education, working conditions of educational staff, structure and management of the educational system, including verification and use of the new findings;
- support for new measures to reduce the administrative burden on schools and schools' facilities;
- support for new measures to establish close professional cooperation between schools and HEIs that prepare teachers, with a focus on student teaching experience;
- support for the involvement of schools in international educational programmes in order to gain experience and transfer innovative methods;
- development of competences in the area of project management, specifically development of general principles of project management (for example, how to correctly reach an objective using all available tools and methods, how to correctly plan, work with risks etc.).

#### Higher education institutions

- strengthening the language and other competences of HEI staff, which are necessary for effective internationalization;
- creating and developing study programmes taught in a foreign language and increasing the offer of subjects taught in a foreign language;
- establishing a welcome office;
- strengthening didactic, other soft skills and digital literacy of HEI staff in order to successfully apply new educational methods in teaching, including reflecting the gender dimension, for example in the content, form and methods of education;
- creating and developing study programmes with an interdisciplinary basis, supporting the creation of study modules and modularization of learning;
- creating and developing study programmes that reflect new teaching methods and labour market / business / region needs, introducing practice in the study programmes, developing digital literacy and competence for entrepreneurship, support of environmental topics and topics in the areas of the Roma history and culture;
- innovating study programmes which deliver professional qualification to perform the regulated profession of a pedagogical worker;

- support for the development of competences of educational staff who are involved in the training of the future pedagogical staff;
- support of the cooperation among HEIs with faculty and other cooperating schools within the region, networking, support of pedagogical innovations;
- developing a system for providing student internships and placements, networking of experts and exchange of experience in the field of cooperation between HEIs and employers;
- involvement of practitioners in teaching;
- creating and developing study programmes taught in the combined/distance form of study;
- development of counselling (including career guidance) for students and applicants for study;
- support for so-called summer schools;
- support of work with potential applicants through long-term activities within the so-called children's universities / laboratories for students, and motivation of potential applicants for HEI study, including non-stereotypical choice of study;
- collection and evaluation of data on barriers to passing through study, identification of students at risk of failure, evaluation of the effectiveness of measures taken to reduce study failure;
- support for the social integration of students (e.g. student associations, organizations, etc.);
- development of counselling centres whose staff can provide effective and individual support to students at risk of academic failure;
- evaluation and review of the structure of study and of internal school management systems, including pilot verification of the set processes;
- training of managers and development of their managerial skills;
- support for the transfer of good practice between HEIs or their components;
- development of support services for doctoral students, centralization of those services at the level of the faculty or the HEI ("doctoral schools") and the strengthening of mutual cooperation between the departments that provide such services;
- setting up processes that would prevent the departure of caregivers from careers at HEIs, support for work and life balance of academic and non-academic staff.

The above-mentioned examples of the related types of activities were considered as compatible with the 'do not significant harm' (DNSH) principle, due to their nature they are not expected to have any significant negative effect on the environment.

#### **Link to other programmes**

In accordance with the Partnership Agreement the link (mutual complementarity of support) in the area of quality, efficiency and relevance of education is set among P JAC and Integrated Regional Operational Programme 2021-2027 (hereinafter referred to as "IROP"), P E+, P TAC, P JT, Programme Environment (hereinafter referred to as "P Envi") and NRP. At the same time, the link between the P JAC and Erasmus+ is assumed.

#### ***The main target groups***

##### **The main target groups are:**

- pedagogical and non-pedagogical staff;
- managers of schools and school facilities, and education authorities;
- academic and non-academic HEI staff;
- employees of CSI and educational counselling facilities;
- employees in public administration and entities established by public administration;
- children, pupils of primary and secondary schools;

- parents (or legal guardians) of children and pupils;
- other education stakeholders (non-governmental non-profit organizations, museums or other memory institutions, providers of further education, etc.);
- application sector staff;
- academic and non-academic HEI staff;
- ROs' staff;
- HEI students and students of PSVSs;
- potential applicants for study at HEIs
- the public.

### ***Actions to ensure equality, inclusion and non-discrimination***

The planned activities include support for reducing inequalities and discrimination in education, for example through support for counselling services, teacher training, career guidance, activities aimed at potential applicants for HEI study, and the introduction of a gender dimension in the content of teaching. In general, compliance with the horizontal principles will be assessed in each project.

### ***Specific territories targeted, including the planned use of territorial tools***

Activities supported under the specific objective will be implemented in all CZ regions including the Capital City of Prague, i.e. in more developed, less developed and transition regions of CZ.

All supported operations will be financed as a combination of allocations to individual categories of regions according to the proportion of allocation to each category of regions.

### ***The interregional and transnational actions***

The planned activities in the specific objective do not foresee the involvement of beneficiaries from other EU Member States or non-EU countries, but envisage the development of effective cooperation with entities from those countries. This cooperation will lead to an effective internationalization of the Czech HEI environment.

### ***The planned use of financial instruments***

The possibilities of using FI are limited in this SO.

In 2018, the MA OP RDE performed a preliminary assessment of the pilot use of FIs in the OP RDE (in accordance with Regulation (EU) No. 1303/2013 of the European Parliament and of the Council).<sup>88</sup> Based on an analysis and after careful consideration of all related risks and the current phase of implementation of the OP RDE, the MA decided not to continue with the implementation of FIs. In the second half of 2021, the MA started updating the ex-ante assessment for the programming period 2021-2027. An updated ex-ante assessment of the use of FIs in P JAC should be prepared during the first half of 2022.

<sup>88</sup> Col.: *Ex ante assessment of the pilot use of financial instruments in the Operational Programme Research, Development and Education 2014-2020*. Prague: Deloitte, 2019, <https://opvvv.msmt.cz/download/file2625.pdf> [2020-01-01].

### 2.2.2.2. Indicators

Table 21: Output indicators

Priority	Specific Objective	Fund	Category of Region Supported	ID	Indicator	Measurement Unit	Milestone Value (2024)	Target Value (2029)
P2	2.2	ESF+	More developed	540 002	Total number of participants in regional education	Persons	37,80	368,88
			Transition				1 622,25	15 831,10
			Less developed				1 489,95	14 540,02
			More developed	540 003	Total number of participants in higher education	Persons	0	25,20
			Transition				0	1 081,50
			Less developed				0	993,30
			More developed	521 002	Number of created products in regional education	Products	0	1,49
			Transition				0	63,91
			Less developed				0	58,70
			More developed	521 003	Number of created products in higher education - improving quality	Products	0	5,38
			Transition				0	230,72
			Less developed				0	211,90
			More developed	510 102	Number of supported institutions in regional education	Institutions	11,76	51,35
			Transition				504,57	2 203,69
			Less developed				463,42	2 023,97
			More developed	510 103	Number of supported institutions in higher education	Institutions	0	0,40
			Transition				0	17,30
			Less developed				0	15,89

Table 22: Result indicators

Priority	Specific Objective	Fund	Category of Region Supported	ID	Indicator	Measurement Unit	Reference Value	Reference Year	Target Value (2029)	Source of Data	Comments
P2	2.2	ESF +	More developed	508 102	Number of institutions affected by the interventions in regional education	Institutions	219,92	2021	167,58	Project implementation report	
			Transition				9 438,29		7 191,98		
			Less developed				8 668,56		6 605,45		
			More developed	508 103	Number of institutions affected by the interventions in higher education	Institutions	0,36	2021	0,40	Project implementation report	
			Transition				15,50		17,30		
			Less developed				14,24		15,89		
			More developed	525 102	Number of workers affected by the interventions in regional education	Persons	562,93	2021	474,02	Project implementation report	
			Transition				24 159,05		20 343,53		
			Less developed				22 188,80		18 684,45		
			More developed	525 103	Number of workers affected by the interventions in higher education	Persons	58,80	2021	30,91	Project implementation report	
			Transition				2 523,50		1 326,64		
			Less developed				2 317,70		1 218,45		
			More developed	515 102	Number of children, pupils and students affected by the interventions in regional education	Persons	15 228,76	2021	10 866,48	Project implementation report	
			Transition				653 567,51		466 353,10		
			Less developed				600 266,86		428 320,42		
			More developed	517 102	Number of Roma children and pupils affected by the interventions	Persons	269,71	2021	82,50	Project implementation report	
			Transition				11 575,12		3 540,63		
			Less developed				10 631,13		3 251,88		

### 2.2.2.3. Indicative breakdown of the programme resources (EU) by type of intervention

**Table 23: SO 2.2: Dimension 1 – intervention field**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.2	148	814 413
		Transition			61 588 879
		Less developed			68 655 405
		More developed		149	1 312 111
		Transition			99 226 528
		Less developed			110 611 486
		More developed		150	135 736
		Transition			10 264 813
		Less developed			11 442 567

**Table 24: SO 2.2: Dimension 2 –form of financing**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.2	01	2 262 260
		Transition			171 080 220
		Less developed			190 709 458

**Table 25: SO 2.2: Dimension 3 – territorial delivery mechanism and territorial focus**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.2	33	2 262 260
		Transition			171 080 220
		Less developed			190 709 458

**Table 26: SO 2.2: Dimension 6 – ESF+ secondary themes**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.2	03	14 591
		Transition			1 103 467
		Less developed			1 230 076
		More developed		09	2 247 669
		Transition			169 976 753
		Less developed			189 479 382

**Table 27: SO 2.2: Dimension 7 – ESF+, ERDF, CF and JTF and gender equality dimension**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.2	03	2 262 260
		Transition			171 080 220
		Less developed			190 709 458

**2.2.3. SO 2.3 PROMOTING EQUAL ACCESS TO AND COMPLETION OF QUALITY AND INCLUSIVE EDUCATION AND TRAINING, IN PARTICULAR FOR DISADVANTAGED GROUPS, FROM EARLY CHILDHOOD EDUCATION AND CARE THROUGH GENERAL AND VOCATIONAL EDUCATION AND TRAINING, TO TERTIARY LEVEL, AS WELL AS ADULT EDUCATION AND LEARNING, INCLUDING FACILITATING LEARNING MOBILITY FOR ALL AND ACCESSIBILITY FOR PERSONS WITH DISABILITIES.**

**2.2.3.1. Interventions of the Funds**

***The related types of actions***

Interventions will target children, pupils and students with special educational needs, not only those with various forms of disadvantage, but also the gifted ones. The basic starting point for effective support is the collection and evaluation of data (quantitative and qualitative) about children, pupils, students and graduates and their functioning in a heterogeneous team. The supported activities will help to remove barriers to access to education and increase equality and fairness in all types of schools and at all levels of education. A necessary condition for achieving the objectives of interventions is the increased professional competence of pedagogical and non-pedagogical and academic and non-academic staff to work with heterogeneous groups. A specific element to be supported in the education of children and pupils are activities of non-formal, leisure or artistic education as well as cooperation between schools and families of children and pupils.

