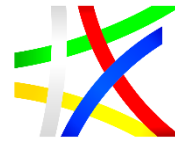




ЕВРОПЕЙСКИ СЪЮЗ
ЕВРОПЕЙСКИ
СОЦИАЛЕН ФОНД



ОПЕРАТИВНА ПРОГРАМА
ДОБРО УПРАВЛЕНИЕ

„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

FINAL REPORT
ANNEX №1.1
FINAL VERSION OF
EX-ANTE ASSESSMENT FOR
IMPLEMENTATION OF FINANCIAL
INSTRUMENTS IN THE FIELD OF
EDUCATION

LOT № 5

"Preparation of ex-ante assessment for implementation of financial instruments under Operational Programme “Science and Education” 2021-2027

Contractor:

Consortium „PROJECT CONSULT”

August 2021



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

CONTENTS

1. INTRODUCTION.....	10
2. APPLICABLE REGULATORY FRAMEWORK AND STRATEGIC DOCUMENTS	11
2.1. EU Regulatory Framework applicable for preparation of the ex-ante assessment for implementation of financial instruments	11
2.2. Bulgarian Regulatory Framework applicable for preparation of the ex-ante assessment for implementation of financial instruments	13
2.3. Strategic Documents applicable to preparation of the ex-ante assessment for implementation of financial instruments	14
3. ANALYSIS OF THE ECONOMIC SITUATION, SOCIO-ECONOMIC FACTORS AND MACROECONOMIC TRENDS FOR THE PERIOD 2021-2027	17
3.1. Problems identified for the period 2007-2020	17
3.2. Outlined development objectives and priorities for the period up to 2030	20
3.3. Characteristics of the market environment	28
3.4. Macroeconomic factors and trends for the period 2021-2027	37
4. LESSONS LEARNED FROM THE IMPLEMENTATION OF FINANCIAL INSTRUMENTS IN THE 2014-2020 PROGRAMMING PERIOD.....	43
4.1. Lessons learned from the implementation of financial instruments in the programming periods 2007-2013 and 2014-2020 in the Republic of Bulgaria	43
4.2. Lessons learned from the implementation of financial instruments in the 2007-2013 and 2014-2020 programming periods in EU Member States EC	49
4.3. Evaluation of the main success and failure factors	56
4.4. Preparation of a SWOT analysis of the structuring of financial instruments in the period 2014-2020.	58
4.5. Lessons for implementing financial instruments in the next programming period 2021-2027	61
4.5.1. Assessment of the administrative capacity of the Managing Authority of the PE 2021-2027	61
4.5.2. Study of the potential of higher education institutions to be involved in implementing support through financial instruments and other financial sources	66
5. GOOD PRACTICES ON THE IMPLEMENTATION OF FINANCIAL INSTRUMENTS IN OTHER EU MEMBER STATES.....	76
5.1. Good practices on the implementation of financial instruments by specific objectives..	76
5.2. Good practices on the implementation of financial instruments under different forms of financing.....	78



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

5.3. Applicability of the good practices considered in the area of intervention of the PE 2021-2027	79
6. ANALYSIS OF THE NEEDS AND POTENTIALS FOR IMPLEMENTING SUPPORT THROUGH FINANCIAL INSTRUMENTS IN THE AREAS OF INTERVENTION UNDER THE PROGRAMME FOR EDUCATION 2021-2027	81
6.1. Survey of the opinion of potential final recipients	81
6.1.1. Analysis of funding opportunities for interventions involving dual training and identification of impact areas through financial instruments	82
6.1.2. Analysing the attitudes towards starting their own business or other entrepreneurial activity by students, postgraduates and lecturers and identifying areas of impact through financial instruments	83
6.2. Analysis of the experience of higher education institutions in project implementation ..	85
6.2.1. Analysis of the experience of higher education institutions in implementing policies and measures for work-based learning and practical training in real work environments ..	86
6.2.2. Analysis of the experience of higher education institutions in implementing partnerships with enterprises, industry and employer organizations or other business representatives for the implementation of projects	87
6.3. Supply and demand analysis of financial instruments	89
6.4. Analysis of the potential for implementing support through financial instruments in the areas of intervention under the Programme for Education 2021-2027	92
7. REGIONAL AND SPATIAL DEVELOPMENT PRIORITIES AND OBJECTIVES FOR THE PERIOD 2021-2027	97
7.1. Regional and spatial development priorities for the period 2021-2027	97
7.2. Regional and spatial development objectives for the period 2021-2027	99
7.3. Funding mechanism through Integrated Territorial Strategies	108
8. OVERALL ASSESSMENT OF THE PROPOSED SIZE OF THE PROGRAMME CONTRIBUTION TO THE FINANCIAL INSTRUMENT AND THE EXPECTED LEVERAGE EFFECT	112
8.1. Appropriate forms and mechanism for managing the financial instrument	112
8.2. Combination with other forms of support, including grants	115
8.3. Financial resources for the contribution of the PE 2021-2027 to the implementation of the financial instrument by programme priority	115
8.4. Assessment of the expected leverage effect by financial instruments and priorities of the PE 2021-2027	116
9. EXPECTED CONTRIBUTION OF THE FINANCIAL INSTRUMENTS TO ACHIEVING THE SPECIFIC OBJECTIVES OF THE PROGRAMME FOR EDUCATION 2021-2027	121
10. NECESSITY FOR DIFFERENTIAL TREATMENT OF INVESTORS	122



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

10.1. Assessment of the possibilities to attract additional investments under the PE 2021-2027	122
10.2. Identification of incentives to attract private investors and analysis of possible mechanisms for their provision	123
11. RISKS AND PRECONDITIONS FOR THE SUCCESSFUL IMPLEMENTATION OF THE FINANCIAL INSTRUMENT UNDER THE PROGRAMME FOR EDUCATION 2021-2027	124
11.1. Analysis of the preconditions for successful implementation of financial instruments under PE 2021-2027	124
11.2. Analysis of possible risks from institutional, administrative, legal, etc. aspects that may hinder the implementation of financial instruments	126
12. SIGNIFICANT PARAMETERS TO BE MONITORED AND CHANGES THAT WILL LEAD TO NECESSITY TO REVISE AND UPDATE THE EX-ANTE ASSESSMENT ...	129



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

LIST OF ABBREVIATIONS AND TERMS USED

Beneficiary	Public or private organisation or individual responsible for initiating operations or for initiating and implementing them; In the context of financial instruments - the organisation implementing the holding fund or, where there is no holding fund structure, the organisation implementing the specific fund or, where the managing authority manages the financial instrument, the managing authority
Buyback Agreement	Sale of securities for cash with an agreement to repurchase them at a future date or on demand
Capital investment	Provision of capital to a company by an investor in exchange for a share of the ownership of the company, in addition to which the investor may exercise certain managerial control over the company and participate in future profits
Contribution from a programme	Assistance from the Funds and national public and private co-financing, if any, for a financial instrument
CPR	Regulation of the European Parliament and of the Council laying down common provisions on the European Regional Development Fund, the European Social Fund+, the Cohesion Fund, the European Maritime and Fisheries Fund and the financial rules applicable to them and to the Asylum and Migration Fund, the Internal Security Fund and the Border and Visa Management Instrument (Common Provisions Regulation)
DCoM	Decision of the Council of Ministers
EC	European Commission
Effect of leverage	Amount of reimbursable funding allocated to eligible final beneficiaries divided by the amount of the financial contribution from the ESIF
ERDF	European Regional Development Fund
ESF+	European Social Fund +
ESIF	European Structural and Investment Funds
EU	European Union
Final recipient (FR)	Legal or natural person receiving assistance from the Funds through a beneficiary of a small project fund or a financial instrument



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Financial Instrument (FI)	Form of support through the use of an appropriate structure with which financial products are provided
Financial product	Equity or quasi-equity investments, loans and guarantees as defined in Article 2 of Regulation (EU, Euratom) No 1046/2018 ("the Financial Regulation")
FMFIB	"Fund Manager of Financial Instruments in Bulgaria" EAD
Guarantee	Written undertaking to assume responsibility for all or part of a third party's debt or obligation, or for that third party's successful performance of its obligations, in the event of an event giving rise to the guarantee, such as a default on a loan payment
Guarantee on request	Guarantee to be paid by the guarantor at the request of the counterparty, irrespective of whether there are obstacles to the enforceability of the underlying obligation
Holding Fund	Fund established under the responsibility of a managing authority under one or more programmes for the purpose of implementing financial instruments through one or more special funds
ICT	Information and communication technologies
MA	Managing Authority
Management costs	Direct or indirect costs recoverable on production of evidence and incurred in the process of implementing financial instruments
Management fees	The price for services provided as set out in the financing agreement between the managing authority and the organisation implementing the holding fund or special fund; and, where applicable, between the organisation implementing the holding fund and the organisation implementing the special fund
MF	Ministry of Finance
Multiplier effect	Amount of investment made by eligible final recipients divided by the amount of the Union financial contribution
Operation	In the context of financial instruments, means the financial contribution from a financial instrument programme and the subsequent financial assistance provided to the final recipients by the relevant financial instrument
PCIE	Programme for Competitiveness and Innovation of Enterprise 2021-2027
PE	Programme for Education 2021-2027



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

PHRD	Programme Human Resources Development 2021-2027
PRIDIT	Programme for Research, Innovation and Digitalisation for Intelligent Transformation 2021-2027
Quasi-capital investment	Type of financing that ranks between equity and debt, that carries higher risk than senior debt and lower risk than the underlying equity, and that can be structured as debt, usually unsecured and subordinated, and in some cases convertible into equity, or preferred equity
RI	Research infrastructure
R&D	Research and development
SME	Small and medium-sized enterprises
Special Fund	Fund through which a managing authority or holding fund provides financial products to final recipients



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

LIST OF TABLES

Table 1	Indicators under Sub-priority 1.1 - Inclusion in education	22
Table 2	Indicators under Sub-priority 1.2 - Attractiveness and prestige of the teaching profession.....	23
Table 3	Indicators under Sub-priority 1.3 - Quality of education	24
Table 4	Indicators under Sub-priority 1.4 - Lifelong learning	25
Table 5	Indicators under Sub-priority 1.5 - Digitalization and innovation in education	26
Table 6	Key indicators and target values for the period up to 2023 under the Policy on Comprehensive, Accessible and Quality Preschool and School Education. Lifelong learning	29
Табл. 7	Key indicators and target values for the period to 2023 in the field of education under the Policy on Equal Access to Quality Higher Education and Development of Scientific Potential.....	29
Table 8	Allocation of education funding by policy and budget programmes for the period 2018-2020 and forecast for the period 2021-2023	30
Table 9	Financial implementation under Priority Axis 2 OP SESG 2014-2020 (as of 31.10.2020), EUMIS 2020	31
Table 10	Effects of the implementation of Priority Axis 2 of OP "Science and Education for Smart Growth", MoF, SIBILA 2.0	32
Table 11	Forecast of key macroeconomic indicators for the period 2020-2023 - baseline scenario.....	41
Table 12	Forecast of key macroeconomic indicators for the period 2020-2023 - alternative scenario (deviation from the baseline scenario).....	42
Table 13	Higher Education institutions - interest in using financial instruments	70
Table 14	Higher Education Institutions - Experience of using grants/financial instruments	70
Table 15	Higher Education Institutions - available expertise for project management and reporting	71
Table 16	Higher Education Institutions - expertise available for project proposal preparation.....	72
Table 17	Higher Education Institutions - expertise available to develop a project for a financial instrument application	72
Table 18	Higher Education Institutions - expertise available for knowledge of rules and principles of financial instruments.....	73
Table 19	Higher Education Institutions - availability of a viable idea and the possibility to implement it together with partners	74



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Table 20	Higher Education institutions - assessment of the effect of partnership with business representatives	75
Table 21	Higher education institutions - financial value of dual training ideas	82
Table 22	Students, postgraduates and lecturers own business - distribution of respondents by planning area	83
Table 23	Students, postgraduates and lecturers own business/entrepreneurship - distribution of those interested in funding to start their own business or other entrepreneurial activity	84
Table 24	Students, postgraduates and lecturers own business/entrepreneurship - estimated value of financial support needed to start their own business or other type of entrepreneurial activity	85
Table 25	Higher education institutions - assessing the experience and impact of implementing work-based learning policies and measures in a real work environment	86
Table. 26	Higher education institutions - assessment of experience in partnership with business representatives	88
Table 27	Higher education institutions - assessment of experience in partnership with business representatives	89
Table 28	Summary assessment of the resources needed in the scope of the integrated territorial development strategies for the period 2021-2027 concerning the education sector	111
Table 29	Calculations to determine the leverage effect for the financial instrument under Priority 3 of PE 2021-2027 - Option 1	119
Table 30	Calculations to determine the leverage effect for the financial instrument under Priority 3 of PE 2021-2027 - Option 2	119
Table 31	Calculations to determine the leverage effect for the financial instrument under Priority 3 of PE 2021-2027 - Option 3	120
Table 32	Proposal for the inclusion of a new output indicator to assess the contribution of the implementation of the FIs to the achievement of the Priority 3 indicators under the PE 2021-2027	121

LIST OF GRAPHS

Figure 1	Administrative structure of the EA OP SESG	62
----------	--	----



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

1. INTRODUCTION

The final version of the Ex-ante Assessment for implementation of financial instruments in the field of "Education" has been prepared and submitted as part of the Contract № ДОГ-25/06.03.2020 with subject: "Preparation of ex-ante assessment for implementation of financial instruments under operational programmes in the programming period 2021-2027", Lot № 5: Preparation of ex-ante assessment for implementation of financial instruments under the Operational Programme "Science and Education" 2021-2027. Additional Agreement-1 to the Contract № ДОГ-25/ 06.03.2020 has been signed pursuant to the provisions of Decision № 495 of the Council of Ministers dated 21 of July 2020 amending and supplementing Decision № 196 of the Council of Ministers dated 11 of April 2019 approving the Analysis of the Socio-Economic Development of Bulgaria 2007-2017 setting up the national priorities for the period 2021-2027, the list of policy objectives to be supported during the programming period 2021-2027, and the list of programmes and responsible institutions for their development, Operational Programme "Science and Education" has been renamed to "Programme for Education" and "Programme for Research, Innovation and Digitalization for Intelligent Transformation" has been established. According to part of the provisions of the Additional Agreement-1, it is necessary to prepare an ex-ante assessment for implementation of financial instruments in the field of "Education".

The subject of the procurement procedure is directly related to the requirement of Art. 58 of the CPR, stipulating that the decision to provide a financial contribution for financial instruments shall be based on an ex-ante assessment. The assessment aims at recommending an appropriate amount of the contribution from the programme to the financial instrument, the type of financial products and the target group of final recipients as well as the expected contribution of the FI for the achievement of the relevant programme's specific objectives. The ex-ante assessment will serve as a basis for the development of investment strategies for the implementation of support through FI under the programmes for the programming period 2021-2027.

The content and scope of the final version of the Ex-ante Assessment for implementation of financial instruments in the field of education are fully compliant with the requirements of the Technical specification as part of the procedure with subject "Preparation of ex-ante assessments for implementation of financial instruments under the operational programmes in the 2021-2027 programming period".




„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

2. APPLICABLE REGULATORY FRAMEWORK AND STRATEGIC DOCUMENTS


This section contains a summary of the EU and Bulgarian regulatory framework, as well as the national strategic documents applicable to the preparation of the ex-ante assessment for implementation of financial instruments under the Programme "Education" 2021-2027 at the time of preparation of this final version of the ex-ante assessment. When amendments in the regulatory framework and strategic documents occur in the process of approval of the ex-ante assessment, they will be supplemented and will be taken into account during the revision of the final version of the assessment.

2.1. EU Regulatory Framework applicable for preparation of the ex-ante assessment for implementation of financial instruments

The following EU legislation is considered applicable for the preparation of the ex-ante assessment for implementation of financial instruments under Programme "Education" 2021-2027:

 *REGULATION (EU) 2021/1060 of the EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2021 laying down common provisions of the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Agriculture Fund and the 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*


The Common Provisions Regulation (CPR) lays down the financial rules for the European Regional Development Fund (ERDF), the European Social Fund plus (ESF +), the Cohesion Fund, the Fair Transition Fund (FTF), the European Maritime, Fisheries Fund and aquaculture (EMFF), the Asylum, Migration and Integration Fund (FAMI), the Internal Security Fund (ISF) and the Instrument for Financial Support for Border Management and Visa Policy (IFSBMVP), as well as the general provisions for the ERDF, ESF +, Cohesion Fund, FTF and EMFF. The regulation entered into force on 01.07.2021.

 *REGULATION (EU) 2021/1058 of the EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2021 on the European Regional Development Fund and of the Cohesion Fund*


This Regulation lays down the specific rules and scope of support from the European Regional Development Fund (ERDF) in relation to the objective "Investments for Jobs and Growth" and the "European Territorial Cooperation" Objective (Interreg), as well as the specific rules and scope of support from the Cohesion Fund for the objective "Investment for Jobs and Growth". The regulation entered into force on 01.07.2021.




„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

 *REGULATION (EU) 2021/1057 of the EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2021 establishing the European Social Fund Plus (ESF+) and repealing Regulation (EU) No 1296/2013*

This Regulation establishes the European Social Fund Plus (ESF +), which consists of two strands: a strand under shared management (the "ESF + strand under shared management") and a strand "Employment and Social Innovation" . The Regulation lays down the rules of ESF +, its budget for the period 2021-2027, the implementation methods, the forms of Union funding and the grants rules. The regulation enters into force on 01.07.2021, and with regard to the "Employment and Social Innovation" strand it has been applied from 01.01.2021.

 *REGULATION (EU, EUROATOM) 2018/1046 of the EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 18 JULY 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012*

This Regulation lays down the rules for setting up and implementing the general budget of the European Union and the European Community for Atomic Energy, as well as for presenting and audit of their accounts. The regulation has entered into force since August 2018.

 *REGULATION (EU) 2020/460 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 30 MARCH 2020 amending Regulations (EU) No 1301/2013, (EU) No 1303/2013 and (EU) No 508/2014 as regards specific measures to mobilise investments in the healthcare system of Member States and in other sectors of their economies in response to the COVID-19 outbreak (Coronavirus Response Investment Initiative)*

This Regulation amends Regulations (EU) № 1301/2013 (3) and (EU) № 1303/2013 (4) of the European Parliament and of the Council in order to allow more flexibility in the implementation of programmes supported by the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the Cohesion Fund (collectively, the "Funds"), as well as the European Maritime and Fisheries Fund (EMFF). It is envisaged to expand the possibilities for the transfer of funds under the Objective "Investments for Growth and Jobs" between the ERDF, the ESF and the Cohesion Fund, so as to provide additional flexibility for Member States to reallocate funds in order to provide tailor-made measures to counter the crisis affecting public health. The regulation has entered into force in April 2020.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

2.2. Bulgarian Regulatory Framework applicable for preparation of the ex-ante assessment for implementation of financial instruments

The following regulatory documents of the Republic of Bulgaria are considered applicable for preparation of the ex-ante assessment for implementation of financial instruments under the Programme "Education" 2021-2027.