**The interventions will result in:**

- reduction of educational inequalities and increase of fairness in access to education;
- natural selection of a suitable educational pathway for pupils and students leading to the reduction of academic failure and the early school leaving rate;
- increase of the number of pedagogical and non-pedagogical and academic and non-academic staff who are prepared to work with a heterogeneous group;
- setting the universal design<sup>89</sup> for education of pupils/students with special/specific educational needs.

**Examples of the types of supported activities:**

**Regional education**

**Equity in education:**

- support for activities leading to the reduction of inequalities in the quality of education between and within schools;
- support for changes in the educational process, taking into account the individual needs and abilities of each individual;
- creating a safe and stimulating environment that motivates all children, pupils, students and other learners to learn throughout their lives;
- support for early identification and internal differentiation, especially in individual classes, which will enable each pupil and student to fully develop their abilities in the company of all their peers, with targeted support for gifted children, pupils and students;
- improving the learning environment in all types of schools, in order to reduce early school leaving, improve educational results and increase the motivation and overall well-being of pupils, students and teachers;

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<sup>89</sup> I.e. creating a framework that does not *a priori* single out any group.

- support for tools to eliminate early school leaving and school drop-out (e.g. educational counselling, career guidance, prevention of high-risk behaviour patterns, cooperation with the parents) in particular for disadvantaged groups (including children and pupils with different mother tongue);
- support access to quality and inclusive early-childhood education and care;
- support for non-discriminatory access to digital educational resources, prevention of the so-called digital divide;
- targeted support for children, pupils and students with special educational needs;
- targeted support for children and pupils with different mother tongues and/or foreign nationals and their integration into education;
- support for activities helping to eliminate unjustifiably high absence of children and pupils in schools, in particular through cooperation of schools with the families of children and pupils;
- support for tools facilitating transition of children, pupils and students (potential applicants and applicants) between individual stages of education system (i.e. along the axis kindergarten – primary school – secondary schools – PSVSs/HEIs);
- ensuring a diverse, accessible and high-quality offer of non-formal, leisure or artistic education, including physical activities and education in health and healthy lifestyle.

#### Educational staff:

- creating and implementing a system of measures supporting a positive and creative climate in schools and school facilities;
- enhancing the competences of educational staff in early identification of children and pupils with learning difficulties, the gifted, and in preventing high-risk behaviour patterns;
- enhancing the competences of educational staff and other staff in education corresponding to the current needs of the development of the education system, in particular the use of the potential of pedagogical diagnostics and the corresponding educational strategy, formative evaluation and self-evaluation;
- building a culture of work with positive and negative feedback, implementing the principles of formative evaluation in the practice of schools;
- creating organizational and systemic conditions for increasing the participation of employees in training programmes within the system of further education;
- support for setting up a system of further education so that it helps to identify the training needs of schools and their teachers and is able to meet those needs on-site to a greater extent;
- encouraging the educational staff to use the educational potential of museums and galleries.

#### Education management:

- strengthening the long-term building of a systematised data base to monitor the usefulness and effectiveness of concrete measures intended to reduce inequalities and increase equity in access to education;
- implementation of international surveys of pupils' results and opinions and attitudes of teachers and headmasters;
- support for analytical work evaluating the effectiveness of tools for reducing inequalities in access to education, which will enable their evaluation over time from the national level down to individual schools and a comparison of the findings in an international context;

- increasing the permeability of existing information systems between the education system institutions with the aim of easy and efficient sharing and use of data, information and analyses necessary for achieving equal access to quality and inclusive education;
- development of competences in the area of project management, specifically development of general principles of project management (for example, how to correctly reach an objective using all available means and methods, how to correctly plan, work with risks etc.).

#### **Higher education institutions**

- collection and evaluation of data with a view to describing the current state, i.e. identification of barriers, eliminating their causes and proposing solutions to problems;
- staff training leading to a theoretical understanding of how to communicate with students with specific requirements (i.e. students with SNs, minorities and exceptionally gifted) and how to avoid primarily segregating behaviour;
- support for activities that will enable students with SNs to gain international experience;
- support for the transfer of international experience in working with students with SNs;
- creation and implementation of compensatory courses for students with SNs in order to facilitate the transition from secondary schools to HEIs and as a prevention of study failure at all types of schools;
- support for activities aimed at identifying and recruiting talented, gifted and exceptionally gifted students and support for systematic work with such students - organization of educational platforms, participation of the students in higher education teaching;
- support for the participation of academic staff in secondary school professional activities (consultations, guidance of term papers, conducting experiments);
- support for HEI counselling centres (methodological support, staff training, internships in order to obtain examples of good practice, networking among the centres, creation and implementation of methods identifying and tackling discrimination and its sources).

The above-mentioned examples of the related types of activities were considered as compatible with the 'do not significant harm' (DNSH) principle, due to their nature they are not expected to have any significant negative effect on the environment.

#### **Link to other programmes**

In accordance with the Partnership Agreement the link (mutual complementarity of support) in the area of equal access of children, pupils and students to education is set among P JAC, IROP, P E+, Operation programme of the Asylum, Migration and Integration Fund (hereinafter referred to as "P AMIF") and NRP.

#### ***The main target groups***

##### **The main target groups are:**

- pedagogical and non-pedagogical staff;
- managers of schools and school facilities, and education authorities;
- academic and non-academic HEI staff;
- employees of CSI and educational counselling facilities;
- employees in public administration and entities established by public administration;
- children, pupils and students of primary and secondary schools;
- parents (or legal guardians) of children and pupils, the public;
- other education stakeholders (non-governmental non-profit organizations, providers of further education, providers of further training of teachers, etc.);

- academic and non-academic HEI staff;
- HEI students with SNs;
- ROs' staff participating in implementing accredited study programmes in cooperation with HEIs;
- HEI students and students of PSVSs;
- potential applicants for study at HEIs;
- the public.

### ***Actions to ensure equality, inclusion and non-discrimination***

In the area of regional education and higher education, the planned interventions include support for a wide range of activities promoting equal access to education and learning for children, pupils with special and students with specific educational needs. The activities include training of educational and academic staff, development of counselling for children, pupils and students, development of the institutional environment, integration of children, pupils and students with SNs, etc.

In general, compliance with the horizontal principles will be assessed in each project.

### ***Specific territories targeted, including the planned use of territorial tools***

Activities supported under the specific objective will be implemented in all CZ regions including the Capital City of Prague, i.e. in more developed, less developed and transition regions of CZ. All supported operations will be financed as a combination of allocations to individual categories of regions according to the proportion of allocation to each category of regions.

### ***The interregional and transnational actions***

The planned activities under the specific objective do not foresee the involvement of beneficiaries from other EU Member States or non-EU countries.

### ***The planned use of financial instruments***

The possibilities of using financial instruments are limited in this SO.

In 2018, the MA OP RDE performed a preliminary assessment of the pilot use of FIs in the OP RDE (in accordance with Regulation (EU) No. 1303/2013 of the European Parliament and of the Council).<sup>90</sup> Based on an analysis and after careful consideration of all related risks and the current phase of implementation of the OP RDE, the MA decided not to continue with the implementation of FIs. In the second half of 2021, the MA started updating the ex-ante assessment for the programming period 2021-2027. An updated ex-ante assessment of the use of FIs in P JAC should be prepared during the first half of 2022.

<sup>90</sup> Col.: *Ex ante assessment of the pilot use of financial instruments in the Operational Programme Research, Development and Education 2014-2020*. Prague: Deloitte, 2019, <https://opvvv.msmt.cz/download/file2625.pdf> [2020-01-01].

### 2.2.3.2. Indicators

Table 28: Output indicators

Priority	Specific	Fund	Category of Region Supported	ID	Indicator	Measurement Unit	Milestone Value (2024)	Target Value (2029)
P2	2.3	ESF+	More developed	540 002	Total number of participants in regional education	Persons	53,40	609,72
			Transition				2 291,75	26 167,15
			Less developed				2 104,85	24 033,13
			More developed	540 003	Total number of participants in higher education	Persons	0	10,80
			Transition				0	463,50
			Less developed				0	425,70
			More developed	521 002	Number of created products in regional education	Products	0	1,88
			Transition				0	80,47
			Less developed				0	73,91
			More developed	521 004	Number of created products in higher education - promoting inclusion	Products	0	4,80
			Transition				0	206,00
			Less developed				0	189,20
			More developed	510 102	Number of supported institutions in regional education	Institutions	16,07	80,99
			Transition				689,71	3 475,92
			Less developed				633,47	3 192,44
			More developed	510 103	Number of supported institutions in higher education	Institutions	0	0,17
			Transition				0	7,42
			Less developed				0	6,81

Table 29: Result indicators

Priority	Specific Objective	Fund	Category of Region Supported	ID	Indicator	Measurement Unit	Reference Value	Reference Year	Target Value (2029)	Source of Data	Comments
P2	2.3	ESF+	More developed	508 102	Number of institutions affected by the interventions in regional education	Institutions	246,44	2021	187,79	Project implementation report	
			Transition				10 576,36		8 059,18		
			Less developed				9 713,82		7 401,93		
			More developed	508 103	Number of institutions affected by the interventions in higher education	Institutions	0,15	2021	0,17	Project implementation report	
			Transition				6,64		7,42		
			Less developed				6,10		6,81		
			More developed	525 102	Number of workers affected by the interventions in regional education	Persons	927,97	2021	781,42	Project implementation report	
			Transition				39 825,55		33 535,77		
			Less developed				36 577,64		30 800,81		
			More developed	525 103	Number of workers affected by the interventions in higher education	Persons	25,20	2021	13,25	Project implementation report	
			Transition				1 081,50		568,56		
			Less developed				993,30		522,19		
			More developed	515 102	Number of children, pupils and students affected by the interventions in regional education	Persons	25 136,18	2021	17 935,92	Project implementation report	
			Transition				1 078 760,98		769 749,90		
			Less developed				990 784,36		706 974,18		
			More developed	517 102	Number of Roma children and pupils affected by the intervention	Persons	432,52	2021	132,30	Project implementation report	
			Transition				18 562,28		5 677,88		
			Less developed				17 048,47		5 214,83		

### 2.2.3.3. Indicative breakdown of the programme resources (EU) by type of intervention

**Table 30: SO 2.3: Dimension 1 – intervention field**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.3	152	2 668 307
		Transition			201 786 927
		Less developed			224 939 361

**Table 31: SO 2.3: Dimension 2 – form of financing**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.3	01	2 668 307
		Transition			201 786 927
		Less developed			224 939 361

**Table 32: SO 2.3: Dimension 3 – territorial delivery mechanism and territorial focus**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.3	33	2 668 307
		Transition			201 786 927
		Less developed			224 939 361

**Table 33: SO 2.3: Dimension 6 – ESF+ secondary themes**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.3	09	2 668 307
		Transition			201 786 927
		Less developed			224 939 361

**Table 34: SO 2.3: Dimension 7 – ESF+, ERDF, CF and JTF and gender equality dimension**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.3	03	2 668 307
		Transition			201 786 927
		Less developed			224 939 361

### 2.2.4. SO 2.4 PROMOTING SOCIO-ECONOMIC INTEGRATION OF MARGINALISED COMMUNITIES SUCH AS ROMA PEOPLE

#### 2.2.4.1. Interventions of the Funds

##### *The related types of actions*

The interventions will aim to reduce inequalities in education and develop the potential of all children, pupils and students from marginalized groups, such as the Roma, or children, pupils and students from socially disadvantaged backgrounds or backgrounds at risk of school failure. The supported activities will lead to the removal of barriers to access education and will focus on ensuring conditions for quality inclusive education for children, pupils and students in all types of schools and at all levels of the school education system. More intensive support will be given to regions with socially excluded localities. The interventions of the specific objective will appropriately complement the resources of the state budget and the National

Recovery Plan aimed at supporting marginalized groups, such as the Roma, or children, pupils and students from socially disadvantaged backgrounds or at risk of school failure, thus ensuring support at all levels of education.

**The interventions will result in:**

- reducing educational inequalities and increasing equality in access to education among schools and within each school;
- increasing motivation and academic achievement of children, pupils and students from marginalised groups at all levels of education system (especially during the transition between different levels of the education) with the aim of reducing academic failure and early school leaving rates;
- increasing the proportion of children from marginalized groups in all years of pre-school education.

**Examples of the types of supported activities:**

Equality in education:

- support for tools preventing the formation of segregated schools and support for the elimination of segregated schools;
- support for measures leading to the early entry of children from marginalized groups, especially the Roma, into pre-school education;
- creating conditions that motivate children, pupils and students to stay in the education system (e.g. support for scholarships in tertiary education by non-governmental non-profit organizations, providing examples of good practice in the social success of persons belonging to marginalized groups such as the Roma);
- individualized support to facilitate transitions between different levels of the education system (e.g. through educational and career counselling activities, prevention of risk behaviour patterns, preparation for teaching, mentoring, etc.);
- support for tools to eliminate anti-Roma sentiment;
- activities enabling children, pupils and students to experience success in formal, leisure and non-formal education;
- early identification of talents enabling children, pupils and students to fully improve their talents and targeted support for their development;
- introducing mechanisms to eliminate exclusions of children, pupils and students from distance education;
- targeted support through school assistants and other support positions;
- support for cooperation among schools and educational institutions and families of children and pupils; development of competences, support and activation of parents (or legal guardians) in the field of education of children and pupils;
- support for networking and cooperation between schools, NGOs and other institutions working with marginalised Roma communities to improve motivation of Roma children/pupils and their parents/legal guardians in relation to education and academic achievements.

Educational staff:

- training and methodological support for staff providing counselling in school education system, especially in the area of identification and diagnosis of the Roma and other disadvantaged children, pupils and students, including appropriate tools used in counselling and diagnosis;

- development of competences of the educational staff in working with the socio-cultural context of children and pupils, openness to differences, recognizing and tackling discrimination, including anti-Roma sentiment and unconscious prejudice;
- methodological support and networking of education professionals in the field of education of children, pupils and students from marginalized and other disadvantaged groups.

**Education management:**

- development of the competences in the area of project management, specifically development of general principles of project management (for example, how to correctly reach an objective using all available tools and methods, how to correctly plan, work with risks etc.);
- support for action planning processes for the development of education in regions with socially excluded localities and functional cooperation of all relevant actors in these regions;
- support for school founders in the field of inclusive education and prevention of segregation in education;
- methodological support for schools and school facilities in the management of the organization, which will lead to the prevention of discriminatory and segregation approaches in the education of children, pupils and students from socially disadvantaged backgrounds, or marginalized groups, especially the Roma.

The above-mentioned examples of the related types of activities were considered as compatible with the 'do not significant harm' (DNSH) principle, due to their nature they are not expected to have any significant negative effect on the environment.

**Link to other programmes**

In accordance with the Partnership Agreement the link (mutual complementarity of support) in the area of support for marginalized groups (e.g. Roma or children, pupils and students from socially disadvantaged backgrounds) is set among P JAC and IROP, P E+ and NRP.

***The main target groups***

**The main target groups are:**

- children, pupils and students from marginalised groups such as the Roma, or children, pupils and students from socially disadvantaged backgrounds or those at risk of school failure;
- children, pupils and students of primary and secondary schools and PSVSs;
- pedagogical and non-pedagogical staff;
- employees in public administration and entities established by public administration;
- academic and non-academic HEIs staff;
- managers of schools and school facilities, and school founders;
- parents (or legal guardians) of children and pupils;
- other actors in the educational area (NGOs etc.);
- the public.

### **Actions to ensure equality, inclusion and non-discrimination**

The planned activities include support for reducing inequalities, discrimination and segregation in education by promoting equal access to education for children, pupils or students from marginalized groups and other disadvantaged groups (e.g. the Roma). Activities include training of pedagogical staff, staff of counselling centres in the field of diagnostics, support for cooperation of relevant actors in the field of education in areas with socially excluded localities, etc.

In general, compliance with the horizontal principles will be assessed in each project.

### **Specific territories targeted, including the planned use of territorial tools**

Activities supported under the specific objective will be implemented in all CZ regions including the Capital City of Prague, i.e. in more developed, less developed and transition regions of CZ.

All supported operations will be financed by a combination of allocations to individual categories of regions according to the proportion of allocation to each category of regions.

### **The interregional and transnational actions**

The planned activities under the specific objective do not foresee the involvement of beneficiaries from other EU Member States or non-EU countries.

### **The planned use of financial instruments**

The possibilities of using financial instruments are limited in this SO.

In 2018, the MA OP RDE performed a preliminary assessment of the pilot use of FIs in the OP RDE (in accordance with Regulation (EU) No. 1303/2013 of the European Parliament and of the Council).<sup>91</sup> Based on an analysis and after careful consideration of all related risks and the current phase of implementation of the OP RDE, the MA decided not to continue with the implementation of FIs. In the second half of 2021, the MA started updating the ex-ante assessment for the programming period 2021-2027. An updated ex-ante assessment of the use of FIs in P JAC should be prepared during the first half of 2022.

## **2.2.4.2. Indicators**

**Table 35: Output indicators**

Priority	Specific Objective	Fund	Category of Region Supported	ID	Indicator	Measurement Unit	Milestone Value (2024)	Target Value (2029)
P2	2.4	ESF+	More developed	540 002	Total number of participants in regional education	Persons	28,80	193,80
			Transition				1 236,00	8 317,25
			Less developed				1 135,20	7 638,95
			More developed	521 002	Number of created products in regional education	Products	0	0,15
			Transition				0	6,51
			Less developed				0	5,98
			More developed	510 102	Number of supported institutions in regional education	Institutions	10,57	31,16
			Transition				453,72	1 337,27
			Less developed				416,71	1 228,22

<sup>91</sup> Col.: Ex ante assessment of the pilot use of financial instruments in the Operational Programme Research, Development and Education 2014-2020. Prague: Deloitte, 2019, <https://opvvv.msmt.cz/download/file2625.pdf> [2020-01-01].