✚ *LAW on Management of the financial resources from the European Structural and Investment Funds (promulgated in SG, No 101 since 2015 г.; am. No 43 and 74 from 2016 г., No. 58 and 85 since 2017 г., No 2 since 2018 г., No 29 and 94 since 2019 г., No 13 and 52 since 2020 г.)*

This law lays down the national institutional framework for the management of the European Structural and Investment Funds; the procedures for providing financial support through grants; special rules for the selection of a contractor by a grant beneficiary; the rules for verifying and certifying eligible expenditure and for making payments and financial corrections

✚ *DECREE No 142 of the Council of Ministers of 07 June 2019 on the development of the strategic and programming documents of the Republic of Bulgaria for the EU Funds management in the programming period 2021-2027;*

✚ *DECREE No 61 of the Council of Ministers of 02 April 2020 on determining the conditions and procedures for the establishment of commercial companies by state higher education institutions, as well as for the participation of these companies in the capital of other commercial companies;*


✚ *DECISION No 335 of the Council of Ministers of 7 June 2019 approving the indicative financial allocation of the European Social Fund+, the European Regional Development Fund and the Cohesion Fund for the programming period 2021-2027 by policy objectives and programmes;*


✚ *COUNCIL OF MINISTERS' DECISION No 368 of 25 June 2019 on the approval of the list of actions, responsible institutions and deadlines for the implementation of the horizontal and thematic enabling conditions for the European Regional Development Fund, the European Social Fund+, the Cohesion Fund, the European Maritime and Fisheries Fund, the Asylum and Migration Fund, the Internal Security Fund and the Border and Visa Management Instrument for the programming period 2021-2027;*


✚ *ORDINANCE No H-3 of 22.05.2018 issued by the Minister of Finance, laying down the rules for payments, for verification and certification of expenditure, for reimbursement and write-off of irregular expenditure and for accounting, as well as the deadlines and rules for the closure of the accounting year for the operational programmes and the European territorial cooperation programmes;*



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”


 *DECISION No 196 of the Council of Ministers of 11 April 2019 on approval of the Analysis of the socio-economic development of Bulgaria 2007-2017 to determine the national priorities for the period 2021-2027;*

 *DECISION No 495 of the Council of Ministers of 21 July 2020 amending and supplementing Decision No 196 of the Council of Ministers of 2019 on the approval of the analysis of the socio-economic development of Bulgaria 2007-2017 to determine the national priorities for the period 2021-2027, the list of policy objectives to be supported during the programming period 2021-2027, and the list of programmes and lead institutions for their development;*

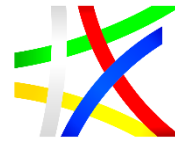
 *DECISION No 496 of 21 July 2020 amending Decision No 335 of the Council of Ministers of 2019 on the approval of the indicative financial allocation of the European Social Fund+, the European Regional Development Fund and the Cohesion Fund for the programming period 2021-2027 by policy objectives and programmes.*

2.3. Strategic Documents applicable to preparation of the ex-ante assessment for implementation of financial instruments

The following national strategic documents are considered relevant for preparation of the ex-ante assessment for implementation of financial instruments under the Programme “Education” 2021-2027.

 *National Development Programme Bulgaria 2030 (NDP Bulgaria 2030)*

The National Development Programme BULGARIA 2030 was adopted by Protocol No. 67 of the Council of Ministers of 02.12.2020. The Programme is a strategic framework document of the highest order in the hierarchy of national programming documents, defining the vision and general objectives of development policies in all sectors of the state administration, including their territorial dimensions. The document builds on the vision, objectives and priorities of the National Development Programme BULGARIA 2030 approved by Decision No 33 of the Council of Ministers of 20 January 2020. Three strategic objectives have been defined - accelerated economic development, demographic uplift and reduction of inequalities, for the implementation of which the government intentions have been grouped into five development areas (axes) and 13 national priorities have been identified. The programme includes detailed strategies for the priorities, an indicative financial framework, a preliminary assessment of the impact on key macroeconomic indicators of the implementation of the interventions, as well as a mechanism for monitoring and control of the implementation of the strategic document. The education sector is basically addressed in Development Axis 1. Innovative and Smart Bulgaria Priority 1. Education and Skills.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Strategy for the development of Higher Education in the Republic of Bulgaria for the period 2021 – 2030

The Strategy was adopted by a decision of the 44th National Assembly on 17 December 2020 and presents the main principles and priorities in the development of the higher education system in the Republic of Bulgaria with a horizon up to 2030 and defines specific objectives, activities and measures for their implementation. The strategy covers an analysis of the environment and the state of the higher education system; principles for the development and implementation of the strategy for the development of higher education; a vision for the development of higher education; the main objectives, activities and measures of the strategy, as well as expected results of its implementation. The strategy identifies the following priority areas for higher education development:

- Improving the quality of higher education by updating the content, methods and forms of education;
- Accelerated modernisation and digitalisation of educational approaches, methods and practices;
- Providing access to high quality higher education and lifelong learning that supports personal development and professional fulfilment;
- Developing fundamental and applied research, innovation and entrepreneurial skills of students and professors, and making research and innovation an integral part of higher education;
- Making full use of the scientific and innovation potential of higher education institutions and enhancing their role in accelerating the development of the economy and solving important societal problems at national and regional level;
- Accelerated internationalisation and full integration into European education and research networks;
- Attracting quality motivated young lecturers for the renewal and development of the academic staff;
- Improving the structure, governance and accreditation system of higher education institutions;
- Ensuring financial sustainability of higher education institutions and financial incentives for the development of quality education and research;
- Ensuring transparency and accountability in the management of the system and of higher education institutions;



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

- Ensure partnership with other scientific organizations in Bulgaria, incl. BAS and SAA to conduct high-level fundamental and applied research and joint educational programmes..

Strategic Framework for the Development of Education, Training and Lifelong Learning in the Republic of Bulgaria (2021-2030)

Taking into account the qualitatively changed social environment and the role of education, training and learning in modern societies, as well as the achievements and problems facing Bulgarian education, the Strategic Framework for Education forms a vision which envisages that in 2030 all Bulgarian young people will graduate from school as functionally literate, innovative, socially responsible and active citizens motivated to build on their competences through lifelong learning.

This strategic document is in line with the vision and overall policy objectives of Priority 1 "Education and Skills" of the National Development Programme Bulgaria 2030, in its part on pre-school and school education, vocational education and training and lifelong learning.

Strategy for Development of Vocational Education and Training in the Republic of Bulgaria for the period 2015 – 2020

The strategy outlines the development of the Vocational Education and Training (VET) system at national level with a focus on:

- making initial vocational and continuing vocational education and training an attractive learning opportunity;
- providing flexible access to training and qualifications;
- holding VET stakeholders to account through greater participation;
- coordinated implementation and management of national and European instruments in the field of recognition of acquired competences, quality assurance, mobility and transparency of VET mechanisms and processes.

National Strategy for Lifelong Learning 2014-2020

The Strategy sets out the strategic framework for public policy on education and training in the period 2014-2020, aimed at achieving the European goal of smart, sustainable and inclusive growth.

The Strategy covers all forms of education, training and learning - formal, non-formal, informal - in which a person participates throughout his or her life, and provides recommendations for the next seven years to serve as a basis for the preparation of annual plans to track progress in the implementation of LLL in Bulgaria.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

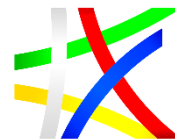
3. ANALYSIS OF THE ECONOMIC SITUATION, SOCIO-ECONOMIC FACTORS AND MACROECONOMIC TRENDS FOR THE PERIOD 2021-2027

The analysis is based on a review of available public information on the problems in the field of education, the objectives and priorities for its development, and the characteristics of the market environment. The macroeconomic factors and trends for the period 2021-2027 are based on the Convergence Programme of the Republic of Bulgaria for the period 2020-2023, April 2020 and the Autumn Macroeconomic Forecast for the Republic of Bulgaria for the period 2020-2023.

3.1. Problems identified for the period 2007-2020

The identified problems in the field of education are based on the review of the analyses prepared in 2018 and 2019 to assess the overall socio-economic development of the country after its accession to the European Union in 2007, as part of the definition of national development objectives and priorities for the period up to 2030.

In the *"Analysis of the socio-economic development of the country after its accession to the EU", May 2019*, it is found that public spending on education remained relatively low and amounted to an average of 3.7% of GDP for the period 2007-2017, with the indicator for the community being 4.9% of GDP. Within the EU, only Romania (3.4% of GDP) spends less on education, while the level in the Nordic countries is almost double that recorded in the country. In 2018, 24.9% of the working-age population was with higher education, up 6.4 percentage points from 2007. Despite the positive trend, it should be noted that the country is increasing its gap with the community, as the improvement recorded in the EU average is 8 percentage points to 28.5%. Achieving the national target for 2020 of 36% share of graduated with higher education in the 30-34 age group is challenging and requires further targeted efforts, as despite the positive trend observed in the dynamics of this indicator, the value reached in 2017 amounted to only 33.7%. At the same time, the relative share of the low-educated working-age population decreased from 28.7% (in 2007) to 21.3% (preliminary data for 2018), remaining significantly lower than the European average (25.6%). In regional aspect, according to the *"Socio-economic analysis of the regions in the Republic of Bulgaria", July 2019*, the best educational characteristics of the population in the country are in the South-Western region, where the population with higher education reaches 39.2% and the population with less than primary education - 8.1%. The North East region has a higher education performance close to the national average. With the least favourable indicators are the North-West and South-East regions. The only region that increased the share of the population with low and without education is the North-West (from 17.0% in 2013 to 20.1% in 2017 and practically maintained the share of the population with higher education - 19.9%). The North-West region (21.6%) and the South Central region (15.9%) had the worst dropout and education rates. The regions with the best rates were



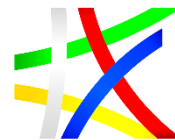
„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

the South West region (4.7%) and the South East region (8.7%). A positive trend is noted in the dynamics of the indicator "Youth (15-24 years) not in education or training or employment (NEET), % of population aged 15-24". There is a decrease in the indicator values in all regions - in the North-West region (22.9%), in the North-East region (14.9%) and in the South-Central region (16.7%). However, the indicator values in the regions remain high and indicate a significant untapped human potential of young people.

Despite the improvement in the educational structure of the population, according to the *"Analysis of the socio-economic development of the country after its accession to the EU", May 2019*, there are still worrying signals about the quality of education. In the World Economic Forum's Global Competitiveness Report 2017-2018, Bulgaria is ranked 83rd in the world (and 26th in the EU, ahead of only Hungary and Croatia) on the quality of the education system. Moreover, over the last ten years, the country has deteriorated its performance by 19 positions. In the period 2001-2011 Bulgaria drops from 4th to 22nd place in the international PIRLS survey of fourth graders' reading skills, being among only four countries showing a net decline in performance over the decade.

According to the *"Analysis of the socio-economic development of the country after its accession to the EU", May 2019*, the trend of decreasing relative share of students in vocational education and training (VET) continues, although it still remains higher than the EU average. Moreover, one out of three learners graduates without a vocational qualification and the employment rate of recent VET graduates (64.2%) is 10.8 percentage points below the EU average, which is indication of the still low quality of the educational service provided in the VET system. The main challenges for VET in Bulgaria have traditionally been related to: insufficient effective cooperation with socio-economic partners; insufficient alignment of VET provision with the requirements and needs of business; insufficient flexibility of the system to address early school leaving before the acquisition of a vocational qualification; insufficient flexible opportunities for re-entry into vocational training. Nevertheless, the *"Socio-economic Analysis of Regions in the Republic of Bulgaria", July 2019*, highlights as a positive fact in vocational education the known increase in learners in vocational schools. The organization of training through work (dual training) is a new option for the reintegration of early leavers into the education system and it must be noted that interest in this form of training is increasing. According to information in the *"Analysis of the socio-economic development of the country after its accession to the EU", May 2019*, in the 2017/2018 school year, 1 742 students in 79 classes in 45 vocational schools took part in the dual training system.

The higher education system in Bulgaria comprises 54 higher education institutions, the vast majority of which are relatively small and highly specialised. The number of higher education institutions is significantly higher than in EU Member States comparable (in terms of territory and population) to Bulgaria. The findings in the *"Analysis of the socio-economic development of the country after its accession to the EU", May 2019* show



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

that the system is oriented towards mass enrolment, which, on the one hand, contributes to the trend of steady improvement of the educational structure of the population, but - on the other hand - to a significant extent at the expense of the quality and relevance of the educational programmes offered, with less than ½ of the graduating students being realised in the relevant profession. At the same time, the *"Socio-economic analysis of the regions of the Republic of Bulgaria", July 2019*, states that the number of students studying at universities and colleges is decreasing due to demographic factors, the declining quality of university education and the preference of young people to study abroad. The wide range of courses is not always in line with the needs of the real national economy and the needs of the labour market in the country. At the same time, many university graduates go to work in EU countries, which further reduces the effectiveness of investment in the system. Therefore, the financing of higher education according to results aims to increase its quality and relevance on the labour market. According to the *"Analysis of the socio-economic development of the country after its accession to the EU", May 2019*, the system has been slow to respond to changing labour market requirements, both in terms of the qualifications and skills of graduates and in terms of the occupations in demand. The labour market is experiencing a shortage of skilled personnel in ICT, teaching and engineering, as well as in the healthcare system. However, the number of graduates in these fields tends to be low, especially in health. The number of graduates in science, technology, engineering and mathematics or related fields is 13.9 per 1 000 inhabitants aged 20-29, compared to an EU average of 19.3 per 1 000 inhabitants. At the same time, one in three graduates traditionally has a degree in business administration, despite the fact that the labour market is oversupplied with such professionals. The targeted actions taken by the government over the last 3 years (including both limiting the number of students in specific professional fields with a surplus of staff and increasing the intake in fields with a proven shortage of qualified specialists) are still too early to show results.

Despite some marginal increases over the last few years, participation in lifelong learning (LLL), according to the *"Analysis of the socio-economic development of the country after its accession to the EU", May 2019*, remains extremely low and covered only 2.3% of persons aged 25-64 in 2017, while the EU average is 10.9%, and in the most advanced Nordic countries in this respect between 1/4 and 1/3 of the population in this age group participates in some form of LLL each year. However, there are regional disparities in the supply of opportunities for LLL - in the South-West region the indicator value reaches 4%, while in the other regions it fluctuates between 1.2% (North-West) and 1.8% (South-East and North-Central). In rural areas of Bulgaria, only 4.2% of the adult population participates in LLL (compared to an EU average of 13.7% in rural areas), while in large cities one in ten adults participates in some form of training or education (compared to 19.6% in the EU). The forms of LLL offered in Bulgaria target the economically inactive population relatively better (4.6% of 25-64 year olds participated in LLL in 2017), compared to the unemployed (1.8% participation in LLL); the least attractive are the



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

skills training and retraining offered to the employed (1.6%). Unsatisfactorily low participation in LLL - and therefore low effective supply of LLL opportunities - is a significant barrier to economic growth. On one hand, almost one in five adults has no or low qualifications, which also means low productivity. The absence of opportunities, incentives and effective mechanisms to upskill the adult population limits productivity growth, reduces the ability of employees to move to higher value-added employers, sectors and regions, and prevents unemployed and economically inactive low-skilled workers from being reintegrated into the labour market once they have acquired market-desirable skills. Further, the absence of adequate opportunities for LLL does not allow to compensate for the weaknesses of the education system in building the necessary cognitive skills.

Work-based learning is an important aspect of LLL, enabling workers to update their knowledge, skills and competences, acquire new skills and improve their employability. On the other hand, work-based learning also benefits employers by increasing productivity and therefore competitiveness. It is a particularly important tool for ensuring the supply of skilled workers in a context of growing mismatches between supply and demand in the labour market, not least due to the rapid spread of new technologies and the digitalisation of the economy. It is worrying that this aspect of LLL is extremely underdeveloped in the country, with Bulgaria's performance on the relevant indicator in the World Economic Forum's Global Competitiveness Report 2017-2018 ranking it 116th in the world (and last 28th in the EU). Moreover, the neglect of the problem over the last ten years has led to a retreat of more than 20 places in the ranking. A problem with LLL is the lack of soft skills training systems that positively impact work process and performance. According to Eurostat research, in Bulgaria individuals have mostly basic skills in this area, with a serious lag behind the community average. For example, only 45% of the population has above basic level skills in understanding and processing information, while the EU average is 68%. For young people aged 16-24, although these figures are higher, the gap of more than 20 percentage points with the EU average persists, which is likely to make it more difficult for them to find suitable employment or study in higher education. In terms of communication skills, the problem is even more serious, as even basic communication skills are significantly below the EU average (8% for the country compared to 18% for the EU). Serious problems are also found in terms of problem-solving skills, where only around 1/4 of those participating have such skills (more than twice less share of the EU average).

3.2. Outlined development objectives and priorities for the period up to 2030

The identified problems in the field of education are the basis for the definition of national development objectives and priorities for the period up to 2030. The outlined national objectives and priorities are included in the main national and sectoral strategic documents prepared in the last few years. They very clearly set out the objectives,



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

priorities and policies to be pursued during the 2021-2027 programming period. This section includes an analysis of only the part of the interventions that will be subject to the ex-ante assessment for the implementation of financial instruments under the Education Programme 2021-2027.

National Development Programme Bulgaria 2030 (NDP Bulgaria 2030)

The National Development Programme BULGARIA 2030 was adopted by Protocol No. 67 of the Council of Ministers of 02.12.2020. The Programme is a strategic framework document of the highest order in the hierarchy of national programming documents, defining the vision and general objectives of development policies in all sectors of the state administration, including their territorial dimensions. The document builds on the vision, objectives and priorities of the National Development Programme BULGARIA 2030 approved by Decision No 33 of the Council of Ministers of 20 January 2020. Three strategic objectives have been defined - accelerated economic development, demographic uplift and reduction of inequalities, for the implementation of which the government intentions have been grouped into five development areas (axes) and 13 national priorities have been identified. The programme includes detailed strategies for the priorities, an indicative financial framework, a preliminary assessment of the impact on key macroeconomic indicators of the implementation of the interventions, as well as a mechanism for monitoring and control of the implementation of the strategic document.