**Table 36: Result indicators**

Priority	Specific Objective	Fund	Category of Region Supported	ID	Indicator	Measurement Unit	Reference Value	Reference Year	Target Value (2029)	Source of Data	Comments
P2	2.4	ESF+	More developed	508 102	Number of institutions affected by the interventions in regional education	Institutions	73,64	2021	56,11	Project implementation report	
			Transition				3 160,36		2 408,19		
			Less developed				2 902,62		2 211,80		
			More developed	525 102	Number of workers affected by the interventions in regional education	Persons	309,10	2021	260,28	Project implementation report	
			Transition				13 265,40		11 170,35		
			Less developed				12 183,56		10 259,37		
			More developed	515 102	Number of children, pupils and students affected by the interventions in regional education	Persons	7 635,06	2021	5 448,00	Project implementation report	
			Transition				327 671,50		233 810,00		
			Less developed				300 948,78		214 742,00		
			More developed	517 102	Number of Roma children and pupils affected by the interventions	Persons	215,77	2021	66,00	Project implementation report	
			Transition				9 260,10		2 832,50		
			Less developed				8 504,90		2 601,50		

### 2.2.4.3. Indicative breakdown of the programme resources (EU) by type of intervention

**Table 37: SO 2.4: Dimension 1 – intervention field**

Priority No.	Fund	Category of region	Specific target	Code	Amount (in EUR)
P2	ESF+	More developed	2.4	154	696 080
		Transition			52 640 068
		Less developed			58 679 833

**Table 38: SO 2.4: Dimension 2 – form of financing**

Priority No.	Fund	Category of region	Specific target	Code	Amount (in EUR)
P2	ESF+	More developed	2.4	01	696 080
		Transition			52 640 068
		Less developed			58 679 833

**Table 39: SO 2.4: Dimension 3 – territorial delivery mechanism and territorial focus**

Priority No.	Fund	Category of region	Specific target	Code	Amount (in EUR)
P2	ESF+	More developed	2.4	33	696 080
		Transition			52 640 068
		Less developed			58 679 833

**Table 40: SO 2.4: Dimension 6 – ESF+ secondary themes**

Priority No.	Fund	Category of region	Specific target	Code	Amount (in EUR)
P2	ESF+	More developed	2.4	09	696 080
		Transition			52 640 068
		Less developed			58 679 833

**Table 41: SO 2.4: Dimension 7 – ESF+, ERDF, CF and JTF and gender equality dimension**

Priority No.	Fund	Category of region	Specific target	Code	Amount (in EUR)
P2	ESF+	More developed	2.4	03	696 080
		Transition			52 640 068
		Less developed			58 679 833

## 2.2.5. SO 2.5 PROMOTING LIFELONG LEARNING, IN PARTICULAR FLEXIBLE UPSKILLING AND RESKILLING OPPORTUNITIES FOR ALL TAKING INTO ACCOUNT ENTREPRENEURIAL AND DIGITAL SKILLS, BETTER ANTICIPATING CHANGE AND NEW SKILLS REQUIREMENTS BASED ON LABOUR MARKET NEEDS, FACILITATING CAREER TRANSITIONS AND PROMOTING PROFESSIONAL MOBILITY

### 2.2.5.1. Interventions of the Funds

#### *The related types of actions*

In view of the changing environment and social development and within the support of lifelong learning and the related further education the field of civic education needs to be reflected. It aims to equip citizens with the competences necessary for responsible life in a democratic society, i.e. skills and knowledge to uphold and promote democratic values and attitudes. Civic education should lead people towards mutual respect and tolerance, responsible behaviour, to critical thinking and to an active interest in public affairs and life around them. It is, therefore, about the ability to act as a responsible citizen and to fully participate in civic and social life on the basis of an understanding of social, economic, legal and political concepts and structures, as well as global development and sustainability. Other important areas include media literacy, digital literacy, the ability to reflect upon oneself, manage time and information efficiently, cooperate in teams and be aware of the diversity and cultural identities in Europe and the world – the aim is to teach the general public to work with information and to be able to recognize dangers posed by disinformation.<sup>92</sup> When implementing civic education, the providers will be supported in using the capacity of schools (including HEIs) and school facilities as well as, for example, other contributory organizations of territorial self-governing units and other institutions. With regard to the changing needs of the labour market, the support will also focus on a specific instrument of lifelong learning provided by HEIs, the so-called lifelong education (LLE). Moreover, it is necessary to support the relevant material provision of those programmes at HEIs.

The subject of support will be not only the development of an environment for lifelong learning (e.g. creating new courses and programmes), but also direct work with a specific target group (e.g. people with a higher education degree in the case of lifelong education programmes at HEIs<sup>93</sup>).

The concept of lifelong learning will be implemented mainly through programmes/ courses/ training of civic education and lifelong education. The promotion of lifelong learning at HEIs will also strengthen the third role of universities, which has a unique place in the development of civic education. Selected interventions of the specific objective may contribute to National RIS3 Strategy.

#### **The interventions will result in:**

- increase of the number and accessibility of courses/programmes dedicated to lifelong learning;
- provision of the conditions for the implementation of lifelong learning courses/programmes;
- improvement of the qualifications of persons who provide support or participate in teaching in the area of lifelong learning.

#### **Examples of the types of supported activities:**

- development of civic education and education for sustainable development promoting competences and critical understanding in the field of environment and sustainability;
- training of staff involved in teaching and organising courses and programmes focused on lifelong learning;

<sup>92</sup> ECA (2021), Special Report 09/2021: Disinformation affecting the EU: tackled but not tamed, p 70, European Court of Auditors, Luxembourg, [https://www.eca.europa.eu/Lists/ECADocuments/SR21\\_09/SR\\_Disinformation\\_EN.pdf](https://www.eca.europa.eu/Lists/ECADocuments/SR21_09/SR_Disinformation_EN.pdf)

<sup>93</sup> OECD (2020), OECD Economic Surveys: Czech Republic 2020, p. 63, OECD Publishing, Paris, <https://doi.org/10.1787/1b180a5a-en>.

- the acquisition of appropriate equipment and relevant aids for lifelong learning courses and programmes;
- promoting the development of digital skills;
- piloting and implementation of courses, platforms, discussions focused on civic education;
- collecting and evaluating information on the needs of employers and the potential demand for lifelong learning programmes;
- development of measures for verification/recognition of previous education (e.g. bridging courses);
- establishing and developing lifelong education centres (or universities of the third age) within HEIs, which provide support services for the other parts of the HEI in order to increase the quality and relevance of LLE (or universities of the third age), including pilot verification of such services, creation, pilot verification and promotion of programmes/courses and work with potential applicants.

The above-mentioned examples of the related types of activities were considered as compatible with the 'do not significant harm' (DNSH) principle, due to their nature they are not expected to have any significant negative effect on the environment.

#### **Link to other programmes**

In accordance with the Partnership Agreement the link (complementarity of support) in the field of lifelong learning is set among P JAC and IROP, P E+, P Envi, P AMIF and NRP.

#### ***The main target groups***

##### **The main target groups are:**

- academic and non-academic HEI staff;
- staff of schools and school facilities, libraries, museums and other memory institutions;
- other education stakeholders;
- participants in LLE programmes and programmes/courses of universities of the third age;
- participants in civic education programmes/courses/training, i.e. citizens and general public (including EU mobile citizens and the third country nationals<sup>94</sup>).

#### ***Actions to ensure equality, inclusion and non-discrimination***

In general, compliance with the horizontal principles will be assessed in each project.

#### ***Specific territories targeted, including the planned use of territorial tools***

Activities supported under the specific objective will be implemented in all CZ regions including the Capital City of Prague, i.e. in more developed, less developed and transition regions of CZ. All supported operations will be financed by a combination of allocations to individual categories of regions according to the proportion of allocation to each category of regions.

#### ***The interregional and transnational actions***

The planned activities under the specific objective do not foresee the involvement of beneficiaries from other EU Member States or non-EU countries.

<sup>94</sup> For the purposes of the P JAC, we count among the citizens of the EU member states also citizens of Iceland, Liechtenstein, Norway and Switzerland. According to the definition of the Ministry of the Interior of the Czech Republic, a third-country national is a citizen of a state that is not a member of the EU and is not a citizen of the aforementioned four countries.

### The planned use of financial instruments

The possibilities of using financial instruments are limited in this SO.

In 2018, the MA OP RDE performed a preliminary assessment of the pilot use of FIs in the OP RDE (in accordance with Regulation (EU) No. 1303/2013 of the European Parliament and of the Council).<sup>95</sup> Based on an analysis and after careful consideration of all related risks and the current phase of implementation of the OP RDE, the MA decided not to continue with the implementation of FIs. In the second half of 2021, the MA started updating the ex-ante assessment for the programming period 2021-2027. An updated ex-ante assessment of the use of FIs in P JAC should be prepared during the first half of 2022.

#### 2.2.5.2. Indicators

**Table 42: Output indicators**

Priority	Specific Objective	Fund	Category of Region Supported	ID	Indicator	Measurement Unit	Milestone Value (2024)	Target Value (2029)
P2	2.5	ESF+	More developed	521 005	Number of created products in lifelong learning	Products	0	2,40
			Transition				0	103,00
			Less developed				0	94,60
			More developed	510 105	Number of supported institutions in lifelong learning	Institutions	0	0,48
			Transition				0	20,60
			Less developed				0	18,92

**Table 43: Result indicators**

Priority	Specific Objective	Fund	Category of Region Supported	ID	Indicator	Measurement Unit	Reference Value	Reference Year	Target Value (2029)	Source of Data	Comments
P2	2.5	ESF+	More developed	508 105	Number of HEIs affected by the interventions in lifelong learning	Institutions	0,12	2021	0,24	Project implementation report	
			Transition				5,15		10,30		
			Less developed				4,73		9,46		
			More developed	525 105	Number of persons affected by the interventions in lifelong learning	Persons	90,00	2021	48,00	Project implementation report	
			Transition				3 862,50		2 060,00		
			Less developed				3 547,50		1 892,00		

#### 2.2.5.3. Indicative breakdown of the programme resources (EU) by type of intervention

**Table 44: SO 2.5: Dimension 1 – intervention field**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.5	151	174 020
		Transition			13 160 017
		Less developed			14 669 959

<sup>95</sup> Col.: Ex ante assessment of the pilot use of financial instruments in the Operational Programme Research, Development and Education 2014-2020. Prague: Deloitte, 2019, <https://opvvv.msmt.cz/download/file2625.pdf> [2020-01-01].

**Table 45: SO 2.5: Dimension 2 – form of financing**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.5	01	174 020
		Transition			13 160 017
		Less developed			14 669 959

**Table 46: SO 2.5: Dimension 3 – territorial delivery mechanism and territorial focus**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.5	33	174 020
		Transition			13 160 017
		Less developed			14 669 959

**Table 47: SO 2.5: Dimension 6 – ESF+ secondary themes**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.5	09	174 020
		Transition			13 160 017
		Less developed			14 669 959

**Table 48: SO 2.5: Dimension 7 – ESF+, ERDF, CF and JTF and gender equality dimension**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P2	ESF+	More developed	2.5	03	174 020
		Transition			13 160 017
		Less developed			14 669 959

## 2.3. PRIORITY 3 - TECHNICAL ASSISTANCE (P3) - ERDF

### Priority for technical assistance<sup>96</sup>

#### 2.3.1. SO 3.1: ENSURING QUALITY MANAGEMENT AND IMPLEMENTATION OF THE PROGRAMME

##### 2.3.1.1. Interventions of the Funds

###### *The related types of actions*

The technical assistance of the P JAC (hereinafter referred to as “TA”) serves as a comprehensive and specific horizontal support of the entire implementation structure, ensuring all necessary processes relevant to the proper implementation of the P JAC throughout the implementation period so as to enable meeting its set objective, which is supporting the development of an open and educated society based on knowledge and skills, equal opportunities and developing the potential of each individual.

In the 2014-2020 programming period, the technical assistance of the OP RDE was successfully implemented in accordance with the 3E principles thanks to the so-called Coordination Procedure. For this reason, the P JAC MA will use a similar mechanism for the programming period 2021-2027. The Coordination Procedure will specify a comprehensive coordination of activities both internally within the P JAC MA and externally with the implementation and supported activities of the Technical Assistance Programme under the responsibility of the Ministry of Regional Development (hereinafter referred to as “MoRD”). The main strategic document of the Coordination Procedure will be the so-called Long-Term Plan for the Implementation of Technical Assistance.

Management of the human resources in P JAC will be provided in accordance with the procedures set out in the Partnership Agreement for the programming period 2021-2027 (Chapter 9). At the same time, new tools described within the Roadmap for administrative capacity building will be applied.

The interventions will result in:

1. Administrative capacity
  - Sufficient and qualified administrative capacity
2. Programme management and provision of related processes
  - Effective programme implementation
3. Technical resources
  - Optimal working conditions leading to the stability of the employees of the implementation structure through the employee standard.
4. Communication and visibility
  - Results according to the Common Communication Strategy and the long-term communication plan will be added.

<sup>96</sup> Technical assistance is divided into Priority 3 - Technical Assistance (P3) - ERDF by decision of the Ministry of Regional Development and Priority 4 – Technical Assistance (P4) - ESF +. Both priorities contain the same text.

The supported activities will be carried out in order to achieve the set objectives of the P JAC or the above results of the interventions. Relevant activities will also include cross-cutting activities focused on the completion and preparation of other programming periods under the responsibility of the MEYS; these activities are an integral part of all the above results of interventions. Therefore, the above-mentioned agenda will be implemented cross-sectionally for all specific objectives.

To prevent the risk of double financing between the activities of Priority 3 and 4 the support will be provided in accordance with Article 53 (1) c) of the General Regulation by the lump sum. The lump sum will always be tied to a certified ESF+ or ERDF allocation.

The supported activities include:

#### Administrative capacity

- Administrative capacity includes all MEYS employees both in employment and service, who are, in accordance with the valid and effective systematization of MEYS, paid in full or in part from TA.<sup>97</sup>
- The administrative capacity and stabilization of the work teams forming jointly the implementation structure (including completion and preparation of other programming periods) consists mainly in the payment of wages and salaries and remuneration under agreements including related levies and in other personnel expenses arising from labour legislation, collective agreements or internal regulations and also financial and non-financial incentives.
- Support for stabilizing the administrative capacity, which will also contribute to the so-called horizontal principles (e.g. costs associated with reconciling family/personal life with the performance of service/work). Arrangement and payment of foreign and domestic trips for the needs of administrative capacity and other activities supporting the administrative capacity (e.g. costs of annual meetings or off-site meetings, etc.).
- Increasing the qualification and expertise of administrative capacity (e.g. training, workshops or seminars, conferences, professional publications and other study materials). The TA will cover training relevant for the implementation of the P JAC.

#### Programme management and provision of related processes

- Ensuring an appropriate environment for the implementation of all processes defined in the Operations Manual, e.g. the process of preparation and announcement of calls, the process of selecting operations (including the staffing of external expert evaluation activities and payment of related personnel and other expenses), the process of project implementation, including the process of administrative verification, on-the-spot checks and authorizations.
- Creation, publication and updating of documentation, especially methodological (e.g. rules, procedures, instructions or recommendations) ensuring proper implementation following the so-called Single National Framework or the relevant legislation at the national and European level.
- Activities helping to reduce the administrative burden on applicants'/beneficiaries' side (particularly support of activities enabling simplified administration through standardized projects, support of the single methodological environment especially in the preparation of proper and timely conditions for the implementation of projects, internal methodologies, manuals and guidelines for applicants/beneficiaries).

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<sup>97</sup> MEYS employees working under agreements on work performed outside the employment relationship are considered to be administrative capacity in cases explicitly specified in the related documentation. MEYS employees working under agreements on work performed outside the employment relationship, concluded as part of evaluation activities, are not considered administrative capacity.

- Drawing up expert reports, analyses, studies, evaluations and methodologies for setting or assessing the functionality and effectiveness of management systems, checks, rules and procedures of each implementation phase.
- Ensuring anti-corruption mechanisms. Use of the ARACHNE system and the application of anti-corruption mechanisms at all levels of implementation.
- Arrangement of all working meetings and events related to the programme management or support of absorption capacity (e.g. meetings of the monitoring committee, programme planning committee, evaluation committees, training of evaluators, seminars for applicants/beneficiaries and other related working groups).
- Ensuring a smooth winding-up and evaluation of previous programming periods under the responsibility of MEYS, as well as activities related to the preparation and commencement of implementing the next programming period.

#### Technical resources

- Ensuring the necessary non-residential space, including the related facilities for the implementation structure.
- Acquiring and renewing the technical equipment for the implementation structure.
- Services and materials to ensure an appropriate work environment and to meet the relevant requirements of the implementation structure.
- Acquiring, developing and ensuring technical support of internal operational information systems and applications.
- Acquiring tangible and intangible capital assets.

#### Communication and visibility

- External and internal communication and information activities targeting the professional and general public and improving the awareness and knowledge of P JAC and European funds, including popularization of outputs and impacts of P JAC and of previous programmes under the responsibility of MEYS, e.g. media campaign, fairs, exhibitions, contests, etc.).
- Providing timely, comprehensive and clear information that will enhance absorption capacity (e.g. own website, publications, etc.).
- Acquiring, developing and ensuring technical support of external information systems and applications serving as a means of communication between the P JAC MA and the public.
- For more information see Chapter 7 Communication and visibility.

The above-mentioned examples of the related types of activities were considered as compatible with the 'do not significant harm' (DNSH) principle, due to their nature they are not expected to have any significant negative effect on the environment.

### ***The main target groups***

#### **The main target groups are:**

- the staff (all employees under any employment/service contract) of the P JAC MA;
- other staff involved in the implementation of operational programmes under the responsibility of MEYS;
- members of working platforms (including monitoring committees) defined by the P JAC Operational Manual;
- professional and general public;
- representatives of (potential) applicants and beneficiaries of financial support;

- representatives of external partners involved in previous programming periods and in the preparation of the next programming period.

### 2.3.1.2. Indicators

**Table 49: Output indicators**

Priority	Specific objective	Fund	Category of region	ID	Indicator	Measurement unit	Milestone (2024)	Target (2029)
P3		ERDF	More developed	806 000	Number of meetings of bodies, working or advisory groups	Meetings	1,47	7,44
			Transition				5,56	28,01
			Less developed				4,97	25,05
P3		ERDF	More developed	820 000	Number of conducted trainings, seminars, workshops, conferences	Activities	4,06	20,30
			Transition				15,28	76,40
			Less developed				13,66	68,30
P3		ERDF	More developed	825 002	Number of jobs financed from the programme	FTE/year	0	0
			Transition				0	0
			Less developed				0	0
P3		ERDF	More developed	805 000	Number of drawn up and published analytical and strategical documents (including evaluation documents)	Documents	0,20	2,03
			Transition				0,77	7,64
			Less developed				0,68	6,83

### 2.3.1.3. Indicative breakdown of the programme resources (EU) by type of intervention

**Table 50: SO 3.1: Dimension 1 – intervention field**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P3	ERDF	More developed		179	177 464
		Transition			669 147
		Less developed			597 336
		More developed		180	5 442 223
		Transition			20 520 492
		Less developed			18 318 289
		More developed		181	295 773
		Transition			1 115 244
		Less developed			995 559

**Table 51: SO 3.1: Dimension 7 – ESF+, ERDF, CF and JTF and gender equality dimension**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P3	ERDF	More developed		03	5 915 460
		Transition			22 304 883
		Less developed			19 911 184

## 2.4. PRIORITY 4 - TECHNICAL ASSISTANCE (P4) - ESF+

### Priority for technical assistance

#### 2.4.1. SO 4.1: ENSURING QUALITY MANAGEMENT AND IMPLEMENTATION OF THE PROGRAM

##### 2.4.1.1. Interventions of the Funds

###### *The related types of actions*

TA serves as a comprehensive and specific horizontal support of the entire implementation structure, ensuring all necessary processes relevant to the proper implementation of the P JAC throughout the implementation period so as to enable meeting its set objective, which is supporting the development of an open and educated society based on knowledge and skills, equal opportunities and developing the potential of each individual.