The education sector is basically affected in *Development Axis 1. Innovative and Smart Bulgaria* **Priority 1. Education and skills**

The main objective of the priority is to increase the quality of human capital through the formation of highly educated, innovative and active individuals, able to successfully realize themselves as professionals and citizens and thus contribute to their personal well-being and the sustainable development of all social spheres. Priority 1 includes the following sub-priorities, with areas of impact and an estimate of the financial resources required. The sources of funding for the implementation of the respective impact areas are the State budget, European funds and instruments, Municipal budgets and Fee revenues collected, including from public universities.

Sub-priority 1.1 - Inclusion in education

The sub-priority aims to ensure the right to quality education for all and to prevent school drop-outs. It provides for the sustainable implementation of policies to facilitate children's, pupils' and students' access to education, and to support and enhance their motivation to learn. Investment in physical facilities will be essential to make educational institutions attractive environments and to improve educational outcomes and learning outcomes.

The result indicators



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Under this sub-priority, the following result indicators with corresponding dimension values are foreseen:

Indicator		Current value (2018)	Target value	Average level in the EU
Net ratio of children aged 3 years to first grade enrolled in organized early childhood development groups, %	Eurostat	82.4	86.3	95.4
Proportion of children aged 7 enrolled in school compared to total number of children aged 7, %	Eurostat	90.5	98.0	97.7
Share of 30-34 year olds with a university degree, %	Eurostat	32.7 (2019)	40.0	41.3

Table 1 Indicators under Sub-priority 1.1 - Inclusion in education

Areas of impact

- 1.1.a Coverage in the education system - estimated required financial resources of 16 020 000 000 BGN

Measures will be taken to provide basic educational services in pre-school, school and higher education; to cover, include and prevent drop-out and to ensure equal access to pre-school, school and higher education by overcoming demographic, socio-economic and cultural barriers.

- 1.1.b Support for full participation in the educational process - estimated required financial resources of 1 125 000 000 BGN

Measures will be taken to provide integrated and accessible early childhood education and care services, as well as to include children, pupils and students (including those from vulnerable groups, with special educational needs and learning difficulties) to participate fully in the educational process and to interact with parents and make them active partners.

- 1.1.c Motivation for learning - estimated required financial resource of 565 000 000 BGN

Measures will be taken to develop skills, talents and abilities in science, technology and the arts, to encourage healthy lifestyles, physical activity and sport. In addition, measures will be implemented to provide career guidance to pupils and students and to preserve the Bulgarian language and culture among Bulgarian communities abroad.

- 1.1.d Modernisation of the material base - estimated required financial resources of 2 660 000 000 BGN



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Measures will be taken to provide modern facilities and information environment in education, including for interest activities, sports, etc., to establish and develop school centres, integrated learning environment and technology. Actions will be implemented to green educational infrastructure and to create an overall renewed image of educational institutions, as well as to modernise and stimulate an innovative educational environment ensuring the acquisition of skills and competences through the construction of STEM classrooms and digital rooms. Measures will also be implemented to provide specialised equipment for experimental work and for vocational education and training, as well as an accessible architectural environment.

Sub-priority 1.2 - Attractiveness and prestige of the teaching profession

Teachers are a key figure in the education process and investing in them is no alternative. In this context, policies aimed at raising the social status of the profession and its attractiveness will be developed. Teacher training and qualifications will be improved.

The result indicators

Under this sub-priority, the following result indicators with corresponding dimension values are foreseen:

Indicator		Current value (2018)	Target value	Average level in the EU
Full-time and part-time teachers in primary and secondary education, % of total active population	Eurostat	1.7	2.0	2.1
Percentage of secondary teachers who feel (very) well prepared to use IT in teaching	OECD, TALIS	77.4	80.0	83.9
Percentage of preservice teachers who feel (very) well prepared to teach in a multicultural or multilingual environment	OECD, TALIS	78.8	85.0	86.6
Percentage of teachers aged up to 35 years	Eurostat	11.4	32.0	20.1

Table 2 Indicators under Sub-priority 1.2 - Attractiveness and prestige of the teaching profession

Areas of impact

1.2.a Social status and prestige of the teaching profession - estimated financial resources needed of 36 840 000 000 BGN

Measures will be taken to raise the incomes of teaching professionals, to incentivise teaching professionals according to the progress of children and pupils in terms of educational outcomes, and to attract young people and professionals from other professions to the teaching profession and to involve business representatives.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

- 1.2.b Academic training of pedagogical specialists - estimated required financial resources of 30 000 000 BGN

Measures will be taken to reform the learning process in pedagogical specialties to acquire complex skills on the application of the competency approach, innovative teaching and upgrading of digital skills, as well as to expand practical training, broad spectrum training and binary training.

- 1.2.c Continuing qualification of pedagogical specialists - estimated required financial resources of 35 000 000 BGN

Measures will be taken to provide continuing teacher education aimed at improving skills in the competency approach, innovative teaching and digital skills, including digital content creation. Measures will also be implemented to improve the system of continuing training of pedagogical specialists.

Sub-priority 1.3 - Quality of education

The main objective of the sub-priority is to improve the quality of the education system. A competency-based approach will be the basic policy in pre-school, school and higher education, linked to a shift in the starting point of education from teaching knowledge to mastering key competences. In this context, the relevance of personal and professional relevance measures is also determined.

The result indicators

Under this sub-priority, the following result indicators with corresponding dimension values are foreseen:

Indicator		Current value (2018)	Target value	Average level in the EU
Proportion of Grade 4 pupils with below-average results in reading, %	PIRLS	17 (2016)	8	20 (2016)
Proportion of Grade 4 pupils performing below average ability in mathematics, %	TIMSS	29 (2019)	15	25 (2019)
Employment rate of recent VET graduates (1-3 years) who do not continue their education, %	Eurostat	68.6 (2019)	80.0	77.6 (2019)

Table 3 Indicators under Sub-priority 1.3 - Quality of education

Areas of impact

- 1.3.a Key competences - estimated required financial resources of 270 000 000 BGN

Measures will be taken to develop and implement a National Framework for Quality Early Childhood Education and Care, for the acquisition of



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

functional literacy, civic and social-emotional skills, practically oriented knowledge and skills, the development of creative and critical thinking, and for enhanced ICT and STEM education, to improve educational work in education. Key competences for sustainable development will be formed. Partnerships with cultural, scientific and other institutions will be developed. The focus of assessment will be on key competences.

1.3.b Applicability of education to achieve professional realization - estimated required financial resources of 745 000 000 BGN

Measures will be taken to achieve interdisciplinarity and integration of curricula, to link secondary and tertiary education with business and to specialise universities. Cooperation with stakeholders will be pursued to align education with labour market needs. Classifications of specialities and professions will be updated to reflect the emergence of new professions and new skills in existing professions; the scope and quality of dual training and practical training in a real work environment will be expanded. It will also monitor the realisation of education and training graduates in order to provide feedback to the education system. Measures will be implemented to network higher education institutions, develop joint curricula and share resources, and adapt curricula and practices to the dynamics of societal development.

Sub-priority 1.4 - Lifelong learning

The key role in improving the skills and qualifications of the Bulgarian citizens (including the elderly population) will be played by the policies for LLL. Their importance is conditioned both with a view to social inclusion and in relation to improving the quality of the workforce.

The result indicators

Under this sub-priority, the following result indicators with corresponding dimension values are foreseen:

Indicator		Current value (2018)	Target value	Average level in the EU
Proportion of young people (aged 20-24) with at least secondary education, %	Евростат	84.4 (2019)	92.0	83.9
Average number of years spent in education	UN, Human Development Index	11.8	14	-

Table 4 Indicators under Sub-priority 1.4 - Lifelong learning



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Areas of impact

- ✚ 1.4.a Expanding opportunities for lifelong learning - estimated required financial resources of 180 000 000 BGN

Measures will be taken to include early school leavers in formal education and training and in non-formal learning. Flexible second-chance literacy and adult literacy programmes will be developed, and measures will be implemented to guide low-skilled adults and people from disadvantaged socio-economic backgrounds towards LLL opportunities.

- ✚ 1.4.b Quality and relevance of the forms of lifelong learning - estimated required financial resources of 120 000 000 BGN

Measures will be implemented to ensure the cooperation of vocational training centres (VTCs) and vocational schools to improve the quality of the training provided in VTCs, to validate skills for their relevance, for the mobility of learners, students and employees under European and international programmes, for transnational cooperation of education and training providers and for the recognition of learning outcomes and qualifications.

✚ *Sub-priority 1.5 - Digitalisation and innovation in education*

The use of ICT for the formation of digital competences, for motivation to learn and for higher educational outcomes will be a key policy. The development of innovation at all stages and levels of education will be supported. An integrated approach will underpin the management of the education system at all levels.

The result indicators

Under this sub-priority, the following result indicators with corresponding dimension values are foreseen:

Indicator		Current value (2018)	Target value	Average level in the EU
Population with basic digital skills, %	EC, DESI	29 (2019)	37	57 (2019)

Table 5 Indicators under Sub-priority 1.5 - Digitalization and innovation in education

Areas of impact

- ✚ 1.5.a Digitalization - estimated required financial resources of 580 000 000 BGN

Measures will be taken to introduce curricula aligned with the digital transformation of education and the economy, to provide access to digital learning content and e-textbooks with augmented reality, and to link



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

digital skills with civic literacy, cyber security, digital ethics, to introduce and develop artificial intelligence systems in school, vocational and higher education. Initiatives for accessible digital education and improving digital competences will be promoted.

✚ 1.5.b Educational Innovation - estimated required financial resources of 740 000 000 BGN

Innovation will be introduced and developed at all stages and levels of education and in all areas of the life of educational institutions and a culture of innovation will be developed with all policy instruments. Networks of innovative educational institutions will be created and developed, open educational resources will be used and integration between education and business for training in innovative professions will take place.

✚ 1.5.c Management of the system - estimated required financial resources of 90 000 000 BGN

Measures will be taken to ensure coordination at all levels of education and training and a clear distribution of responsibilities among the relevant national and/or regional bodies, to ensure analytical and administrative capacity at all levels for planning, monitoring and evaluation of education policies, to improve the management system of higher education institutions (with a balance between academic autonomy and state and public interests). An inter-institutional mechanism will be put in place and implemented to monitor the implementation and develop impact assessments of education policies. Efforts will be taken for development of the European Education Area.

"Analysis of the Socio-economic Development of Bulgaria 2007-2017 for the Determination of National Priorities for the Period 2021-2027", adopted by DCoM No. 196/11.04.2019

Based on the socio-economic analysis, the following national priorities and sub-priorities for the next programming period have been identified:

National priority "Education and training for a highly skilled workforce"

Efforts will continue to adapt the vocational education and training system to the needs of the labour market, based on a critical systematic analysis of the results and effectiveness of the introduced apprenticeship system (dual training). The mechanism for the formation of the state order in the field of higher education will be upgraded in an effort to provide the prerequisites for the training of personnel in areas and specialities in demand by the business. A particular focus of government policy in the area of upskilling the working age population will be on the effective provision of LLL opportunities. A system of



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

incentives and effective mechanisms for up-skilling the adult population will be put in place to allow the reintegration into the labour market of unemployed, including structurally unemployed, and economically inactive low-skilled workers. Improving their skills and getting them into employment will contribute to increasing labour productivity in macroeconomic terms, while playing the role of an instrument for social inclusion. In particular, the possibility of building a system of incentives and sanctions for employers providing their employees with participation in work-based learning as a form of LLL will be explored.

3.3. Characteristics of the market environment

The Ministry of Education and Science is responsible for implementing state policy in the field of education and science. To this end, the Ministry of Education and Science develops strategies for their development in accordance with the EU-wide policy and national priorities and implements measures and activities for their implementation, allocates and controls the spending of the financial resources allocated by the state budget for education and science. Financial resources in the field of education are structured according to the following policy areas and budget programmes:

POLICY ON COMPREHENSIVE, ACCESSIBLE AND QUALITY PRE-SCHOOL AND SCHOOL EDUCATION. LIFELONG LEARNING

The following budgetary programmes are implemented to achieve the policy objectives:

- Quality Assurance in Pre-School and School Education Programme;
- "Facilitating Access to Education. Inclusive Education" Programme;
- School Education Programme;
- Children and Pupils Capacity Development Programme;
- "Education of Bulgarians Abroad" Programme;
- Lifelong Learning Programme.

Activities for the implementation of the *Policy in the field of comprehensive, accessible and quality pre-school and school education. Lifelong learning* are aimed at achieving the following key indicators and their corresponding targets:

KEY PERFORMANCE INDICATORS AND TARGET VALUES				
Policy for comprehensive, accessible and quality pre-school and school education. Lifelong learning	Unit of measurement	Target value		
Indicator		Budget 2021	Forecast 2022	Forecast 2023
1. Proportion of early school leavers	percentage (%)	10,6%	10,2%	under 10,2%



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

2. Proportion of children aged 4 to grade 1 enrolled in pre-school education from 87.8% in 2012 to 90% in 2020	percentage (%)	90,2%	90,6%	over 90,6%
3. Proportion of underachieving 15-year-olds in:				
3.1. reading from 39.4% in 2012 to 30% in 2020	percentage (%)	28,0%	27,6%	under 27,6%
3.2. mathematics from 43.8% in 2012 to 35% in 2020	percentage (%)	34,8%	34,4%	under 34,4%
3.3. natural sciences from 36.9% in 2012 to 30.0% in 2020	percentage (%)	28,0%	27,6%	under 27,6%
4. Participation of the population aged 25-64 in education and training from 1.7% in 2012 to more than 5% in 2020	percentage (%)	5,1%	5,4%	over 5,4%

Table 6 Key indicators and target values for the period up to 2023 under the Policy on Comprehensive, Accessible and Quality Preschool and School Education. Lifelong learning

POLICY ON EQUAL ACCESS TO QUALITY HIGHER EDUCATION AND THE DEVELOPMENT OF SCIENTIFIC POTENTIAL

The following budget programmes are implemented to achieve the education policy objectives:

- Improving Access and Quality in Higher Education Programme;
- Student Assistance Programme;
- International Educational Exchange Programme.

The activities in the field of education for the implementation of the *Policy in the area of equal access to quality higher education and development of scientific potential* are aimed at achieving the following key indicators and their corresponding target values:

KEY PERFORMANCE INDICATORS AND TARGET VALUES				
Policy on equal access to quality higher education and the development of scientific potential	Unit of measurement	Target value		
Indicator		Budget 2021	Forecast 2022	Forecast 2023
1. Proportion of 30-34 year olds with a university degree (36%)	percentage (%)	36,2%	36,6	over 36,6

Табл. 7 Key indicators and target values for the period to 2023 in the field of education under the Policy on Equal Access to Quality Higher Education and Development of Scientific Potential

The allocation of financial resources in the field of education by policy and budget programmes in the period 2018-2020 and the forecast for the period 2021-2023 confirms the elevation of education to a strategic national priority. Efforts are focused on pursuing an integrated policy in which the education and personal development of children and young people in Bulgaria play a leading role, with the assertion of national interests in EU policies to harmonise Bulgarian education and training with EU policies and practices. The policy on equal access to quality higher education is pursued with the perspective that the system of higher education in Bulgaria will develop sustainably,



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

creating conditions for access to quality higher education aimed at successful lifelong realisation.

There is a strong trend to increase funding under the *Comprehensive, Accessible and Quality Pre-school and School Education Policy. Lifelong learning*, with an increase in total financial resources of about 47% for the period 2018-2021, while under the *Policy in the field of equal access to quality higher education and development of scientific potential* in the field of education the increase in total financial resources is about 25% for the period 2018-2021. The total financial resources in the field of education for the period are an increase of about 42%, and for the forecast period until 2023 they remain at relatively stable levels with a slight downward trend at the end of the period in the range of about 2-3%.

Code	POLICY AREAS AND BUDGET PROGRAMMES	2018	2019	2020	2021	2022	2023
1700.00.00	Total expenditure	3,969,425.9	4,337,661.2	4,844,929.9	5,653,272.9	5,595,492.7	5,500,650.9
1700.01.00	<i>Policy for comprehensive, accessible and quality pre-school and school education. Lifelong learning</i>	3,208,610.5	3,549,406.3	4,032,885.1	4,700,912.6	4,679,132.4	4,599,290.6
1700.01.01	Budget Programme "Quality Assurance in the Preschool and School Education System"	318,640.4	228,745.9	221,488.0	276,638.1	323,895.0	296,703.9
1700.01.02	Budget Programme "Facilitating Access to Education. Inclusive Education"	168,600.3	183,019.1	266,331.1	308,526.6	308,130.6	309,130.6
1700.01.03	School Education Budget Programme	2,634,292.8	3,052,139.5	3,411,075.8	3,941,595.3	3,871,640.4	3,814,228.4
1700.01.04	Budget programme "Development of the abilities of children and pupils"	10,785.3	34,919.6	33,271.3	51,190.5	51,190.5	51,190.5
1700.01.05	Budget Programme "Education of Bulgarians Abroad"	13,814.3	15,503.6	16,501.3	16,806.8	16,806.8	16,806.8
1700.01.06	Lifelong Learning Budget Programme	62,477.4	35,078.6	84,217.6	106,155.3	107,469.1	111,230.4
1700.02.00	<i>Policy on equal access to quality higher education and the development of scientific potential</i>	760,815.4	788,254.9	812,044.8	952,360.3	916,360.3	901,360.3
1700.02.01	Budget Programme "Improving Access and Quality in Higher Education"	688,539.3	704,032.0	686,766.4	793,663.1	807,663.1	792,663.1
1700.02.02	Student Assistance Budget Programme	69,267.1	81,726.3	121,738.3	154,683.8	104,683.8	104,683.8
1700.02.03	Budget Programme "International Educational Exchange"	3,009.0	2,496.6	3,540.1	4,013.4	4,013.4	4,013.4

Table 8 Allocation of education funding by policy and budget programmes for the period 2018-2020 and forecast for the period 2021-2023



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

During the period 2014-2020, the following results have been reported in the framework of the Operational Programme Science and Education for Smart Growth (OP SESG) as of 31.12.2019¹ in the different levels of education of interest for the ex-ante assessment:

➤ **Professional Education:**

❖ Within the framework of the "Student Practices" project, more than **300 vocational schools** in the country were supported with **406 training companies and 8351 students** were involved in practical training in a real working environment;

❖ At the beginning of February 2020, the **project "Support for the dual training system" was launched with a budget of BGN 24.5 million**. Within the framework of the project, more than **140 vocational high-schools/schools** with vocational training classes are expected to introduce a dual system of training.

➤ **Higher Education:**

❖ So far, the programme has funded the provision of **scholarships to 41 501 students** studying in priority fields for the economy and **46 077 students** who have participated in student placements in a real work environment;

❖ **495 university lecturers** have participated in programmes for qualification improvement, 602 young scientists up to the age of 34 have received support from OP SESG for science researches.

❖ Educational mobility of **166 students** is funded.

➤ **Lifelong learning:**

❖ More than 5,500 illiterate or low-literate people have been enrolled in adult education courses - literacy and learning content courses that will give them better job opportunities.

According to the information from the INFORMATION SYSTEM FOR MANAGEMENT AND MONITORING OF EU FUNDS IN BULGARIA 2020 (EUMIS 2020) as of 31.10.2020, out of the total budget under Priority Axis 2 "Education and Lifelong Learning" of 532 229 204 BGN, funds amounting to 518 532 147 BGN or 97.43% of implementation have been contracted, and the amounts actually paid amount to 329 332 277 BGN or 61.88% of implementation.

Priority axis	Budget (BGN)	Contracted funds (BGN)		Amounts actually paid (BGN)	
	Total	Total	% of implementation	Total	% of implementation
2. Education and lifelong learning	532,229,204	518,532,147	97.43	329,332,277	61.88

Table 9 Financial implementation under Priority Axis 2 OP SESG 2014-2020 (as of 31.10.2020), EUMIS 2020

¹ <http://sf.mon.bg/?h=downloadFile&fileId=2439>



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

These results are expected to be further developed in the current programming period and built upon in the next programming period 2021-2027.

Data from the Ministry of Finance's evaluation - developed with the SIBILA 2.0 tool - on the impact of the European Structural and Investment Funds (ESIF) absorbed by the end of 2019 in the 2014-2020 programming period² show that due to the relatively low absorption of programme funds by the end of 2019, the estimated effects of the interventions are not significant.

In the medium term, the mismatch between labour supply and demand is expected to decrease as a result of the improved quality of education and the reduction in the number of school drop-outs. This is expected to improve employment and unemployment rates among the most affected population groups and thus contribute to improving social inclusion and poverty indicators. The employment generated under this line is likely to be directed towards the creation of highly skilled jobs, which will also contribute to some increase in wages in these sectors and hence to an increase in the national average wage

Macroeconomic indicator	Impact by the end of 2019 Priority axis 2
GDP	0.00%
Exports of goods and services	0.00%
Imports of goods and services	-0.04%
Current account (% of GDP)	-0.08 p.p.
Private consumption	0.01%
Private investments	0.01%
Employment (15-64)	0.00%
Unemployment rate (15-64)	0.00 p.p.
Average wage	0.03%
Inflation rate	0.05%
Budget balance (% of GDP)	0.01 p.p.

Table 10 Effects of the implementation of Priority Axis 2 of OP "Science and Education for Smart Growth", MoF, SIBILA 2.0

Together with the improvement of support at different levels of education, of interest for the ex-ante assessment, there are a number of challenges in the sector during the 2014-2020 programming period that will be subject to in-depth analysis and evaluation during the implementation of the activities under this contract.

First and foremost, they are related to the development of dual learning in the Vocational Education and Training (VET) and Higher Education (HE) systems. While there is experience in the VET system, and experience to be built upon in the framework of the 2014-2020 OP SESG, the necessary legal framework for the introduction of dual training is still being prepared in the HE system. In the new programming period, dual training in VET and HE will face the challenge of attracting, together with employers in key

² Fondove EU_Bulgaria_03_2020.pdf



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

occupations for the country's economy, additional forms of support related to meeting labour market needs. Another equally challenging form of support in the education sector is the crediting of undergraduate and postgraduate students. Lending is carried out in accordance with the provisions of the Law on Lending to Undergraduate and Postgraduate Students (LLUPS), and a maximum budget of state guarantee is approved annually by the Council of Ministers. The state guarantee for the loans to be granted in 2021 is up to BGN 40 million in total. The amount has been determined by the Ministry of Education and Science following an analysis based on actual data on lending under the Law for the period 2010 - 2019, as well as as a result of an assessment of trends and expectations of lending institutions for the development of lending under the LLUPS. The analysis of the results of the credit programme for students and postgraduate students during the reporting period shows that 20 954 students and postgraduate students took the opportunity to draw a loan under the Law for a total amount of 143 097 396,34 BGN. The average amount of loans for the period under review was BGN 6 829.12. Since 2011, the trend has been towards an annual decrease in the number of loans, and since 2015, a significant decline in the implementation of the limits of the guarantee agreements. The forecast of the expected number of loans agreed in 2021 shows that the total number of loans agreed to pay for tuition fees and maintenance will be 480.

Additionally, legislative steps have been taken to facilitate the loan financing process for public higher education institutions. Article 73 of the State Budget Act of the Republic of Bulgaria for 2020 includes a specific provision that state higher education institutions may incur debt in 2020 in a total amount of up to BGN 20 million to finance projects through financial instruments within the meaning of Article 2(11) of Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 on laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006 (OJ L 347/320 of 20 December 2013), by financial intermediaries implementing a financial instrument managed by the Fund of funds. Such loans have been successfully structured and disbursed by the FI under the 2020 Fund of Funds to the NSA in the amount of 3 029 440 BGN and to the NATFA in the amount of 3 614 324 BGN. A number of other higher education institutions are in the process of structuring low-interest loan FI projects with the support of the ESIF.

A similar provision is also provided in Article 75 of the 2021 State Budget Act of the Republic of Bulgaria adopted by the National Assembly.

The above shows the targeted steps taken by the state to create conditions for the entry of financial instruments in the education sector, as well as real demand from higher education institutions. There is real demand not only in higher education, but also in



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

secondary education, where there has been large-scale investments in private schools, financed with loan funding from EU financial instruments.

A draft **Recovery and Sustainability Plan for the Republic of Bulgaria** was presented at the end of October 2020. The Plan sets out the Government's and society's views on how structural problems in the economy should be addressed through an internally coherent and consistent combination of reform and investment. In this respect, the presented intentions should not be seen in isolation, but in combination with the parallel actions planned under the EU Cohesion Policy - both under the additional funding for the 2014-2020 programming period (REACT EU) and in the package of strategic documents (Partnership Agreement and its programmes) for the next programming period. Additional efforts to transition to a climate-neutral economy, in the context of the ambitious targets of the European Green Deal, which will be financed through the Fair Transition Mechanism on the basis of the Fair Transition Plans, should also be taken into account. The main objective of the Plan is to facilitate economic and social recovery from the crisis caused by the COVID-19 pandemic. In pursuit of this objective, the Government has grouped a set of measures and reforms that will not only restore the growth potential of the economy, but also develop it by ensuring resilience to negative externalities. This will allow, in the long term, the achievement of the Government's strategic objective of convergence of the economy and incomes to the European average.

The plan is structured in four pillars:

- **Innovative Bulgaria** - aimed at increasing the competitiveness of the economy and transforming it into a knowledge-based economy and smart growth - 20% of the Plan resources;
- **Green Bulgaria** - with a focus on sustainable management of natural resources to meet the current needs of the economy and society, while maintaining environmental sustainability so that these needs can continue to be met in the long term - 37% of the Plan resources;
- **Connected Bulgaria** - focusing on providing the preconditions for increasing the competitiveness and sustainable development of the country's regions, such as improving transport and digital connectivity, as well as promoting local development, based on the specific local potential - 22% of the Plan's resources;
- **Fair Bulgaria** - with a special focus on disadvantaged groups and individuals to achieve more inclusive and sustainable growth and shared prosperity for all, and with an emphasis on building effective and accountable public institutions that are sensitive to the needs of business and citizens - 21% of the Plan's resources.

Each pillar consists of key areas, analysis of major challenges, planned reform objectives and investments. **The key area "Education and Skills" falls under Pillar 1:**



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Innovative Bulgaria with a total planned expenditure of BGN 2 431.9 million. The COVID-19 pandemic and the measures taken to contain its spread have posed a serious challenge to the country's education system. In the context of the state of emergency and with restrictions imposed on movement and social contacts, school education had to go into remote mode in spring 2020. However, the Ministry of Education and Science estimates that over 10% of the country's students were not covered by distance education as they did not have devices that would allow them to fully engage in the learning process. Following the loosening of the restrictive measures taken, the 2020/2021 school year began in earnest, but the dynamics of the spread of the infection in October suggest a return to distance learning at a systematic level. This calls for adequate measures to ensure the right to education of every child and young person. The challenges of modernising, internationalising and adapting universities in the context of digital and industrial transformation persist.

The objective of the policy is to increase the quality and scope of education and training with a focus on the acquisition of analytical skills and the development of creative thinking, increasing people's ability to adapt in a timely manner to technological transformation and the resulting changes in the labour market. Accelerated modernisation and digitisation of educational approaches, methods and practices.

An important aspect of the ongoing reform is the focus on STEM fields (science, technology, engineering and mathematics), which creates preconditions for the successful subsequent realisation of young people in the professions of the future, in addition to encouraging the introduction of new teaching methods, the upgrading of the qualifications of teaching professionals and the creation of new curriculum content in the direction of integrating STEM subject areas. Through a model of integrating next generation learning environments in Bulgarian schools, educational innovation in learning and teaching will be encouraged and supported. The reform efforts in higher education also specifically address the development of a critical mass of human and material resources in key areas to support the competitiveness of the Bulgarian economy, but also to widely disseminate innovation and conditions for entrepreneurship across the country. A national map will be drawn up to support the connectivity of the resources and programmes of the higher education institutions, which will also allow further qualitative specialisation, according to regional specificities and accumulated capacities, while providing the necessary basis for the development of research and the identification of priority units.

The planned reforms and necessary investments in the **Education and Skills Key Area** under the Plan are as follows:

- ESTABLISHING OF A NATIONAL STEM ENVIRONMENT FOR TOMORROW'S SKILLS

The project aims to enable and quality e-learning and access to modern information and communication technologies, create virtual classrooms, implement digital technologies



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

and introduce digital and innovative teaching and learning methods. The project will create a pool of technological devices and provide digital resources for frontline learning in each classroom. STEM classrooms will be established in 8 361 schools that are not earmarked for funding from the national budget or programmes/projects funded by the European Union. The project will contribute to promoting digital skills and equal access to education. The indicative **planned financial resource is 552 337 500 BGN with an implementation period of 2021-2025.**

- BUILDING PERSONAL DEVELOPMENT CENTRES FOR STUDENTS AND YOUNG PEOPLE TO SUPPORT THE SUSTAINABLE REGENERATION OF MUNICIPALITIES

The measure will support the formation, development and realisation of students and young people through the construction of multifunctional centres that provide both modern facilities and the application of innovative approaches in working with these age groups. The model of building youth centres in Plovdiv, Stara Zagora, Dobrich and Vratsa will be followed and built upon with the support of the European Economic Area Financial Mechanism. Maintaining the interest of students and young people in education and acquiring new skills, participating in joint initiatives and sharing common values with their peers, including participation in national and international initiatives, will not only contribute to the integration and socialisation of young people from vulnerable groups, but will also allow the formation of a positive attitude among young people for development and realisation in Bulgaria. Additionally, this programme would have a real effect on the creation of new jobs in the municipalities, with 200 jobs foreseen for the whole project. The indicative **planned resource is 60.0 million BGN with an implementation period of 2021-2026.**

- MODERNISING EDUCATIONAL INSTITUTIONS FOR A MORE ATTRACTIVE AND QUALITY ENVIRONMENT FOR LEARNING AND INNOVATION

In order to provide a complete renovation of the educational institutions and to create more attractive conditions for learning, interest activities, sports and recreation of children, pupils and students, activities will be carried out for renovation, reconstruction, sanitation, construction of installations for the use of alternative energy sources, heating, ventilation and cooling of the building stock. Priority will be given to the implementation of complete repairs and construction of student campuses to provide living and learning conditions. The indicative **planned resource is 604 597 000 BGN with implementation period 2021-2026.**

The additional REACT-EU funds support measures to help the education system to cope with the effects of the COVID-19 pandemic and its social consequences and to prepare for an ecological, digital and sustainable recovery of the economy. Investments are targeted at the actors involved in the educational process (students, teachers, educational



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

mediators, parents) in order to prevent disruption of the educational process and inclusive education in the context of crises and to counter the risk of drop-out in a situation of distance learning in an e-environment.

3.4. Macroeconomic factors and trends for the period 2021-2027

The macroeconomic factors and trends for the period 2021-2027 are based on the Convergence Programme of the Republic of Bulgaria for the period 2020-2023³, April 2020 and the Autumn Macroeconomic Forecast for the Republic of Bulgaria for the period 2020-2023⁴, October 2020.

The focus of this year's Convergence Programme is on 2020, with information in the medium term limited to a qualitative description of expected developments for the general government debt and deficit, economic assumptions and the effects of measures taken. The Convergence Programme is consistent with the provisions of the Public Finance Act as well as with the fiscal parameters set in the 2020 State Budget Act and its update. The Convergence Programme is also prepared in line with the 2020 update of the National Reform Programme of the Republic of Bulgaria (NRP). The COVID-19 pandemic has a strong negative impact on all EU Member States. The unprecedented measures taken to contain the spread of the infection and strengthen health systems in most Member States have serious economic consequences. Bulgaria, like many countries in Europe and worldwide, is using all available resources to contain the spread of COVID-19 and reduce its impact on the health and lives of the population, social life and the economy as a whole. The dimensions of the crisis, both for the European and the global economy, cannot yet be fully assessed and realistically predicted. Expectations are for a significant slowdown and a potential slide into recession this year, with all forecasts accompanied by a high degree of uncertainty about how profound the economic consequences of the actions taken to combat the pandemic will be. What is clear, however, is that the severe limitations in the response to the disease will have significant economic consequences and economic recovery will only begin once the threat of the pandemic is effectively contained.

The emergency situation has also necessitated a rethinking of previous objectives and a reallocation of funds to new urgent costs that have arisen. The country's top priority is to support the health system's capacity to fight the contagion. Next up: ensuring the security services are in place so that they can help the health system, and taking measures to ease the blow on the economy, preserve employment and help the most affected business sectors.

³ https://www.minfin.bg/upload/44289/CP+2020-2023_BG.PDF

⁴ https://www.minfin.bg/upload/45702/MacroForecasting_Oct_2020bg.pdf



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

The implementation of the overall strategy and the main policy initiatives in response to the COVID-19 pandemic require the mobilisation of significant resources, including financial resources, with the Government committing to provide funds from the national budget in the form of direct expenditure and other operations in the financing part, as well as support through the operational programmes of the 2014-2020 programming period in the amount of around BGN 870 million to finance socio-economic measures to support the people and enterprises directly affected by the crisis. In addition, other public resources have been mobilised, including in the form of financial instruments, whose impact on supporting and restoring economic activity is estimated at around BGN 4.5 billion.

GDP in Bulgaria grew by 3.4% in 2019, continuing the trend of relatively high economic growth that started in 2015 and leading to an acceleration of the real convergence process towards the EU average. Growth during the year was led by domestic demand. Private consumption accelerated and was influenced by the positive labour market developments that have characterised recent years and also by credit growth. Government spending continued to support growth, and merchandise exports recovered after a weak performance in 2018. The employment and economic activity rates of the population in the 15-64 age group reached historic highs in 2019, at 70.1% and 73.2% respectively, while the unemployment rate fell to its lowest level to date at 4.2%. The number of people employed accelerated its growth rate to 0.3%, with the services sector leading the way. High demand for labour in the economy drove compensation per employee up by 6.1%, while real labour productivity growth remained stable at a rate of 3%. Nominal unit labor costs (NULC) slowed to 3% growth in 2019 from 6.3% in 2018. Annual average inflation for 2019 was 2.5%, remaining close to the prior year's 2.6%. External drivers of consumer price increases were limited by declines in international oil and non-energy commodity prices. The cost competitiveness of the economy was supported by a moderate increase in NULC. House prices continued to rise, but at a slower pace. Their development was in line with underlying fundamentals.

The capital position of the banking system remained stable and the indicators continued to be above the minimum regulatory and prudential requirements. Additional capital requirements were introduced during the period, with all banks holding common equity tier 1 capital above the required minimum and complying with capital buffer requirements. The overall capital adequacy of the banking system remained high at 20.21% at year-end (20.38% in December 2018), including Tier 1 capital adequacy of 19.55% (19.41% in December 2018). At the end of the period, the excess of capital over the regulatory minimum under Tier 1 amounted to BGN 8.0 billion, or BGN 0.9 billion more than in 2018. The excess over the capital requirements and capital buffers during the year decreased by BGN 0.6 billion to BGN 3.3 billion, driven by the growth of risk exposures and the capital and buffers required calculated on this basis, as well as the additional requirements introduced in 2019. The banking system's profit as at 31 December 2019 amounted to BGN 1.7 billion and was similar in size to that reported for



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

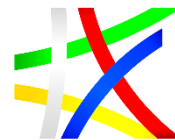
2018. Due to the higher growth rate of assets and balance sheet capital, the return on assets (ROA) and return on equity (ROE) ratios declined and stood at 1.47% and 11.64% respectively at the end of December 2019 (compared to 1.58% and 11.97% at the end of 2018).

In 2019, the trend towards improving asset quality indicators of the banking system continued. Gross NPLs and advances decreased by BGN 663 million. (9.8%) to BGN 6.1 billion at the end of the year, while total gross loans and advances increased by BGN 5.4 billion. (6.1%). As a result, the share of gross non-performing loans and advances in total gross loans and advances fell by 1.1 percentage points to 6.5% at end-2019 (7.6% at end-2018). The downward trend in gross non-performing loans and advances was also accompanied by a decline in their inherent impairment coverage ratio to 48.6% at year-end (vs. 51.4% coverage at end-2018). The net value of non-performing loans and advances, which represents the potential credit risk on the balance sheet of the banking system, decreased by 4.5% to BGN 3.2 billion at the end of 2019, while its share in net loans and advances fell to 3.5% (3.9% at the end of 2018). The amount of residual risk remained fully covered by the excess of total capital over capital requirements.