In the 2014-2020 programming period, the technical assistance of the OP RDE was successfully implemented in accordance with the 3E principles thanks to the so-called Coordination Procedure. For this reason, the P JAC MA will use a similar mechanism for the programming period 2021-2027. The Coordination Procedure will specify a comprehensive coordination of activities both internally within the P JAC MA and externally with the implementation and supported activities of the Technical Assistance Programme under the responsibility of the MoRD. The main strategic document of the Coordination Procedure will be the so-called Long-Term Plan for the Implementation of Technical Assistance.

Management of the human resources in P JAC will be provided in accordance with the procedures set out in the Partnership Agreement for the programming period 2021-2027 (Chapter 9). At the same time, new tools described within the Roadmap for administrative capacity building will be applied.

###### **The interventions will result in:**

1. Administrative capacity
  - Sufficient and qualified administrative capacity
2. Programme management and provision of related processes
  - Effective programme implementation
3. Technical resources
  - Optimal working conditions leading to the stability of the employees of the implementation structure through the employee standard.
4. Communication and visibility
  - Results according to the Common Communication Strategy and the long-term communication plan will be added.

The supported activities will be carried out in order to achieve the set objectives of the P JAC or the above results of the interventions. Relevant activities will also include cross-cutting activities focused on the completion and preparation of other programming periods under the responsibility of the MEYS; these activities are an integral part of all the above results of interventions. Therefore, the above-mentioned

agenda will be implemented cross-sectionally for all specific objectives.

To prevent the risk of double financing between the activities of Priority 3 and 4 the support will be provided in accordance with Article 53 (1) c) of the General Regulation by the lump sum. The lump sum will always be tied to a certified ESF+ or ERDF allocation.

The supported activities include:

#### Administrative capacity

- Administrative capacity includes all MEYS employees both in employment and service, who are, in accordance with the valid and effective systematization of MEYS, paid in full or in part from TA.<sup>98</sup>
- The administrative capacity and stabilization of the work teams forming jointly the implementation structure (including completion and preparation of other programming periods) consists mainly in the payment of wages and salaries and remuneration under agreements including related levies and in other personnel expenses arising from labour legislation, collective agreements or internal regulations and also financial and non-financial incentives.
- Support for stabilizing the administrative capacity, which will also contribute to the so-called horizontal principles (e.g. costs associated with reconciling family/personal life with the performance of service/work). Arrangement and payment of foreign and domestic trips for the needs of administrative capacity and other activities supporting the administrative capacity (e.g. costs of annual meetings or off-site meetings, etc.).
- Increasing the qualification and expertise of administrative capacity (e.g. training, workshops or seminars, conferences, professional publications and other study materials). The TA will cover training relevant for the implementation of the P JAC.

#### Programme management and provision of related processes

- Ensuring an appropriate environment for the implementation of all processes defined in the Operations Manual, e.g. the process of preparation and announcement of calls, the process of selecting operations (including the staffing of external expert evaluation activities and payment of related personnel and other expenses), the process of project implementation, including the process of administrative verification, on-the-spot checks and authorizations.
- Creation, publication and updating of documentation, especially methodological (e.g. rules, procedures, instructions or recommendations) ensuring proper implementation following the so-called Single National Framework or the relevant legislation at the national and European level.
- Activities helping to reduce the administrative burden on applicants'/beneficiaries' side (particularly support of activities enabling simplified administration through standardized projects, support of the single methodological environment especially in the preparation of proper and timely conditions for the implementation of projects, internal methodologies, manuals and guidelines for applicants/beneficiaries).
- Drawing up expert reports, analyses, studies, evaluations and methodologies for setting or assessing the functionality and effectiveness of management systems, checks, rules and procedures of each implementation phase.

<sup>98</sup> MEYS employees working under agreements on work performed outside the employment relationship are considered to be administrative capacity in cases explicitly specified in the related documentation. MEYS employees working under agreements on work performed outside the employment relationship, concluded as part of evaluation activities, are not considered administrative capacity.

- Ensuring anti-corruption mechanisms. Use of the ARACHNE system and the application of anti-corruption mechanisms at all levels of implementation.
- Arrangement of all working meetings and events related to the programme management or support of absorption capacity (e.g. meetings of the monitoring committee, programme planning committee, evaluation committees, training of evaluators, seminars for applicants/beneficiaries and other related working groups).
- Ensuring a smooth winding-up and evaluation of previous programming periods under the responsibility of MEYS, as well as activities related to the preparation and commencement of implementing the next programming period.

#### Technical resources

- Ensuring the necessary non-residential space, including the related facilities for the implementation structure.
- Acquiring and renewing the technical equipment for the implementation structure.
- Services and materials to ensure an appropriate work environment and to meet the relevant requirements of the implementation structure.
- Acquiring, developing and ensuring technical support of internal operational information systems and applications.
- Acquiring tangible and intangible capital assets.

#### Communication and visibility

- External and internal communication and information activities targeting the professional and general public and improving the awareness and knowledge of P JAC and European funds, including popularization of outputs and impacts of P JAC and of previous programmes under the responsibility of MEYS, e.g. media campaign, fairs, exhibitions, contests, etc.).
- Providing timely, comprehensive and clear information that will enhance absorption capacity (e.g. own website, publications, etc.).
- Acquiring, developing and ensuring technical support of external information systems and applications serving as a means of communication between the P JAC MA and the public.
- For more information see Chapter 7 Communication and visibility.

The above-mentioned examples of the related types of activities were considered as compatible with the 'do not significant harm' (DNSH) principle, due to their nature they are not expected to have any significant negative effect on the environment.

#### ***The main target groups***

##### **The main target groups are:**

- the staff (all employees under any employment/service contract) of the P JAC MA;
- other staff involved in the implementation of operational programmes under the responsibility of MEYS;
- members of working platforms (including monitoring committees) defined by the P JAC Operational Manual;
- professional and general public;
- representatives of (potential) applicants and beneficiaries of financial support;
- representatives of external partners involved in previous programming periods and in the preparation of the next programming period.

### 2.4.1.2. Indicators

**Table 52: Output indicators**

Priority	Specific objective	Fund	Category of region	ID	Indicator	Measurement unit	Milestone (2024)	Target (2029)
P4	4.1	ESF+	More developed	806 000	Number of meetings of bodies, working or advisory groups	Meetings	0,11	0,53
			Transition				4,68	23,16
			Less developed				5,21	25,81
			More developed	820 000	Number of conducted trainings, seminars, workshops, conferences	Activities	0,30	1,46
			Transition				12,60	63,15
			Less developed				14,10	70,39
			More developed	825 002	Number of jobs financed from the programme	FTE/year	0	0
			Transition				0	0
			Less developed				0	0
			More developed	805 000	Number of drawn up and published analytical and strategical documents (including evaluation documents)	Documents	0,02	0,24
			Transition				0,63	10,53
			Less developed				0,70	11,73

### 2.4.1.3. Indicative breakdown of the programme resources (EU) by type of intervention

**Table 53: SO 4.1: Dimension 1 – intervention field**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P4	ESF+	More developed		179	7 251
		Transition			548 334
		Less developed			611 248
		More developed		180	222 358
		Transition			16 815 577
		Less developed			18 744 948
		More developed		181	12 085
		Transition			913 890
		Less developed			1 018 747

**Table 54: SO 4.1: Dimension 6 – ESF+ secondary themes**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P4	ESF+	More developed		09	241 694
		Transition			18 277 801
		Less developed			20 374 943

**Table 55: SO 4.1: Dimension 7 – ESF+, ERDF, CF and JTF and gender equality dimension**

Priority No	Fund	Category of region	Specific objective	Code	Amount (EUR)
P4	ESF+	More developed		03	241 694
		Transition			18 277 801
		Less developed			20 374 943

### 3. PLAN OF FINANCING

#### 3.1. FINANCIAL FUNDS BY YEAR

Table 56: Funds by year (EUR)

Fund	Category of region	2021	2022	2023	2024	2025	2026		2027		Total
							Financial allocation without the amount of flexibility	Amount of flexibility	Financial allocation without the amount of flexibility	Amount of flexibility	
ERDF	More developed	0	33 133 601	33 666 575	34 210 699	34 765 082	14 404 062	14 404 062	14 691 821	14 691 821	193 967 723
	Transition	0	104 872 114	94 211 570	147 408 722	149 798 246	58 189 037	58 189 038	59 353 824	59 353 825	731 376 376
	Less developed	0	77 982 780	58 590 943	145 947 554	148 311 642	54 965 903	54 965 903	56 061 179	56 061 180	652 887 084
Total		0	215 988 495	186 469 088	327 566 975	332 874 970	127 559 002	127 559 003	130 106 824	130 106 826	1 578 231 183
ESF+	More developed	0	1 032 118	1 048 727	1 065 663	1 082 957	448 717	448 717	457 731	457 731	6 042 361
	Transition	0	78 052 446	79 308 511	80 589 299	81 897 044	33 933 601	33 933 602	34 615 265	34 615 265	456 945 033
	Less developed	0	87 009 076	88 409 363	89 838 898	91 295 660	37 826 920	37 826 921	38 583 358	38 583 358	509 373 554
Total		0	166 093 640	168 766 601	171 493 860	174 275 661	72 209 238	72 209 240	73 656 354	73 656 354	972 360 948
Total		0	382 082 135	355 235 689	499 060 835	507 150 631	199 768 240	199 768 243	203 763 178	203 763 180	2 550 592 131