At the end of 2019, the government approved by its decision (DCoM No. 815/30.12.2019) the updated medium-term budget forecast for the period 2020-2022 (MTBF), based on the 2020 State Budget Act approved by the National Assembly. In line with the revenue and expenditure parameters and policies in the 2020 State Budget Act, the MTBF estimated the main parameters for the general government sector (ESA 2010), which projected a close-to-balance budget balance for the year - a minimum deficit of - 0.1 percent of projected GDP. The target thus outlined was consistent with the macroeconomic situation at the time of adoption, as well as with the requirements of the national fiscal rules and constraints laid down in the Public Finance Act and the European requirements for Member States' budgetary frameworks.

The envisaged revenue policy has continued to adhere to the principles and guidelines established in recent years, with its main orientation once again being towards sustaining economic growth and stimulating labour demand and supply, as well as improving revenue collection, tackling the shadow economy and reducing administrative burdens and costs for businesses and citizens. The envisaged revenue policy measures aim at ensuring the necessary financial resources to implement the Government's expenditure policies.

The main thrust of public expenditure policy was to ensure the normal functioning of budget systems and to implement priority policies before the outbreak of the COVID-19 pandemic crisis. Education policy is aimed at ensuring access to pre-school and school education and reducing drop-out and early school leaving rates are key factors in reducing social exclusion, improving the quality and competitiveness of the workforce and the well-being of citizens. In line with this understanding, measures were taken at the outbreak of the epidemic crisis, on the one hand, to preserve the lives and health of



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

students as a risk category for infection and spread of the virus, and on the other hand, to continue the normal functioning of the educational process. To this end, distance e-learning was initiated, through the use of internet platforms and television forms. This poses serious challenges and new demands for both students and teachers, but at the same time is a major step towards deepening the penetration of digital technologies in education. As already indicated, 2020 was another step in the planned and annual increase in funding for education and training activities for children and pupils, which started in 2017, with an additional 360 million BGN. These funds provide for an increase in the salaries of pedagogical specialists.

The policy in the field of higher education aims to encourage autonomous higher education institutions to continuously develop the quality of higher education offered, support academic staff, create conditions for the absorption of good practices of higher education institutions from EU Member States, and provide conditions for access to quality higher education aimed at successful lifelong realization. In the crisis situation, higher education is facing challenges similar to those facing secondary education - the suspension of face-to-face classes and the introduction of distance e-learning. The estimates to the 2020 State Budget Act provide for additional funding for the following priority measures and activities in the field of higher education: additional funds of BGN 41.1 million for the maintenance of the education of undergraduate and postgraduate students, and maintaining the total amount of the state guarantee for newly granted student loans at BGN 50 million.

The autumn macroeconomic forecast includes a projection of the main macroeconomic indicators until 2023. In the short term, the risks to the forecast are to the downside. Economic development depends on the dynamics of the epidemic situation both domestically and globally, and no sustainable solution to the pandemic has yet emerged. As part of this projection, an alternative macroeconomic scenario with less favourable external dynamics in 2020 and 2021 has been developed. The results of this simulation show a deterioration in overall GDP dynamics, with real changes in 2020 and 2021 being lower by 2.2 and 4.3 percentage points, respectively, relative to the baseline scenario. Throughout the projection period, the level of GDP at current prices will be lower than in the baseline scenario.

Real GDP is forecast to fall by 3% in 2020, with a partial improvement in economic activity expected in the second half of the year. This is reflected in a slowdown in the decline in household consumption, while public consumption expenditure and investment will have a positive impulse on GDP. The overall contribution of the external sector to GDP in 2020 will be almost neutral. In 2021, we expect GDP growth to be 2.5%, with the economy not reaching its pre-crisis level of 2019.

The average annual decline in employment in 2020 is expected to be around 2.6% and the unemployment rate 5.6%. The government has taken a number of measures to limit the negative effects of COVID-19, and in the labour market area the 60/40 measure is



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

yielding positive results and limiting the increase in unemployment. Wages are expected to grow by 5% in 2020 and will be accelerated next year by both private sector and planned public sector earnings increases.

Average annual inflation for 2020 is forecast to be 1.4%. Next year, its dynamics will depend on the recovery of international commodity prices and oil prices. Increased uncertainty in 2020 is reflected in a higher propensity to save, defer spending on durable goods and lower demand for credit. Claims on businesses are expected to grow by 0.6% and on households by 5% in 2020. Demand for credit will accelerate next year, but will be less pronounced for firms, due to still-weak investment activity expected in the private sector.

The prognosis presented is dependent on the evolution of the epidemic situation, both nationally and globally. If pandemic containment measures increase and have a restraining effect on economic activity, negative shocks to supply, consumption and exports can be expected. These shocks would have a negative effect on GDP mainly in 2020 and 2021. In the absence of a sustainable solution to deal with the pandemic, uncertainty among economic agents can be expected to remain high in the medium term, resulting in lower growth. Regarding the external environment, the latest forecasts for Bulgaria's main trading partners suggest a revision of expectations towards a more gradual recovery. Downside risks related to protectionist policies and global trade disruptions, as well as the effects of the UK's exit from the European Union, remain. All of these could be reflected in slower export growth rates over the forecast period.

There are also risks to the upside. If the global epidemic situation is dealt with more quickly, there could be a much more favourable impact on the external environment, especially with an accelerated recovery in international tourism. At the same time, the country is likely to see a faster recovery in investment and stronger consumption growth given the recovery in the labour market. Recovery plan funds will also have a positive effect on the economy, especially in the period 2021-2026. Bulgaria is expected to have access to more than 10 billion euros under the new EU Mechanism for Reconstruction and Sustainability.

Key macroeconomic indicators	Forecast			
	2020	2021	2022	2023
Gross domestic product (million BGN)	119 089	124 540	130 876	137 701
GDP (real growth, %)	-3.0	2.5	3.0	3.2
Employment (%)	-2.6	0.9	1.5	0.4
Unemployment rate (%)	5.6	5.2	4.6	4.6
Average annual inflation (%)	1.4	2.1	2.6	2.5
Current account (% of GDP)	3.1	3.9	4.2	3.4
Trade balance (% of GDP)	-1.7	-1.2	-1.3	-2.1
Foreign direct investment (% of GDP)	2.9	2.9	2.9	2.9

Table 11 Forecast of key macroeconomic indicators for the period 2020-2023 - baseline scenario



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

An alternative macroeconomic scenario with less favourable dynamics of the external environment is also considered. This involves a slower recovery of the European and global economies, with the shock to growth of our trading partners starting in the fourth quarter of 2020 and being most pronounced in 2021. After this year, growth rates are unchanged from the baseline scenario, but the level of GDP of our trading partners remains lower. In both years, a negative shock to international prices is also set, i.e. a slower price recovery is considered compared to the baseline scenario, and their recovery also depends on the recovery of the world economy. The changes made in the assumptions are reflected in a deterioration of overall GDP dynamics in 2020-2022. Throughout the projection period, its level at current prices remains lower than in the baseline scenario. The change in assumptions has a negative impact on real GDP growth, with lower rates of 2.2 and 4.3 p.p. in 2020 and 2021, respectively. As the effect of the deteriorated external environment wears off towards the end of the forecast horizon, GDP growth rates will pick up, but its level at constant prices will remain lower than in the baseline scenario. The change in assumptions will be directly reflected in a deterioration of exports, both in real and nominal terms. Again, the divergence is pronounced in the first two years of the period, after which there is a recovery in growth, but at lower levels. Weaker growth in firms' export earnings will affect employment and incomes, and hence lead to weaker household consumption. Investment will also be negatively affected by lower demand. Throughout the projection period, inflation developments in GDP deflator and inflation terms are lower compared to the baseline scenario, which negatively affects the level of GDP at current prices. In line with the decline in exports, there will be a deterioration in the current account balance.

A summary of the expected changes in key macroeconomic indicators resulting from the changes in assumptions is presented in the following table:

Key macroeconomic indicators	Forecast			
	2020	2021	2022	2023
GDP level at current prices (%)	-2.4	-7.6	-8.5	-7.6
GDP (real growth, p.p.)	-2.2	-4.3	-0.3	1.2
Employment (p.p.)	-1.3	-2.6	-0.2	0.7
Unemployment rate (p.p.)	0.6	1.9	2.0	1.7
Average annual inflation (p.p.)	-0.2	-0.7	-0.4	-0.2
Current account % of GDP (p.p.)	-1.2	-3.0	-0.1	1.5

Table 12 Forecast of key macroeconomic indicators for the period 2020-2023 - alternative scenario (deviation from the baseline scenario)



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

4. LESSONS LEARNED FROM THE IMPLEMENTATION OF FINANCIAL INSTRUMENTS IN THE 2014-2020 PROGRAMMING PERIOD

This section includes an overview of the implementation of financial instruments in Bulgaria and other EU Member States during the previous programming periods, with a focus on the established mechanisms and experience gained. Particular attention is paid to the analysis and assessment of the main success and failure factors in the implementation of financial instruments in the field of education. A SWOT analysis of the strengths, weaknesses, opportunities and threats in the implementation of financial instruments in the 2014-2020 programming period has also been prepared.

4.1. Lessons learned from the implementation of financial instruments in the programming periods 2007-2013 and 2014-2020 in the Republic of Bulgaria

In the first programming period for Bulgaria 2007-2013, financial instruments /instruments for financial engineering/ were foreseen in 2 operational programmes co-financed by the Structural Funds and the Cohesion Fund. - OP "Development of the Competitiveness of the Bulgarian Economy" and OP "Regional Development".

The financial resources provided in the form of financial instruments in Bulgaria in the period 2007-2013 were managed through the participation of the European Investment Bank Group. As a result, within the framework of the OP "Development of the Competitiveness of the Bulgarian Economy", the financial instruments were implemented in the framework of the JEREMIE Initiative through a Holding Fund managed by the European Investment Fund. Under OP "Regional Development", the financial instruments were implemented under the JESSICA Initiative through a Holding Fund managed by the European Investment Bank.

In connection with the above, Framework Agreements have been concluded between the Government of the Republic of Bulgaria and the European Investment Fund on the implementation of the JEREMIE Initiative and a Financial Agreement between the Government of the Republic of Bulgaria and the EIB on the implementation of the JESSICA Initiative. In 2015, both Framework Agreements were extended until 31.12.2025, taking into account the need to prepare a strategy for the management of the recycled financial resources of the Holding Fund and its management in accordance with the requirements in the EC Guidelines on Financial Engineering Instruments, providing for the need to use the recycled funds from the instruments for the same type of instruments

The JEREMIE Initiative implements 5 financial engineering instruments, namely:

- Guarantees covering losses on a portfolio of loans;
- An instrument providing financing with a risk-sharing element;
- Venture Capital Fund;



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

- A tool to promote entrepreneurship and provide seed funding;
- Co-investment funds.

Within the JESSICA Initiative 2 instruments are implemented - Urban Development Funds managed by:

- Regional Fund for Urban Development AD;
- Sofia Sustainable Urban Development Fund EAD.

In the 2007-2013 programming period, Bulgaria has committed to provide funds through financial instruments under the operational programmes, amounting to € 388 million, of which EU funding is € 330 million. According to the report of the European Commission, DG Regional Policy of 20.09.2017 *"Summary data on the progress of the implementation of financial engineering instruments reported by the Managing Authorities in accordance with Article 67 (2) (j) of Regulation (EU) No 1083/2006"*⁵, the information for Bulgaria regarding the financial implementation of financial engineering instruments with funds under the Operational Programmes in the period 2007-2013 is as follows:

- The amount of the OP financial commitment from the MA to the Holding Fund is €382 million, of which €324.70 million is from the Structural Funds, €57.30 million is national public co-financing and there is no national private co-financing;
- The amount committed under the OP for financial resources from the Holding Fund to specific funds is EUR 375.76 million, of which EUR 319.40 million under the Structural Funds and EUR 56.36 million - national public co-financing. There is no national private co-financing. The number of financial products offered and 9 527, of which 4 092 are loans, 5 225 are guarantees and 210 are equity/venture capital. The amount of financial commitment for OP financial instruments reaching the final users is EUR 356.88 million, of which EUR 235.87 million in loans, EUR 68.67 million in guarantees and EUR 52.34 million in equity/risk capital. The amount of the Structural Funds reaching the final beneficiaries is EUR 303.35 million, of which EUR 200.49 million in loans, EUR 58.37 million in guarantees and EUR 44.49 million in equity/risk capital.

In the 2014-2020 programming period, a single joint stock company with state property was established, called "Fund Manager of Financial Instruments in Bulgaria" EAD (Fund of Funds). The sole owner of the capital of the Fund of Funds is the State, represented by the Minister of Finance. The Company is engaged in the management of financial instruments implemented under the programmes co-financed by the European Regional Development Fund, the European Social Fund and the Cohesion Fund, as well as the European Agricultural Fund for Rural Development and the European Maritime and

⁵ <https://www.fi-compass.eu/sites/default/files/publications/summary-data-FEI-situation.pdf>



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Fisheries Fund in Bulgaria. The Fund of Funds will also act as a holding fund for the financial engineering instruments under OP "Competitiveness" 2007-2013 after the expiry of the Framework Agreement concluded with the EIF under the JEREMIE Initiatives. The Fund of Funds also manages the JESSICA reinvestment cycle under the Regional Development OP since 2017.

Within the 2014-2020 period, the Fund of Funds manages financial resources amounting to BGN 1.2 billion under four operational programmes, as follows: OP „Human Resources Development“, OP „Innovation and Competitiveness“, OP „Environment“ and OP “Regions in Growth”, as well as the Rural Development Programme.

The financial instruments used under the four operational programmes and the Rural Development Programme for the 2014-2020 programming period are as follows:

➤ OP "Human Resources Development":

- Microcredit with shared risk - with a public financial resource of BGN 23.9 million. The instrument aims to improve access to finance for the establishment and development of start-ups; support social entrepreneurship and promote entrepreneurship among vulnerable groups. The final recipients are companies and self-employed persons registered not more than 5 years ago, including those representing vulnerable groups - unemployed for more than 6 months, young people up to 29 years, and people with disabilities; social enterprises. The type of financing is an investment or working capital loan of up to BGN 48 895. There is also the possibility of a small loan of up to BGN 5 000. The repayment period is up to 10 years, with a possible grace period for principal and interest of up to 3 years. The funds are earmarked for the acquisition of tangible and intangible assets for the development and expansion of the enterprise's or self-employed person's activities, for other expenses related to the main business activity.
- Portfolio guarantees with a loss ceiling of BGN 5 million The portfolio guarantee covers up to 80% of the financial intermediary's credit risk on each microloan included in the guaranteed portfolio, up to a loss ceiling of 25% at portfolio level. Microloans are targeted at start-ups, including those of vulnerable groups, unemployed for more than 6 months, young people up to 29 years, including persons with disabilities and social enterprises. The funds finance activities for the acquisition of tangible and intangible assets, working capital in connection with the development and expansion of the enterprise's or self-employed person's activities, the development and upgrading of the skills of employees or hosts in the case of self-employment. The maximum amount of the credit granted to the final recipient is BGN 97 791.
- For the "Micro-credit with shared risk" financial instrument, funding has already been provided to the final recipients and for the "Portfolio Guarantees with Loss Ceiling" instrument, a financial intermediary has been selected and financial resources are to be provided to the final recipients.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

➤ OP “Innovation and Competitiveness”:

- Acceleration and Seed Fund I - with a public financial resource of BGN 37.8 million, including BGN 10.4 million to support enterprises affected by COVID-19. Private co-financing at fund level is BGN 3.5 million. The individual investment amounts are: between BGN 50 000 and BGN 100 000 in the acceleration phase and between BGN 100 000 and BGN 2 000 000 in the start-up phase. A separate accelerator programme is also available to provide strategic support, training, mentoring, etc. Investments are made in SMEs for acceleration and early-stage development. The estimated number of companies expected to be supported is 229.
- Acceleration and Seed Fund II - with a public financial resource of BGN 49.2 million, including BGN 13.6 million to support enterprises affected by COVID-19. Private co-financing leveraged at fund level is BGN 1.5 million. Technology-driven projects with high growth potential are supported for acceleration and early-stage development. The individual investment amount for acceleration and between BGN 25 000 and BGN 100 000 and for early-stage development is between BGN 25 000 and BGN 2 000 000. The fund has an accelerator programme to provide strategic support, training and mentoring to entrepreneurs. The expected number of companies supported is expected to be 125.
- Acceleration and Seed Fund III - with a public financial resource of BGN 37.4 million. An additional amount of BGN 14.3 million is made available to support enterprises affected by COVID-19. Private co-financing leveraged at fund level is BGN 5.1 million. This instrument supports only early-stage enterprises, with individual investments of up to BGN 2 000 000. The expected number of companies to be supported is expected to be up to 53.

The aim of these three instruments is to promote entrepreneurship in Bulgaria and facilitate access to finance for SMEs in the early stages of their development. In addition, the implementation of the instruments aims at creating and developing new sustainable businesses, implementing new innovative ideas, promoting the development of the entrepreneurial ecosystem in Bulgaria and creating added value for the final recipients. The type of financing is equity and quasi-equity investments.

- Venture Capital Fund - with a public financial resource of BGN 65.1 million, including BGN 18 million of additional resources made available to support enterprises affected by COVID-19. The funds come from the discontinued Technology Transfer Fund. Private co-financing leveraged at fund level is BGN 10.2 million. The objective of the instrument is to support the entrepreneurial ecosystem in Bulgaria, providing support to high-tech companies in order to consolidate and expand their activities, as well as to improve overall access to capital for commercialization of developed products and overall capacity to achieve higher growth, including through the application of innovation. The final recipients of the aid are SMEs with a high-risk profile and at a relatively early stage of development. Eligible areas for funding include: production of goods using new technologies that reduce unit costs, high technology, software and hardware, e-commerce, innovative



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

products and services. The financing provided may take the form of equity and quasi-equity investments, with investment amounts ranging between BGN 1,5 million and BGN 6,8 million. Up to 25 companies are expected to be supported under the fund.

- Mezzanine/Growth Fund - with a public financial resource of 75.3 million leva. The private funds raised should be at least 30% of the public resources invested in the final recipients. The instrument aims to provide access to alternative financing for small and medium-sized enterprises that have growth potential and have plans to expand and improve their operations, develop new products and services. Separately, the financial instrument aims to improve the financial and corporate governance of the supported enterprises in order to increase their productivity and potential to enter new markets. The final recipients of the financial instrument are small and medium-sized enterprises at a 'mature' stage of development. Financing is in the form of equity and quasi-equity investments, with assistance ranging from BGN 4,9 million to BGN 13,7 million. A substantial part of the resource is provided as mezzanine financing or a hybrid form between equity and debt financing. In January 2021, the FMFIB entered into an agreement with a financial intermediary through which the assistance under the fund will be delivered to the final recipients.
 - Portfolio guarantees in COVID - 19 loss cap - with a public financial resource of BGN 157.9 million. The funds have been reallocated from the discontinued Small Business Financing Facility and the transformed Portfolio Guarantees with Loss Ceiling for Energy Efficiency and Innovation Facility. The loans are provided by selected intermediary banks with private resources, on concessional terms thanks to the credit facilities of the guarantee. The purpose of the facility is to facilitate businesses' access to credit to continue their operations, including to meet their liquidity needs and/or to overcome financial difficulties due to the pandemic crisis - COVID-19. The final recipients of the assistance are small and medium-sized enterprises located in Bulgaria, and the type of financing provided can be in the form of a credit guarantee for a portfolio of new loans for companies without sufficient collateral but with a need for support, in the terms of COVID-19. There is the possibility of combining a guarantee instrument and an interest rate subsidy in a single operation, as well as preferential interest rates, reduced collateral requirements and a lower administrative burden. The grace period of the loan is up to 2 years and the possible interest subsidy up to 1 year is 4%.
- **OP "Regions in Growth":**
- Urban Development Fund - North - with a public financial resource of 130.4 million leva;
 - Urban Development Fund - South - with a public financial resource of BGN 135.5 million;
 - Urban Development Fund - Sofia - with a public financial resource of BGN 87.4 million.

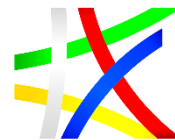


„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

The additional private co-financing for the three funds is raised by the selected financial intermediaries and should be at least 41% of the total funding under the urban development funds. The purpose of the instrument under the three funds is urban development (urban transport, urban environment improvement, cultural and sports infrastructure), stimulating economic growth in the regions through the development of economic development zones in cities, increasing the energy efficiency of single-family residential buildings and student residences, and developing tourism related to immovable cultural property of national and global importance. The final recipients are municipalities and municipal enterprises, public institutions and state-owned companies, private companies, public-private partnerships, NGOs, religious institutions and individuals. Financing is provided in the form of low-interest investment and working capital loans, including VAT. The amount of the loans is up to BGN 39 116 600 for urban development and up to BGN 19 558 300 for regional tourism. The repayment period is up to 20 years with up to 3 years grace period. The embedded guarantees provided to financial intermediaries are up to 80% for each individual loan and up to 25% for the entire loan portfolio. There are no public resource management fees and reduced collateral requirements. The required deductible of the final recipients is up to 15% with the possibility of reduction, including up to 0% in certain cases. There is the possibility of combining the credit resource with a grant for certain sectors.

➤ OP “Environment”:

- Financial instrument - water sector - with a public financial resource of BGN 225 million. The additional funding is from the European Bank for Reconstruction and Development. The objectives of the Facility are aimed at complementing the OP Environment grant funding for eligible projects of water and wastewater operators; reconstruction and modernization of infrastructure in the water and wastewater sector; improving the environment by reducing water losses and achieving compliance with EU environmental legislation. The final recipients of the aid are water operators. The type of financing under this instrument is the provision of loans to water operators with a repayment period of up to 15 years and a grace period of up to 3 years, as well as guarantees to commercial banks providing loans to finance eligible projects of water operators;
- Financial instrument - waste - with a public financial resource of 50 million leva. The additional financial resource should be provided by the partner banks. The objectives of the instrument are aimed at increasing the investment potential of private and municipal enterprises to implement projects to reduce landfilled municipal waste as well as to reduce the amount of landfilled municipal waste in the country. The final recipients of the aid are municipalities that do not use grant funds for the same purposes, enterprises with existing contracts with municipalities for waste treatment, and non-profit organizations with pilot and demonstration projects for which no grant is awarded. The type of financing is in the form of loans, jointly with commercial



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

banks, investment loans with a repayment period of up to 240 months, working capital loans linked to the investment with a repayment period of up to 60 months.

➤ Rural Development Programme:

- Loans for businesses in rural areas - with a public financial resource of BGN 38.3 million. The additional financial resource will be raised from intermediary banks. The aim of the instrument is to develop rural areas economically, increase the competitiveness of the agricultural sector, and promote social inclusion and support for the sustainable development of small farms. The final recipients of the aid are farmers and non-agricultural businesses in rural areas. The type of financing takes the form of loans in euro or in leva on concessional terms for investment purposes or for working capital; stand-alone loans or loans complementing grants already received for individual projects. The amount of the loans shall be up to BGN 2 000 000.

Within the current programming period 2014-2020, OP "Science and Education for Smart Growth" does not implement financial instruments, but only grants are provided, including for education and lifelong learning, within the framework of PA 2, as well as for active inclusion and socio-economic integration of learners.

While in the first programming period Bulgaria did not have enough expertise and know-how and relied on the assistance of the European Investment Bank and the European Investment Fund, in the second programming period 2014-2020, through the establishment of the Fund of Funds and the expansion of the scope of the financial instruments, Bulgaria started to accumulate more than the necessary capacity, experience and skills for managing the financial instruments.

4.2. Lessons learned from the implementation of financial instruments in the 2007-2013 and 2014-2020 programming periods in EU Member States EC

During the 2007-2013 programming period, financial instruments set up under the European Regional Development Fund (ERDF) and the European Social Fund (ESF) were used by 25 of the 28 European Union (EU) Member States. 972 ERDF and 53 ESF financial instruments have been set up across the EU. By the end of 2014, around €16 billion had been contributed to these instruments from the operational programmes of the two funds (€15.2 billion from the ERDF operational programmes and €0.8 billion from the ESF operational programmes). In the 2007-2013 programming period, EU contributions to financial instruments represent 5% of total EU funding to the ERDF and 1% of total EU funding to the ESF for the whole period.

According to the report of the European Commission, DG Regional Policy of 20.09.2017 *"Summary data on progress in the implementation of financial engineering instruments reported by Managing Authorities in accordance with Article 67 (2) (j) of*



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Regulation (EC) No 1083/2006⁶, the summary data on the implementation of financial instruments, in particular those under the ESF by type of fund in the programming period 2007-2013 are as follows:

- 25 Member States have used financial engineering instruments, of which 25 for SME support, 11 for urban development, 9 for energy efficiency and renewables;
- 1 058 financial instruments have been created in the EU: 77 holding funds and 981 specific funds;
- 89% of the financial instruments provided support for enterprises, 7% for urban development and 4% for energy efficiency and renewables;
- The financial instruments amount to €16.4 billion, including €11.3 billion under the Structural Funds;
- Payments to end-users amounted to €15.2 billion, including €10.1 billion under the Structural Funds - 93% of all FI payments;
- The management costs and fees, based on the 81% of the FIs that are reported, are equal to €900 million or 6.7% of all FI payments;
- Resources of €8.5 billion have been recovered;
- The leverage achieved shows significant differences between instruments, in some cases up to 20 times for guarantees and loans and up to 18 times for equity/venture finance;
- 314 000 end-users are supported;
- The average support provided per end-user is EUR 40 000;
- The average amount of funds made available is EUR 45 000 for loan instruments (including microfinance), about EUR 16 000 for guarantees and about EUR 410 000 for equity participations;
- 170 000 jobs have been created as a result of the implementation of financial instruments.

The investments made by the European Social Fund in financial instruments during the 2007-2013 programming period were equal to around EUR 871.48 million, with EUR 762.71 million made available through various financial products to final beneficiaries.

During the 2014-2020 programming period, an increasing use of financial instruments is encouraged. This is also reflected in the General Regulation - Regulation 1303/2013, which provides for an expanded use of financial instruments to ensure that the objectives of all five European Structural and Investment Funds and all thematic objectives of the programmes are met.

⁶ <https://www.fi-compass.eu/sites/default/files/publications/summary-data-FEI-situation.pdf>



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

The financial instrument allocations for the five ESFs in 2014-2020 are around €21 billion from the EU budget, corresponding to around €31 billion in total allocations.

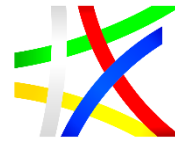
Based on the reports prepared by the Managing Authorities of the Operational Programmes, in accordance with Article 46 of Regulation (EU) No 1303/2013, at the end of 2018, 24 EU Member States are using financial instruments under all ESF and the 10 (ten) Thematic Objectives (TOs), distributed as follows:

- 15.4% under TO 1 "Strengthening research, technological development and innovation";
- 3.3% under TO 2 "Improving access to, use and quality of information and communication technologies";
- 56.2% under TO 3 "Increasing the competitiveness of small and medium-sized enterprises (SMEs);
- 15.5% under TO 4 "Supporting the transition to a low carbon economy";
- 0.1% under TO 5 "Promoting climate change adaptation and risk prevention and management";
- 2.7% under TO 6 "Preservation and protection of the environment and promotion of resource efficiency";
- 0.7% under TO 7 "Promoting sustainable transport and improving network infrastructures";
- 3.3% under TO 8 "Promoting sustainable quality employment and supporting labour mobility";
- 2.2% under TO 9 "Promoting social inclusion and combating poverty and discrimination";
- 0.5% under TO 10 "Investment in education and training and lifelong learning".

The financial contribution of the operational programmes for financial instruments as of 31/12/2018 is approximately €22.1 billion, with €16.9 billion under the ESIF. At the same time, the total number of planned and operational financial instruments reported at the end of 2018 is 686, compared to a total of 1 058 for the 2007-2013 programming period. This is mainly due to the consolidation and rationalization of some financial instruments during the 2014-2020 programming period.

Almost €9 billion has been paid under various financial instruments, including €7 billion under the ESIF (around 41% of the ESIF financial commitment), with around €3.7 billion reaching the final users, of which €2.8 billion under the ESIF.

As of 31/12/2018, Managing Authorities from 8 Member States have reported progress on the establishment and implementation of financial instruments co- financed by the



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

European Social Fund (ESF) and the Youth Employment Initiative. 51 financial instruments have been set up and are operational, with a financial commitment of €815 million under operational programmes, including €573 million funded by the ESF. Most of the financial instruments supported by the ESF and the Youth Employment Initiative were set up under TO 8 "Promoting sustainable quality employment and supporting labour mobility. The remaining financial instruments are under TO 9 (in Bulgaria, Hungary, Italy and Poland) and TO 10 (in Italy and Portugal). The assistance provided under the ESF and Youth Employment Initiative financial instruments is mostly in the form of loans and micro-credit schemes, with some exceptions, including 2 financial instruments providing equity finance in Germany and Poland.

As of the end of 2018, 18 ESF and Youth Employment Initiative financial instruments have committed €69 million of operational programme resources to final recipients, with payments to them amounting to €49 million, of which €34 million are ESF. 2 308 final recipients were supported, including 1 389 micro-enterprises and 773 individuals.

Lessons learned regarding the implementation of financial instruments to support student and doctoral start-ups and lifelong learning, as applied by individual EU Member States and other countries, can be summarised as follows:

Poland

Financial instrument "Labour Fund Training Loan"

The financial instrument has been implemented since 1997 on the basis of Article 42 of the Employment Promotion and Labour Market Institutions Act and is a national funding scheme for unemployed and jobseekers to acquire skills and knowledge relevant to labour market needs. The implementation scheme of the financial instrument covers the whole country, but the provision and management of the loans is at local level. Local labour offices, part of the public employment services, manage the loan process. Each labour office draws up its own loan scheme, defining the specific rules and requirements (repayment conditions, etc.). Each loan recipient is required to collect and keep all supporting documentation, such as receipts from the training course, copies of training materials, accommodation documents, etc. This documentation should be provided to the relevant labour office. In case of misuse and misappropriation of funds, they must be reimbursed by the recipient.

Eligible final recipients are unemployed and jobseekers registered with the local employment office. Loans are also eligible for foreigners, in accordance with the provisions of the Employment Promotion and Labour Market Institutions Act.

The type of training courses should be aimed at acquiring skills, competences and knowledge in order to facilitate the inclusion of the target groups in the labour market.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Sources of funding are the state budget through the Labour Fund. Repayment of loan instalments for members of eligible target groups will be made from their future earnings when they find employment.

The maximum loan amount is up to EUR 3 325 and the interest rate is 0%. Repayments are negotiated individually at each local employment office, starting immediately after the completion of the training course and the maximum repayment period is 18 months.

Eligible costs include: training/course fees, insurance, travel, accommodation, physical and psychological tests.

Financial instrument "Creation of new jobs and promotion of entrepreneurship in Mazovia, Poland."

The tool is a pilot scheme implemented under the Human Capital OP, co-financed by the European Social Fund. The financial instrument provides loans of up to EUR 12 500 as well as training and business advice to citizens in the Mazovia region who are planning to start their own business but have limited access to capital. The loans are granted at preferential interest rates and have relaxed requirements regarding the provision of collateral. The aim of the initiative is to address intra-regional disparities in terms of existing unemployment as well as to promote entrepreneurship, research and development. The financial instrument is exemplary in terms of providing support to people with insufficient capital, but with innovative ideas and skills to start their own businesses. This is particularly important for areas where there is a general lack of job opportunities in order to improve the socio-economic situation. By the end of 2015, the financial instrument had helped to create 151 jobs, through the provision of €1.6 million in loans. The loans provided are combined with non-financial support, including training and business advice, to promote business sustainability and the business environment.

This financial instrument would also be extremely useful for students with ideas for developing their own business and entrepreneurship.

Germany

AFBG 'Maister-BAFÄ' combination tool

The instrument is implemented in accordance with the Career Development Promotion Act and the Further Training Support Act/Upgrading Training Act. The purpose of the instrument is to provide support for the acquisition of a vocational qualification or other comparable qualification in a specific vocational field.

The instrument is a combination of a grant and a debt instrument (loan). The loan is provided by the financial institution KfW. The Federal Government subsidizes the loans (finances the interest rates during the programme/rate and the grace period).

Eligible target groups include people who have completed Vocational Education and Training (VET) and aim to build on what they have achieved in order to gain a higher



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

vocational qualification or other comparable qualification in a vocational field. The combined instrument is also available to foreigners who hold a residence permit in Germany. Training usually takes place over 2 or more years of full-time commitment or 4 years of part-time commitment (400 training hours of full-time commitment). Distance learning is permissible in strict compliance with the Distance Learning Protection Act. Multimedia courses are permissible if supplemented by practical activities. Support is also provided for vocational training abroad, but only if it is in EU Member States and with which there are agreements between the responsible institutions. The fields of study must comply with the provisions of the German Vocational Education and Training Act (federal law).

The period of support is up to 24 months for training with full commitment and up to 48 months for training with partial commitment.

Eligible expenses include fees and other costs associated with the vocational training programme, daily expenses. The amount of assistance depends on a number of factors including the applicant's marital status, number of children, applicant's income, spouse's income. The amount for fee assistance is up to EUR 10 226; 30,5% grant and 69,5% in the form of a loan. The amount for daily expenses is up to €675, the first €150 is a loan and the rest is in the form of a grant (44%) and a loan (56%). The additional financial resources for daily expenses include: €215 per spouse (50% grant - 50% loan); €210 per child (50% grant - 50% loan). The amount for vocational trainings fees is provided regardless of income.

Loan repayments start after a 2-year grace period and after completion of the programme or exam and can be extended up to 6 years, subject to certain conditions. The maximum repayment period is 10 years. The minimum monthly repayment instalment is EUR 128. The interest rate is 0% during the training programme plus a 2-year grace period, after which the borrower can choose between a fixed or flexible interest rate (during the repayment period). A 25% reduction in the loan interest rate is provided upon passing the exam.

Denmark

State education support grants and education loans

The instruments are provided in accordance with the Act on the Danish State Education Grant and Loan Scheme. It has been applied since 1970. The support is combined, in the form of grants and government subsidized loans. The loans are provided by the Danish Education Support Agency through a private commercial bank.

There are two main support programmes:

- For students aged 18 and over following general and vocational education programmes. There is no limit to the duration of this type of support and learners can use



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

it for an unlimited number of courses. (For learners under 20, support depends on their parents' income;)

➤ For students in higher education. Receive monthly grants/scholarships corresponding to the duration of the chosen general or vocational training plus 12 months. Within the 70 grants/scholarships awarded, students may change general or vocational courses. The type of training courses is general and vocational for secondary or higher education

The sources of financing are the government (grants and credit subsidies); private bank (current financial resources) and the individuals themselves (future income to repay the borrowed funds). The interest rate is up to 4% per annum during the training itself. Repayments start after a maximum of 1 year after completion of the general education or vocational course and the maximum repayment period is up to 15 years. The maximum grant per month for students living with their parents is up to DKK 5 792 and the maximum loan per month is up to DKK 7 592 per month.

Entrepreneurship Fund of Central Denmark

The financial instrument was set up in 2012 with funding from the European Social Fund and national public and private funding. The Facility is aimed at supporting new, knowledge-intensive, research and innovation businesses in the Central Denmark region. The fund is implemented under the Regional Competitiveness and Employment Operational Programme 2007-2013. The type of financing under the financial instrument is in the form of loans, equity and quasi-equity investments, in cooperation with other investors and opportunities to use business incubator and business advice and mentoring. The Facility targets start-up initiatives and innovative business ideas at the earliest stage of their development before they have access to loans from commercial banks. The total amount of funding under the instrument is EUR 17 000 000, with EUR 8 500 000 provided by the European Social Fund, EUR 825 000 of national public funding and EUR 7 740 000 of private funding. The Fund is implemented between April 2011 and April 2016. The leverage of public funds is 1.8 times. The main results are 43 enterprises supported and EUR 15 400 000 investments made as of April 2016. These investments have supported the creation of 211 research and innovation jobs.

Lithuania

Entrepreneurship Promotion Fund

The source of funding for the Fund is the European Social Fund, within the framework of the Human Resources Development Operational Programme 2007- 2013. The type of funding is in the form of loans combined with non-financial support - training and business advice. The final beneficiaries can also benefit from other related instruments such as guarantees, interest subsidies, wage subsidies. The size of the Fund is EUR 14 480 000 (with the ESF contributing 100%). The absorption rate is 78.32% as of December 2013. The leverage of the funds is 1, with a reinvestment rate of 24.2%. The



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Fund has supported more than 1,000 enterprises of young entrepreneurs, with research and innovative ideas, with interest rates between 1.5 and 3.5% lower than the loans provided by commercial banks. More than 1 700 new jobs have been created. Using loan opportunities, in conjunction with grants, the Lithuanian government has re-used the funds over a period of 5 years to fill an existing market imperfection/market gap - access to financial resources for young people and start-ups to develop innovative ideas.