### 3.2. TOTAL FINANCIAL ALLOCATION BY FUND AND NATIONAL CO-FINANCING

**Table 57: Total financial appropriations by fund and national contribution (EUR)**

Policy objective No or TA	Priority	Basis for calculating EU support (total or public)	Fund	Category of region	EU contribution a)=g)+h)	EU contribution		National contribution b)=c)+d)	Indicative breakdown of national contribution		Total e)=a)+b)	Co-financing rate f)=a)/e)
						EU contribution without the amount of flexibility g)	Amount of flexibility h)		Public c)	Private d)		
1	Priority 1	Total	ERDF	More developed	153 750 835	129 962 149	23 788 686	230 626 253	230 626 253	0	384 377 088	40 %
				Transition	566 607 922	472 681 262	93 926 660	242 831 967	242 831 967	0	809 439 889	70 %
				Less developed	394 761 772	325 518 618	69 243 154	69 663 843	69 663 843	0	464 425 615	85 %
4	Priority 2	Total	ERDF	More developed	34 301 428	28 994 231	5 307 197	51 452 142	51 452 142	0	85 753 570	40 %
				Transition	142 463 571	118 847 368	23 616 203	61 055 817	61 055 817	0	203 519 388	70 %
				Less developed	238 214 128	196 430 199	41 783 929	42 037 788	42 037 788	0	280 251 916	85 %
			ESF+	More developed	5 800 667	4 894 219	906 448	8 701 001	8 701 001	0	14 501 668	40 %
				Transition	438 667 232	370 118 365	68 548 867	188 000 243	188 000 243	0	626 667 475	70 %
				Less developed	488 998 611	412 588 332	76 410 279	86 293 873	86 293 873	0	575 292 484	85 %
TA	Priority 3	Total	ERDF	More developed	5 915 460	5 915 460	0	8 873 190	8 873 190	0	14 788 650	40 %
				Transition	22 304 883	22 304 883	0	9 559 236	9 559 236	0	31 864 119	70 %
				Less developed	19 911 184	19 911 184	0	8 533 365	8 533 365	0	28 444 549	70 %
	Priority 4	Total	ESF+	More developed	241 694	241 694	0	362 541	362 541	0	604 235	40 %
				Transition	18 277 801	18 277 801	0	7 833 344	7 833 344	0	26 111 145	70 %
				Less developed	20 374 943	20 374 943	0	8 732 119	8 732 119	0	29 107 062	70 %
Total			ERDF	More developed	193 967 723	164 871 840	29 095 883	290 951 585	290 951 585	0	484 919 308	40 %
				Transition	731 376 376	613 833 513	117 542 863	313 447 020	313 447 020	0	1 044 823 396	70 %
				Less developed	652 887 084	541 860 001	111 027 083	120 234 996	120 234 996	0	773 122 080	84,45 %
			ESF+	More developed	6 042 361	5 135 913	906 448	9 063 542	9 063 542	0	15 105 903	40 %
				Transition	456 945 033	388 396 166	68 548 867	195 833 587	195 833 587	0	652 778 620	70 %
				Less developed	509 373 554	432 963 275	76 410 279	95 025 992	95 025 992	0	604 399 546	84,28 %
Total					2 550 592 131	2 147 060 708	403 531 423	1 024 556 722	1 024 556 722	0	3 575 148 853	71,34 %

## 4. ENABLING CONDITIONS

This chapter will be supplemented following the receipt of the official version of the translation for all programs from the Ministry for Regional Development - the National Coordination Authority. The text of the enabling conditions is currently available only in the Czech version of the programming document.

## 5. PROGRAMME AUTHORITIES

Table 58: Programme authorities

Programme authorities	Name of the institution	Contact name	E-mail
<b>Managing Authority</b>	Ministry of Education, Youth and Sports of the Czech Republic -	Václav Velčovský, deputy minister	<a href="mailto:Vaclav.Velcovsky@msmt.cz">Vaclav.Velcovsky@msmt.cz</a>
<b>Audit Authority</b>	Ministry of Finance of the Czech Republic - Audit Authority Department	Stanislav Bureš, director	<a href="mailto:Stanislav.Bures@mfcz.cz">Stanislav.Bures@mfcz.cz</a>
<b>Body which receives payments from the Commission</b>	Ministry of Finance of the Czech Republic - National Fund Department	Veronika Ondráčková, director	<a href="mailto:Veronika.Ondrackova@mfcz.cz">Veronika.Ondrackova@mfcz.cz</a>
<b>Accounting function in case this function is entrusted to a body other than the managing authority</b>	Ministry of Finance of the Czech Republic - National Fund Department	Veronika Ondráčková, director	<a href="mailto:Veronika.Ondrackova@mfcz.cz">Veronika.Ondrackova@mfcz.cz</a>

## 6. PARTNERSHIP

### Preparation of the operational programme

The P JAC was prepared in accordance with Article 8 of the General Regulation and all relevant entities were involved. Based on Government Resolution No 94/2019, the entity responsible for the preparation of P JAC is MEYS.

The relevant partners involved in the P JAC preparation process were selected in accordance with Article 8 of the General Regulation and the European Code of Conduct on Partnership. Account was also taken of experience with cooperation in the preparation and implementation of the OP RDE in the programming period 2014-2020. The partnership principle is also fulfilled in P JAC by involving the P JAC MA in bilateral meetings with relevant partners and by discussing topics from the upcoming period 2021–2027 at OP RDE Monitoring Committee meetings.

The total number of partners involved in the preparation of P JAC within all platforms reached almost 150.

### P JAC Preparatory Committee

The Preparatory Committee of the P JAC was established as the supreme body in May 2019. The P JAC Preparatory Committee was built on the principle of partnership cooperation, it takes into account the interests of social and professional partners and represents a platform for addressing current topics in the preparation of the 2021-2027 programming period.

Members of the P JAC Preparatory Committee include, in addition to representatives of MEYS, key actors of public administration and self-government, professional public, interest groups recommended by the MoRD or directly proposed by relevant organizations (partner ministries, regions, social partners, representatives of NGOs, the professional public, interest groups etc.). The list of partners involved in the preparation of P JAC is given below.

**Table 59: List of partners involved in the preparation of P JAC**

	P JAC Preparatory Committee - represented organizations
1.	Czech Academy of Sciences
2.	Association of Regions of the Czech Republic
3.	Association of Research Universities
4.	Czech Rectors' Conference
5.	Czech Professional Society for Inclusive Education
6.	Czech Council of Children and Youth
7.	Czech University of Life Sciences Prague
8.	Czech-Moravian Confederation of Trade Unions
9.	Czech National Agency for International Education and Research (DZS)
10.	ITI agglomerations
11.	Prague City Hall
12.	Ministry of Transport
13.	Ministry of Finance - Paying and Certifying Authority

14.	Ministry of Labour and Social Affairs
15.	Ministry of Regional Development
16.	Ministry of Regional Development - National Coordination Authority
17.	Ministry of Industry and Trade
18.	Ministry of Health of the Czech Republic
19.	MEYS - Office of the Minister
20.	MEYS - Economic and Legislative Section
21.	MEYS - Section of Higher Education, Science and Research
22.	MEYS - Section of Education and Youth
23.	National Network of Local Action Groups of the Czech Republic
24.	Government Council for Non-governmental Non-profit Organisations
25.	Council of Higher Education Institutions
26.	Association of Local Authorities of the Czech Republic
27.	Senate of the Parliament of the Czech Republic - Committee for European Union Affairs
28.	Permanent Conference of Education Associations
29.	Union of Towns and Municipalities of the Czech Republic
30.	Confederation of Industry of the Czech Republic
31.	Technology Agency of the Czech Republic
32.	Union of Schools' Associations of the Czech Republic – CZESHA
33.	Palacký University Olomouc
34.	Office of the Government of the Czech Republic - Department of European Programmes and Funds
35.	Office of the Government of the Czech Republic - Council for Research, Development and Innovation
36.	Office of the Government - Section for Human Rights
37.	Trade Union of Higher Education Institutions

The P JAC Preparatory Committee is headed by a chairman who is MEYS Deputy-Minister for International Affairs, EU and ESIF. The activities of the P JAC Preparatory Committee are governed by the Statute and Rules of Procedure.

The 1st meeting of the P JAC Preparatory Committee held on 29 May 2019 focused on the presentation of the P JAC structure, including the selected specific objectives, the definition of borderline areas with other operational programmes, and the presentation of strategic documents. The presentations also covered intervention logics to be used as the basis of the programming document.

The first working draft of the P JAC Programming Document was sent to the partners for comments during November 2019 and was subsequently presented and discussed at the 2nd meeting of the P JAC Preparatory Committee, which took place on 12 December 2019.

At the 3rd meeting, held on 9 October 2020, the P JAC Preparatory Committee presented an indicative plan of interventions and the third working draft of the P JAC Programming Document which took into account relevant comments on the second working draft of the P JAC Programming Document received by P JAC MA from representatives of the relevant Directorates General of the Commission. The MA plans further meetings of the P JAC Preparatory Committee.

During the 4<sup>th</sup> meeting of the P JAC Preparatory Committee held on 14 May 2021, draft solutions to the major comments received by the P JAC MA in the framework of the inter-departmental consultation procedure and from representatives of the relevant EC DGs were discussed and an indicative intervention plan for 2022 was presented.

All partners were provided with documents for the meeting (electronically), which it was possible to comment through the submission of comments, in writing or verbally directly at the meeting. All comments or proposals were duly settled by the MA, relevant comments were reflected in the text of the P JAC. If necessary, the issue was discussed at bilateral negotiations.

All the above-mentioned meetings and the active participation of the partners (incl. Representatives of the EC) in the preparation brought in particular the following modifications to the text of the P JAC:

- making drafting changes to the description of problems, needs and supported activities concerning in particular:
  - measures to promote gender equality;
  - interventions aimed at supporting R&D with high application potential, which will contribute to solving the issue of sustainable development (Green deal);
  - strengthening the orientation of research in research organizations to areas with a high potential for applicability in practice;
  - greater link between interventions and the priorities defined in the National RIS3 Strategy;
  - more targeted support for the tool of lifelong learning provided by universities, for the so-called lifelong learning.
- added a new specific objective 2.4 in Priority 2 focusing on promoting the socio-economic integration of marginalized communities, such as the Roma people;
- making formal adjustments (e.g. introduction of new abbreviations, updating of references to strategic documents etc.).