4.3. Evaluation of the main success and failure factors

Financial instruments in education indirectly help to address employment and career issues, as investments in education develop the entrepreneurial spirit and the skills and competences of young people.

The main benefits /success factors/ of investing in education, skills development and lifelong learning through financial instruments include:

- Economic returns, in addition to social value creation, especially when investments are targeted at the creation of SMEs by young people;
- Because the return on investment in education directly affects the acquisition of qualifications, the use of financial instruments can encourage people, especially those from disadvantaged backgrounds, to continue to learn and develop;
- Investments in education help to improve the potential for better job and career opportunities.

The use of financial instruments in education contributes to overall improvement of access and quality of education, as well as to better career prospects.

Demand for this type of funding /through financial instruments/ in the field of education is from:

- Students;
- Working people seeking higher qualifications;
- Public institutions/NGOs running vocational training and qualification courses;
- Public and private institutions providing primary and secondary education;
- Universities.

Funding is provided within the framework of operational programmes, in combination with additional resources provided by public institutions, foundations, banks, credit institutions and is distributed through financial intermediaries.

The successful implementation of financing for education through financial instruments depends to a large extent on the existence of a comprehensive support framework (e.g. combined incentives) ensuring the link between the education system and the labour market.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

According to the FiCompass report *"Introducing financial instruments for the European Social Fund"*, the investment priorities in the field of education (thematic objective 10 - *investment in education, training, including vocational training for skills acquisition and lifelong learning*) where financial instruments have a relatively high relevance include:

- Improve the quality, efficiency and access to higher education, with a view to increasing the participation rate, especially of the disadvantaged;
- Improving equal access to lifelong learning for all age groups, in formal and informal settings, upgrading the knowledge, skills and competences of the workforce and promoting flexible learning methods, including through career development and validation of acquired competences.

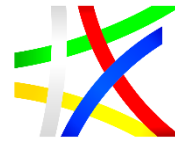
The main obstacles /difficulties/ in investing in education through the use of financial instruments is the existence of a relatively long time period between the realization of investments and the generation of their benefits. In addition, the mismatch between the timing of expenditure and the generation of benefits is particularly pronounced among young borrowers. Young people and students have less access to financial resources due to the fact that they lack sufficient personal savings and the ability to provide collateral, insufficient credit history and little work experience.

The use of financial instruments in education and training is more limited. This is due to the fact that training is most often included in financial products aimed at promoting job creation and start-ups of SMEs. Specific financial instruments for measures targeting thematic objective 10 are less common as these activities represent additional non-financial services that are part of the financial products offered.

This trend is confirmed in the 2014-2020 programming period, with a significant part of the ESF financial resources foreseen to be made available in the form of financial instruments (€210.8 million) for *thematic objective 9 - "promoting social inclusion, combating poverty and all forms of discrimination"* and a small part earmarked for thematic objective 10 (€24.5 million).

According to the above-mentioned FiCompass report *"Implementation of financial instruments for the European Social Fund"*, the financial instruments under thematic objective 10 are less relevant for initiatives related to:

- Reducing and preventing early school leaving and promoting equitable access to good quality early childhood, primary and secondary education, including formal and non-formal forms of reintegration education and training;
- Improving the labour market relevance of education and training systems, facilitating the transition from education to work, improving the quality of vocational education and training, including by introducing mechanisms for skills development, adapting curricula and building and developing work-based learning systems, including dual training systems and apprenticeship schemes.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

4.4. Preparation of a SWOT analysis of the structuring of financial instruments in the period 2014-2020.

The experience of implementing FIs in education in the 2014-2020 programming period shows **relatively low interest in using FIs in the education sector through the ESF**. The main sectors in which Member States have applied financial instruments as part of their support under the ESF in the 2014-2020 period, broken down by thematic objective (TO), are the following:

- Increasing the competitiveness of small and medium-sized enterprises (TO3),
- Supporting the transition to a low carbon economy (TO4) and
- Strengthening research, technological development and innovation (TO1).

Investments, through the implementation of financial instruments, are prioritized in the area of TO3 (56.2%), followed by TO4 (15.5%) and TO1 (15.4%)⁷. The planned investments in the field of education for the 2014-2020 programming period out of the total resources allocated to the implementation of financial instruments under the operational programmes, through the ESF of the Member States for the period, are only 0.5%. On the other hand, according to EC analyses⁸, the sectors where the implementation of financial instruments is insufficient and there is scope for greater use of FIs in the 2021-2027 programming period are: renewables, urban development and transport, environment, information and communication technologies, and research and development in SMEs.

The analysis of the **main difficulties** encountered in the implementation of financial instruments in the framework of the support under the ESF in the 2014-2020 programming period can be grouped as follows:

Lack of experience and information. A major difficulty in implementing the FIs is the lack of sufficient experience on the part of the managing authorities of the operational programmes in using and managing the FIs. In this respect, MAs do not see the potential of FIs and do not consider them as a serious alternative to grants in their planning. This is also true for Bulgaria, especially in the areas where financial instruments have been applied for the first time - environment and human resources. The lack of experience with the implementation of FIs in Bulgaria has consequently led to long periods of time needed to set up and market the financial instruments. In this respect, the analyses of the use of FIs for the 2014-2020 programming period indicate⁵ that it is important to present and promote to planners and other potential stakeholders and investors the advantages and opportunities offered by financial instruments and especially the possibilities of combining them with grants.

Competitive advantages of a grant. Another major difficulty in implementing financial instruments is competing with the grant aid provided. Where funding in the form of grand

⁷ [Financial instruments under the European Structural and Investment Funds 0, December 2019 г.](#)

⁸ [Stocktaking study on financial instruments by sector. Progress to date, market needs and implications for financial instruments. Executive summary. 2020](#)



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

and FI is available for the same investment, grants are usually preferred because of the potential to obtain a fairly high percentage of grant aid.

Lack of interest in the market. This difficulty in implementing financial instruments can be seen as linked to the advantages of providing grant. The possibilities to use grant lead to a weakening of the interest of market stakeholders as future final beneficiaries and/or potential financial intermediaries).

Challenges during the design/creation phases of the financial instruments implemented during the 2014-2020 programming period:

- Difficulty in applying State aid rules;
- Difficulty in understanding and/or complying with the regulatory framework at EU level;
- Difficulty understanding and/or complying with regulatory restrictions at the local level;
- Limited awareness of the potential of financial instruments among key stakeholders.

The **main opportunities** for improving the implementation and uptake of financial instruments under the EU's support to the ESF in the 2021-2027 programming period include the following common elements:

✚ *Financial instruments can be designed in a way that covers several target sectors.* This could contribute to:

- Achieving several policy and operational programme objectives at once;
- Reaching the critical mass of end beneficiaries needed to make the financial instrument(s) viable;
- Increase interest from potential (public and private) fund managers/intermediaries as the designed financial instrument(s) is/are more viable.

The same approach is valid for achieving several objectives within a sector. The different sectors to be 'mainstreamed' into each financial instrument should vary and depend on the needs and conditions of the local market, including the availability of fund managers/intermediaries with a sufficient breadth of skills and experience in the sectors in question, and the policy objectives prioritised by the managing authority.

✚ *Financial instruments can often be designed and implemented together with the grant component.* Such a grant component can help to 'de-risk' or improve the financial viability of projects. It can also help integrate the financial instrument(s) into existing sectoral financial ecosystems where grants are often prevalent.

✚ *Financial instruments can be designed with a supporting technical assistance component.* In addition to the grant component, financial instruments can be designed with a technical assistance component which, in addition to supporting the design and



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

implementation of the financial instrument itself, can offer support to final recipients to help prepare and develop mature and bankable projects.

The **SWOT analysis** summarises an analysis of the strengths, weaknesses, opportunities and threats for the implementation of financial instruments. The strengths and weaknesses are characterised as the internal environment of the sector education, while the opportunities and threats are conditioned by the external environment of the sector education.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ➤ Financial instruments enable projects to be implemented that would not otherwise happen due to limited public financial resources; ➤ Existence of good practices in the implementation of financial instruments through the EU's Structural Funds in some EU Member States; ➤ Experience in implementing financial instruments in other sectors in Bulgaria through the FMFIB. 	<ul style="list-style-type: none"> ➤ Relatively low experience in the implementation of financial instruments for the sector education through the ESF in EU member states; ➤ Lack of experience in the implementation of financial instruments through the ESF in the sector education in Bulgaria; ➤ There is a lack of experienced financial intermediaries in the sector.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ➤ Combination of implementation of financial instruments and use of grant for specific projects; ➤ Combination of implementation of financial instruments and interest rate subsidies and guarantee fee subsidies to improve access to private finance for final beneficiaries under the programme; ➤ Providing technical assistance for the establishment and implementation of a financial instrument, together with the preparation and development of mature and bankable projects; ➤ Combination of implementation of financial instruments through the ESIF with other EC financial instruments. 	<ul style="list-style-type: none"> ➤ Competitive advantages of a grant; ➤ Lack of interest in the market; ➤ Difficulty in applying State aid rules; ➤ Limited awareness of the potential of financial instruments among key target groups.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

4.5. Lessons for implementing financial instruments in the next programming period 2021-2027

4.5.1. Assessment of the administrative capacity of the Managing Authority of the PE 2021-2027

The Executive Agency "Operational Programme Science and Education for Smart Growth" was established on 1 November 2017 by Decree No. 237 of the Council of Ministers, published in the State Gazette, No. 86, dated 27 October 2017, for the purpose of managing the Operational Programme "Science and Education for Smart Growth". The Executive Agency "Programme Education" is a second-level budget spending unit to the Ministry of Education and Science. The Executive Agency is managed by an Executive Director assisted by a Deputy Executive Director and a Chief Secretary. The organizational structure includes Verification Directorate General with two departments - Technical Verification and Financial Verification, and five directorates – Risk Management and Control Directorate, Programming, Monitoring and Evaluation Directorate, Project Selection and Contracting Directorate, Financial Planning, Accounting and Payments Directorate (with two departments Accounting and Payments of the Operational Programme and Accounting and Payments of the Executive Agency) and Administration and Management Directorate and territorial units in 13 regional cities. The activities, structure, work organization and staffing of the Executive Agency "Operational Programme "Science and Education for Smart Growth" are defined by the Implementing Rules of the Executive Agency "Operational Programme "Science and Education for Smart Growth" Annex No. 3 to the PM No. 237 of 23.10.2017, SG No. 86 of 27.10.2017, in force from 1.11.2017, amended and supplemented by SG No. 24 of 22.03.2019, in force from 22.03.2019.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

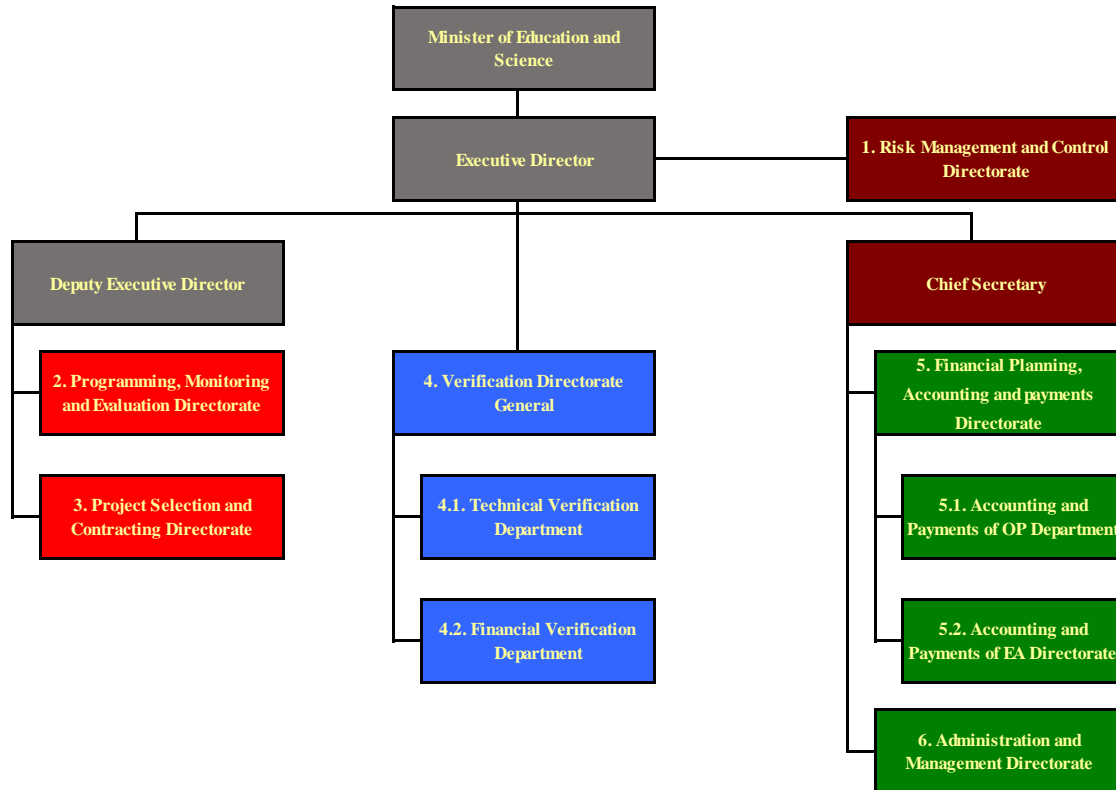


Figure 1 Administrative structure of the EA OP SESG

The Executive Agency performs the functions of the Managing Authority of the Operational Programme "Science and Education for Smart Growth" 2014 - 2020 (OP SESG) and all resulting obligations and responsibilities under national legislation and European Union law, which includes the following main responsibilities:

- Organisation of the planning, programming and amendment processes of the OP SESG;
- Preparation and announcement of procedures for the provision of grants under OP SESG, including overall organisation and coordination of the evaluation process;
- Monitoring and control of the implementation of contracts/orders for the provision of grant aid under OP SESG and verification of expenditure incurred by beneficiaries;
- Performing the functions of the Secretariat of the Monitoring Committee for OP SESG;
- Organization, implementation and reporting of information and publicity measures under OP SESG;



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

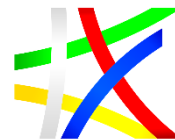
- Management of financial resources in compliance with the lawful and appropriate use of cash and assets;
- Compliance with the functioning of management and control systems, including prior control of the legality of all documents and actions relating to financial activities before a decision is taken to commit and incur expenditure;
- Accountability and reporting, including the preparation and submission to the Certifying authority through the European Structural and Investment Funds Management and Monitoring Information System (ESMIS) of certification reports and declarations of eligible expenditure;
- Preparation, management and implementation of the budget lines under the priority axis "Technical assistance" of the OP SESG;
- Planning and organizing staff training and development and professional development of Agency staff.

The Agency shall also carry out other activities arising from the obligations for the implementation, management and control of programme instruments supporting science and education or assigned by an act of the Council of Ministers or the Minister of Education and Science. Through the implementation of the Operational Programme "Science and Education for Smart Growth" 2014-2020 (OP SESG), the Executive Agency supports the reform of pre-school and school education, as well as higher education, in particular by improving the match between their results and the needs of the labour market and strengthening cooperation between education, research institutes and business.

According to information from the Information System for Management and Monitoring of EU Funds in Bulgaria 2020 (EUMIS 2020), the total budget of OP SESG is EUR 634 225 572, distributed by funds as follows:

 ERDF	- EUR 186 989 211;
 ESF	- EUR 352 102 522;
 NF	- EUR 95 133 836

As of 30.09.2020 a total of 307 contracts for the provision of grants for a total value of EUR 625 924 684 have been concluded under OP SESG, with the total number of beneficiaries under the programme being 204. The amounts actually disbursed amounted to EUR 326 909 395 and the amounts verified and certified amounted to EUR 218 567 269 and EUR 198 271 200 respectively. In order to improve the application process to the calls for proposals under the direct grant procedures, the OPSESG EA published Guidelines for the application procedure, including the objectives and indicators of the procedure, the total amount of the grant and its maximum and minimum amount for a specific project, the eligibility of applicants, partners, activities and costs under the procedure. In order to improve the implementation process and the reporting of activities



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

and expenditure of projects co-financed through OP SESG, the OPSESG EA publishes Guidelines for beneficiaries for the implementation of administrative grant agreements. The manuals are made available to all interested parties for consultation during the application process for the submission of project proposals under the direct grant procedures.

These data show the great responsibilities of the OPSESG EA in the 2014-2020 programming period. In order to implement them, the Executive Agency needs to have and maintain the necessary administrative capacity. To assess this, data provided by the OPSESG EA as well as those available in the annual reports on the implementation of OP SESG available on the OPSESG EA website were analysed.

The analysis of the staffing data of the OPSESG EA shows that the Executive Agency is gradually filling the staffing establishment, with 6 vacant posts as of 24.11.2020. The turnover in recent years has been quite high, but the Management of the Agency is taking timely measures to restore and upgrade the number of occupied posts. The Directorates with the highest turnover are the Project Selection and Contracting Directorate with a total of 11 leavers and 13 new recruits against 14 establishment plan posts and the Programming, Monitoring and Evaluation Directorate with a total of 6 leavers and 9 new recruits against 13 establishment plan posts.

The OPSESG MA is taking consistent measures to strengthen the capacity of its staff in the prevention and fight against irregularities and fraud programme. In 2019, the OPSESG MA organised general trainings for 95 staff in relation to new or updated EU legislation adopted for the 2014-2020 programming period on the protection of EU financial interests in the revenue and expenditure area. In 2019, 74 of the staff of the OPSESG MA received training related to risk analysis, verification and audit of ESIF funds, management and control systems, management of the risk of irregularities and conflict of interest, case law in the management of ESIF funds, financial corrections for irregularities in the use of ESIF funds in relation to the new EC Guidelines for the determination of financial corrections and the Regulation on the identification of irregularities constituting grounds for making financial corrections, as well as specialized training sessions were organized.