#### **Thematic working groups:**

In the process of the P JAC preparation, partnership was also developed in the form of two thematic working groups, the structure of which corresponds to the priorities and policy objectives. These are the Thematic Working Group on Research and Development and the Thematic Working Group on Education. The members of both groups were nominated by the members of the P JAC Preparatory Committee; therefore, in addition to the representatives of MEYS, they are again representatives of public administration and self-government, the professional public, interest groups, etc.

Both working groups met on 20 June 2019 and 23 October 2019. At the first meeting, the members were introduced to the structure of the P JAC, including the selected specific objectives, and the intervention logics serving as the basis of the programming document. At the second meeting, the first working draft of the P JAC Programming Document was presented and subsequently commented on by the members.

#### **Other negotiations**

The process of P JAC preparation was repeatedly an extensive topic of many meetings in the plenary of the Czech Rectors' Conference, the Council of HEIs, the National Standing Conference, the Regional Standing Conference and other key stakeholders.

With regard to the content of Priority 2, the preparation of the P JAC involved representatives of the civic part of the Government Council for Roma Minority Affairs. On 19 June 2020, the MoRD - National

Coordination Authority (hereinafter referred to as “MoRD-NCA”) organized a meeting attended by representatives of the European Commission on the issue of supporting Roma integration. On 28 July 2020, the MoRD-NCA organized a meeting on the issue of collecting data on the Roma minority. A similar topic was discussed at the round table organized by the Department of Human Rights and Minority Protection of the Office of the Government of the Czech Republic on 14 September 2020. Representatives of the P JAC MA actively participated in all of the above meetings. For 22 October 2020, the P JAC MA arranged a meeting with representatives of the European Commission and MLSA as the Managing Authority of the P E+ on the topic of supporting the Roma minority from P JAC and from the P E+. On 10 February 2021, the P JAC MA organized a meeting on supporting the education of the Roma minority.

### **Implementation of the programme**

The partnership principle will be fulfilled in the implementation of the P JAC, relevant partners will be involved not only in the preparation but also in the implementation of P JAC in accordance with Article 8 of the General Regulation and the European Commission's Code of Conduct on Partnership.

### **P JAC Monitoring Committee**

The P JAC Monitoring Committee will be the basic tool for involving relevant partners in the implementation, monitoring and evaluation of P JAC. The P JAC Monitoring Committee will be established on the motion of the P JAC MA no later than 3 months after the approval of the Programme by the European Commission. Its composition will be primarily based on membership in the P JAC Preparatory Committee, so that actors involved in the preparation of the programme take an adequate part in its implementation.

### **Specific professional platforms and working groups**

Partners will also be engaged in specific professional platforms and working groups related to the implementation (e.g. the Main Planning Commission of the Programme, the Planning Commission for P1 and P2).

## 7. COMMUNICATION AND VISIBILITY

### **Communication management**

The MA will use the experience in the field of communication and publicity from the 2014–2020 programming period, e.g. the management of communication and the organization of the “WG Publicity” or the use of proven communication tools. For the planned budget see tables 50 and 53 Dimension 1 – intervention field.

Communication activities will be set up in accordance with the Common Communication Strategy (hereinafter referred to as “CCS”). A communication officer will be appointed for the programme, who will participate in the Working Group for Information and Publicity of EU Funds for the programming period 2021-2027 under the leadership of MoRD-NCA.

At the programme level, a Longterm Internal Communication Plan (hereinafter referred to as “LCoP”) will be prepared, every year, a more detailed Annual Communication Plan (hereinafter referred to as “ACoP”) will be drawn up, taking into account the specifics of the current implementation phase and specifying the planned activities.

### **Communication objectives**

The main communication objective and the basic need for communication of the P JAC will stem from the strategic objective of the programme, i.e. it will show the general and professional public in CZ that through P JAC the EU supports the development of an open and educated society leaning on knowledge, skills and equal opportunities and developing the potential of each individual, and to raise awareness of this support among people in all regions of CZ.

At the beginning of the programming period, the communication activities informing about the results and benefits of the OP RDE will also draw attention to its follower P JAC and thus help to build important knowledge and inform about the possibilities of support under the programme in the programming period 2021-2027. The communication will be also aimed at motivating and mobilizing potential applicants to submit grant applications, and at sufficient informing of potential applicants, applicants and beneficiaries, which will lead to successful submission of grant applications, implementation and achievement of the required outputs and objectives of projects. Towards the end of the programming period, communication activities will focus more on building awareness of the results and benefits of the P JAC primarily using examples of successful projects.

The communication objectives will be interlinked, in accordance with the communication phases defined in the CCS and LCoP.

### **Target groups**

The key target group will be potential applicants, applicants, beneficiaries and potential and end users of the support. Another main target group will be the professional public (actors in the field of education and research as defined in Chapter 2 for each specific objective). Communication will also be targeted at the general public and the media. The target groups will be specified in more detail in accordance with the CCS and LCoP and according to the focus of the programme priority and the specific call of the P JAC.

### **Planned communication activities/channels**

The MA will use the existing effective and proven combination of communication activities for targeting the target groups of the P JAC, always in accordance with a uniform visual style. Their focus will also be based on the results of the evaluation of the OP RDE media campaign, which is focused on the awareness of activities and supported projects from the ESIF, also within individual regions of the Czech Republic. On this basis, communication activities will be targeted mainly to those regions where this awareness is lower, also in cooperation with successful project implementers from these regions. The awareness will be continuously evaluated during the programming period.

Direct communication with potential applicants and applicants will take place mainly in the form of seminars, workshops, conferences and fairs. Round tables or working groups will also be implemented, allowing, among other things, to obtain feedback from beneficiaries.

Publication activities will focus on the production of information materials on the priorities and individual calls. At a later stage, brochures presenting successful projects and the progress of the implementation of the P JAC will also be prepared. All this will be mainly available in electronic form with a link to the P JAC website.

Online communication will focus on the management and development of the P JAC website, where information on the programme priorities, the call schedule and the list of supported operations will be published. Applicants will find there all the necessary documentation and methodological support and examples of good practice will gradually appear here. Facebook remains the key social network, which is still the most used among the programme's target group. Due to the growing popularity of audio-visual content, YouTube and Instagram will also be used.,

Media communication will be ongoing, mainly in the form of press releases, PR articles and information campaigns, also in cooperation with key projects supported by P JAC (with regional focus). The initial phase will be focused on information for applicants with emphasis on successes from the OP RDE as examples of good practice, and later on successful projects supported directly from the P JAC. During the preparation, the MA identified the following operation of strategic importance: EOSC-CZ and in this context will provide special communication activities to promote awareness of operations of strategic importance.

The monitored indicators will be, for example, the number of implemented informational or promotional activities, the number of created informational and promotional materials or the number of created communication tools. The number of visits to the web portal, the number of followers and the overall reach on social networks will be also monitored on an ongoing basis, but also in connection with individual communication activities. The indicators will be monitored in LICoP or ACoP, respectively, and information on their fulfilment will be part of the annual Evaluation of the ACoP.

Other communication activities aimed at specific target groups or informing about the themes of the programme will be specified in the ACoPs with regard to the specific calls of the P JAC.

Communication and information activities will be the subject of ongoing evaluations, both at the level of individual activities and program results. In accordance with the goal of improving awareness and knowledge of the P JAC and EU funds among the professional and general public, future evaluations will follow the results of the OP RDE.

## 8. USE OF UNIT COSTS, LUMP SUMS, FLAT RATES AND FINANCING NOT LINKED TO COSTS

Table 60: Use of Union contribution based on unit costs, lump sums, flat rates and on financing not linked to costs

Intended use of Articles 88 and 89	YES	NO
From the adoption, the programme will make use of reimbursement of the Union contribution based on unit costs, lump sums and flat rates under priority according to Article 94 CPR (if yes, fill in appendix 1)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
From the adoption, the programme will make use of reimbursement of the Union contribution based on financing not linked to costs according to Article 95 CPR (if yes, fill in Appendix 2)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 9. LIST OF ABBREVIATIONS

ACoP	Annual Communication Plan
CCS	Common Communication Strategy
CSI	Czech School Inspectorate
CZ	Czech Republic
EC	European Commission
EDP	Entrepreneurial Discovery Process
EOSC	European Open Science Cloud
ERDF	European Regional Development Fund
ESF+	European Social Fund Plus
EU	European Union
EUSDR	EU Strategy for the Danube Region
FAIR	Findable, Accessible, Interoperable, Re-usable
FEP	Framework Educational Programme
FI	Financial Instrument
General Regulation	Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy
HEI	Higher education institution
IROP	Integrated Regional Operational Programme 2021-2027
LAP	Local Action Planning
LICoP	Long-term internal communication plan
LLE	Lifelong education (formal part of lifelong learning)
MA	Managing Authority of the P JAC
MA OP RDE	Managing Authority of the OP RDE
MEYS	Ministry of Education, Youth and Sports
MoRD	Ministry of Regional Development
MoRD – NCA	Ministry of Regional Development - National Coordination Authority
National RIS3 Strategy	National research and innovation strategy for smart specialisation of the Czech Republic
NRP	National Recovery Plan
OECD	Organization for Economic Co-operation and Development
P AMIF	Programme of the Asylum, Migration and Integration Fund
P E+	Programme Employment Plus
P Envi	Programme Environment

P JAC	Programme Johannes Amos Comenius
P JT	Programme Just Transition
P TAC	Programme Technologies and Application for Competitiveness
OP RDE	Operational Programme Research, Development and Education
PSVSs	Post-secondary vocational schools
RAP	Regional Action Planning
R&D	Research and development
R&D&I	Research, development and innovation
RO	Research organization
SNs	Specific needs
SO	Specific objective
STEM	Science, Technology, Engineering and Mathematics
TALIS	Teaching and Learning International Survey
TA	Technical assistance
WG Publicity	Working Group Publicity