In order to organize the activities for the preparation of the new programming period 2021-2027, the **Decision No. 196 of 11 April 2019 of the Council of Ministers** on the approval of the Analysis of the socio-economic development of Bulgaria 2007- 2017 for the definition of the national priorities for the period 2021-2027, the List of policy objectives to be supported in the programming period 2021-2027 and the List of programmes and lead agencies for their development was adopted. In the Decision, the Ministry of Education and Science has been approved as the lead department for the "Operational Programme for Science and Education". By **Decision No. 495 of 21 July 2020 of the Council of Ministers** amending and supplementing Decision No. 196 of the Council of Ministers of 11 April 2019, the name of the "Operational Programme for



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Science and Education" was replaced by "Education Programme". By **Decision No 496 of the Council of Ministers** of 21 July 2020 amending Decision No 335 of the Council of Ministers of 2019 on the approval of the indicative financial allocation by policy and programme objective of the European Social Fund+, the European Regional Development Fund and the Cohesion Fund for the programming period 2021-2027 (Council Decision No 496/2020).), the indicative financial allocations for the future programmes for the programming period 2021-2027 have been reallocated, leaving the Education Programme as a single fund, with **ESF+ funding amounting to EUR 786 795 000**, and the initial ERDF funding foreseen is removed from the scope of the programme. **The total budget of the Education Programme for the programming period 2021-2027 including national co-financing is EUR 977 697 187.**

The analysis of the administrative capacity of the OPSESG EA for the implementation of financial instruments in the next programming period 2021-2027 shows that the Agency has sufficient experience in the application, evaluation and implementation of the concluded grant contracts. The administrative capacity of the Agency is improved annually with actions taken to organize and conduct specialized training for staff. In the framework of the Preparation and announcement of procedures for the provision of grant support under Priority Axis 1 "Research and Technological Development" of OP SESG, including the overall organization and coordination of the appraisal process, as part of the application documents are prepared Financial Analysis for a specific project proposal, which is prepared in accordance with Annex III of the Implementing Regulation (EU) 2015/207 of the Commission (in the part "Financial Analysis") and the European Commission Guidelines for the preparation of Cost-Benefit Analysis of Investments in the field of research and technological development. Within this priority axis, 16 grant agreements have already been concluded with the financial analyses of the project proposals reviewed and positively assessed respectively, and the corresponding submitted Application Forms have been assessed in parallel. The preparation of the Financial Analysis and the Application Form constitute an essential part of the documents required in the conditions of application for funding under the financial instruments. Their correct and consistent assessment is crucial for the approval of a submitted project proposal and, in this respect, the conclusion on **the assessment of the administrative capacity of the MA of OP “Science and Education for Smart Growth” (OP SESG) in this respect is positive**. As MA of OP SESG, OPSESG EA implements the necessary management and control systems of OP SESG that can be successfully used also in the implementation processes of financial instruments in the programming period 2021-2027. This positive assessment is complemented by the comparison of the total budgets of OP SESG and the PO that will be subject to the management of the MA of OP SESG - the total budget of OP SESG amounts to EUR 690 244 016 as of 31.05.2021, while the total budget of the "Programme for Education" for the programming period 2021- 2027 amounts to EUR 977 697 187. The difference in absolute value should not be decisive in determining the



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

assessment of administrative capacity, but rather provide guidance for enhancing and maintaining it.

Nevertheless, the Agency faces certain challenges for the next programming period. One of these challenges relates to enhancing the capacity of the MA in terms of specific expertise specifically in the area of support through financial instruments. Another challenge is to find the necessary balance in the performance of the functions of the MA of OP SESG and the MA of PE in the period 2021-2023 during which the implementation of both programmes will be covered. The period in 2023 is expected to be particularly critical, when a large part of the OP SESG projects are planned to be completed, especially those related to the implementation of projects under Priority Axis 1 "Research and Technological Development", and in this year the application and implementation of contracts under PE 2021-2027 is also expected to be accelerated. An additional challenge for the Agency, but in the short term, is the possibility of the need to transfer part of the human resources to the newly formed Research and Innovation State Agency (RISA). This is rather a challenge for the whole administration of the country, but in particular, in our assessment, the managing authorities of the operational programmes in the 2014-2020 programming period may be the most affected.

4.5.2. Study of the potential of higher education institutions to be involved in implementing support through financial instruments and other financial sources

The study of the potential of higher education institutions for inclusion in the implementation of support through financial instruments under the Programme "Education" 2021-2027 was carried out on the basis of the available data on the implementation of projects under OP SESG 2014-2020, according to public information in the EUMIS and on the website of OP SESG, as well as an analysis of the completed questionnaires from higher education institutions received during the survey of the opinion of the main target groups (potential final beneficiaries) in the process of developing financial instruments for the programming period 2021-2027.

Higher education institutions are beneficiaries of OP SESG 2014 - 2020 under the following priority axes and procedures:

Under Priority Axis 1 - Research and Technological Development - 7 contracts for the provision of grant under implementation

Procedure No BG05M2OP001-1.001 Establishment and Development of Centres of Excellence - total budget of grant for higher education institutions - BGN 59,537,432

Sofia University "St. Kliment Ohridski".

Under procedure No BG05M2OP001-1.002 Building and development of competence centres - total budget of grant for higher education institutions - BGN 107,738,712

Medical University - Plovdiv;



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Medical University - Pleven;

Sofia University "St. Kliment Ohridski";

Technical University - Gabrovo;

University of National and World Economy.

Under procedure No BG05M2OP001-1.003 Complementary support for research organisations with approved projects under the Horizon 2020 Framework Programme, Widespread-Teaming Call, Phase 2 - total budget of grant for higher education institutions - BGN 29,203,119.

Sofia University "St. Kliment Ohridski".

Priority Axis 2 - Education and Lifelong Learning - 10 completed contracts for provision of BFP and 5 contracts for provision of grant under implementation

Under procedure No BG05M2OP001-2.009 Support for the development of PhD students, postdoctoral fellows, postgraduate students and young scientists - Phase 1 - total budget of BFP for higher education institutions - BGN 9,285,641.

Higher Naval School "Nikola Ionkov Vaptsarov";

University of Economics - Varna; Forestry University;

Medical University - Plovdiv;

International Higher Business School - Botevgrad;

National Military University "Vasil Levski" - Veliko Tarnovo;

Ruse University "Angel Kanchev";

Sofia University "St. Kliment Ohridski" through the Faculty of Slavonic Philology;

Sofia University "St. Kliment Ohridski" through the Faculty of Chemistry and Pharmacy;

Economic Academy "Dimitar Apostolov Tsenov" - Svishtov;

Technical University - Sofia;

University of National and World Economy;

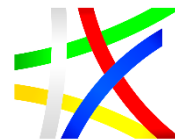
Medical University - Pleven through the Faculty of Medicine;

University of Chemical Technology and Metallurgy through the Department of Physical, Mathematical and Technical Sciences.

Geographically distributed higher education institutions, as beneficiaries of OP SESG, represent all planning regions except the South-East. Their distribution is as follows:

✚ North-West - 1;

✚ North Central - 4;



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

- + North-East - 2;
- + South-West - 6;
- + South Central - 1.

In total, under OP SESG, higher education institutions are beneficiaries of 22 contracts for the provision of grants, 10 of which have been completed and 12 are in the process of implementation. Their geographical distribution is as follows:

- + North-West - 2;
- + North Central - 4;
- + North-East - 2;
- + South-West - 12;
- + South Central - 2.

A total of 14 higher education institutions are beneficiaries of these contracts and the contracts concluded for the provision of grants total BGN 205,764,904. For the implementation of the concluded contracts for the provision of grants, the MA of OP SESG provides the beneficiaries with specific manuals for the implementation of administrative contracts for the provision of grant financial assistance. On the one hand, these manuals are mandatory for implementation by the beneficiaries, but on the other hand, they are intended to facilitate the beneficiaries in the processes of planning, implementation and reporting on project activities and expenditure. The guides include a set of instructions to beneficiaries on compliance with the legality of public procurement for the selection of contractors, as well as on the expenditure of public funds, their traceability and reporting; the avoidance of irregularities during the implementation of contractual relations; the ways of taking measures to avoid conflicts of interest, as well as compliance with information and publicity measures during the implementation of the contract for the provision of grants. Strict compliance with the implementation of the provisions of the Guidelines by the HEIs, as Beneficiaries under the OP SESG, has created in them the necessary culture about their role and responsibilities. Nevertheless, the beneficiaries of the programme are periodically informed by the MA of the OP SESG of the most frequent errors detected in the follow-up of public procurement, with a view to avoiding or reducing the cases for the determination of financial corrections to be applied to expenditure financed by the European Union in case of non-compliance with the procurement rules. The purpose of this ex-post control is to ascertain whether the expenditure claimed by beneficiaries for reimbursement from the operational programme for supplies, services and works is eligible and whether national and European procurement legislation has been complied with in carrying it out. In the course of the ex-post control, the MA of OP SESG checks in detail the compliance with the rules concerning: the choice of the type of procurement procedure, the way the procedure is announced in the Registry for Public Procurement and the Official Journal of the EU, the deadlines for receipt of tender documents and for receipt of tenders, the selection criteria, the evaluation methodology, the technical specifications, the clarifications of the tender documents and their announcement, the exclusion of the tenderers, the compliance of the selected contractor with all the requirements, the equal treatment of the tenderers



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

The approach used by the MA of OP SESG in carrying out ex-post control for legality and in determining the financial impact of irregularities is fully borrowed and in line with that of the audit body, the Executive Agency for the Audit of European Union Funds, for which purpose the MA of OP SESG uses a single systematic approach in carrying out ex-post control for legality. At the conclusion of the ex-post control, the MA of OP SESG considers that the main reasons for the most frequent errors made by beneficiaries are the relatively frequent amendments to the regulatory framework in the field of public procurement, which requires the timely adaptation of contracting authorities to the changes made; the existence of different types of procedures for the selection of contractors with the respective specificity in their conduct, which makes it difficult for contracting authorities, especially in cases where they do not have expert staff in the field of public procurement; the In view of the findings identified during the ex-post control, the MA of OP SESG endeavours to conduct introductory and, if necessary, additional trainings for beneficiaries related to the application of the legal framework in the field of public procurement, as well as familiarising them with the irregularities according to the EC Guidelines for the determination of financial corrections, respectively the Regulation on the indication of irregularities, while also assisting them by providing materials related to the irregularities identified in the practice of the Audit Authority in the area of public procurement. It is the assurance of the MA of OP SESG that the follow-up carried out will benefit all contracting authorities - beneficiaries of the operational programme and will contribute both to the timely identification of potential problems and to the prevention of irregularities in order to avoid the establishment of financial corrections. In all introductory trainings for beneficiaries in 2019, the MA of OP SESG has included good practices and common problems and errors in the field of public procurement, as well as the most common errors leading to financial corrections in projects co-financed by the ESF, and on how to report an irregularity; clarification of the concepts of "irregularity", "suspected fraud" and "fraud" and the actions of the MA of OP SESG in case of their identification. On the basis of the identified difficulties in the effective establishment and development of CoEs and CoCs funded under PA1, the MA of OP SESG has taken a number of measures to support beneficiaries, such as counselling of Priority Axis 1 beneficiaries through the organisation of regular monthly and individual meetings. These meetings are a useful tool for monitoring the implementation of the projects and enable solutions to be found very quickly to problems that arise on an ongoing basis; bringing in external expertise to support the MA and the beneficiaries of Priority Axis 1. The measures described above by the MA of OP SESG to increase the administrative capacity of the beneficiaries of OP SESG and in particular of the universities, as such, undoubtedly have a positive impact. In the OP SESG Annual Report on the implementation of the programme for 2019, specific problem areas concerning the implementation of the grant contracts have been identified and measures have been taken to reduce or eliminate them. No specific data on financial or administrative sanctions imposed on higher education institutions as beneficiaries of the programme are available. In addition to exploring the potential of HEIs to be involved in the implementation of support through financial instruments under the PE 2021-2027, an analysis of the completed questionnaires from HEIs received during the survey on the opinion of the main target groups (potential final recipients) in the process of developing financial instruments for the 2021-2027 programming period has been prepared. Around 77% of the HEIs have experience in projects funded by grants and have used financial instruments, with almost half of the positive respondents again in the field of social sciences.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

14. Are you interested in using financial instruments?

Education and training area / Regions	Yes	No	I can't answer	Total
Higher School	6	5	2	13
Natural Sciences		2		2
South West		2		2
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts		1		1
South West		1		1
Social Sciences	5	2	1	8
North Central	1			1
North West	2			2
North East			1	1
South West	2	2		4
Technical Sciences, Social Sciences			1	1
South Central			1	1
Humanities and Arts	1			1
South West	1			1
Total	6	5	2	13

Table 13 Higher Education institutions - interest in using financial instruments

15. Do you have experience in EU funded projects - use of grants/financial instruments (FIs)/loans?

Education and training area / Regions	We have used FI	We have used FI, We have received credits	We have no experience	We have received Grant	We have received Grant, We have used FI	Total
Higher School	1	1	3	7	1	13
Natural Sciences				2		2
South West				2		2
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts	1					1
South West	1					1
Social Sciences			3	4	1	8
North Central				1		1
North West			1		1	2
North East				1		1
South West			2	2		4
Technical Sciences, Social Sciences		1				1
South Central		1				1
Humanities and Arts				1		1
South West				1		1
Total	1	1	3	7	1	13

Table 14 Higher Education Institutions - Experience of using grants/financial instruments



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

In general, the universities participating in the survey declare the availability of expertise in project management and reporting (90%) and the expert capacity to develop a specific project proposal to apply for funding, including the preparation of a budget and business plan for funding (over 76%).

28. Do you have experts in leading positions in the organization, who have experience in project management and reporting?

Education and training area / Regions	Yes	No	Did not answer	Total
Natural Sciences	1		1	2
Higher School	1		1	2
South West	1		1	2
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts	1			1
Higher School	1			1
South West	1			1
Social Sciences	6	1	1	8
Higher School	6	1	1	8
North Central	1			1
North West	2			2
North East	1			1
South West	2	1	1	4
Technical Sciences, Social Sciences	1			1
Higher School	1			1
South Central	1			1
Humanities and Arts			1	1
Higher School			1	1
South West			1	1
Total	9	1	3	13

Table 15 Higher Education Institutions - available expertise for project management and reporting

40. Do you have experts who could develop a budget/business plan to finance a project to implement one of your ideas?

39. Do you have experts who could develop a project that you could apply for funding?	Yes	No	I can't answer	Total
Higher School	10	1	2	13
Natural Sciences	1		1	2
South West	1		1	2
Yes			1	1
I can't answer	1			1
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts	1			1
South West	1			1
Yes	1			1



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Social Sciences	6	1	1	8
North Central	1			1
Yes	1			1
North West	2			2
Yes	2			2
North East	1			1
Yes	1			1
South West	2	1	1	4
Yes	2			2
No		1		1
I can't answer			1	1
Technical Sciences, Social Sciences	1			1
South Central	1			1
Yes	1			1
Humanities and Arts	1			1
South West	1			1
Yes	1			1
Total	10	1	2	13

Table 16 Higher Education Institutions - expertise available for project proposal preparation

On the other hand, however, in the case of developing a project for funding through a financial instrument, this readiness decreases to about 60%, with knowledge of the rules and principles of providing financial instruments shared by about 53% of the participating universities.

25. Could you develop a project application with a financial instrument?

Education and training area / Regions	Yes	No	Total
Higher School	8	5	13
Natural Sciences		2	2
South West		2	2
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts	1		1
South West	1		1
Social Sciences	5	3	8
North Central		1	1
North West	2		2
North East	1		1
South West	2	2	4
Technical Sciences, Social Sciences	1		1
South Central	1		1
Humanities and Arts	1		1
South West	1		1
Total	8	5	13

Table 17 Higher Education Institutions - expertise available to develop a project for a financial instrument application



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

26. Do you know and to what extent the principles and rules for the provision of financial instruments?

Education and training area / Regions	Yes, in-depth knowledge	Yes, basic knowledge	No	I can't answer	Total
Higher School	2	5	4	2	13
Natural Sciences			2		2
South West			2		2
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts		1			1
South West		1			1
Social Sciences	2	2	2	2	8
North Central			1		1
North West		1		1	2
North East	1				1
South West	1	1	1	1	4
Technical Sciences, Social Sciences		1			1
South Central		1			1
Humanities and Arts		1			1
South West		1			1
Total	2	5	4	2	13

Table 18 Higher Education Institutions - expertise available for knowledge of rules and principles of financial instruments

Encouragingly, almost 88% of those who responded to the survey believe they have a viable idea that can be brought to market and almost the same percentage have the ability to find partners to bring that idea to life.

38. Can you find partners to help you make the idea a reality?

37. Do you have a viable idea that you think is in a phase that can easily reach the market?	Yes	No	Did not answer	Total
Higher School	9	3	1	13
Natural Sciences	1	1		2
South West	1	1		2
Yes	1			1
No		1		1
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts	1			1
South West	1			1
Yes	1			1
Social Sciences	6	1	1	8
North Central	1			1
Did not answer	1			1
North West	1	1		2
Yes	1	1		2



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

North East	1		1
Yes	1		1
South West	3	1	4
Yeah.	1		1
Did not answer	2	1	3
Technical Sciences, Social Sciences	1		1
South Central	1		1
Yes	1		1
Humanities and Arts	1		1
South West	1		1
Yes	1		1
Total	9	3	13

Table 19 Higher Education Institutions - availability of a viable idea and the possibility to implement it together with partners

In terms of partnership with business representatives for the implementation of projects in the field of R&D, education and training, about 53% of the participating higher education institutions declared such partnership, with the assessment of the effect of the partnership ranging between positive and strongly positive. This is a very encouraging fact with a view to orienting project proposals towards their realization and reaching the market.

35. Please assess the impact of partnerships with enterprises, industry and employer organisations or other business representatives?

33. Have you so far partnered with enterprises, industry and employers' organisations or other business representatives to implement projects in research and development, education and training?	Positive	Strongly positive	Did not answer	Total
Higher School	4	3	6	13
Natural Sciences		1	1	2
South West		1	1	2
Yes		1		1
No			1	1
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts	1			1
South West	1			1
Yes	1			1
Social Sciences	2	1	5	8
North Central			1	1
No			1	1
North West	1		1	2
Yes	1			1
I can't answer			1	1
North East			1	1
I can't answer			1	1
South West	1	1	2	4



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Yes	1	1		2
No			2	2
Technical Sciences, Social Sciences	1			1
South Central	1			1
Yes	1			1
Humanities and Arts		1		1
South West		1		1
Yes		1		1
Total	4	3	6	13

Table 20 Higher Education institutions - assessment of the effect of partnership with business representatives

Due to this fact that about 1/3 of all higher education institutions are beneficiaries under OP SESG, and almost the same is the proportion of those who participated in the survey, there are reasons to give a **positive assessment on the potential of higher education institutions for inclusion in the implementation of support through financial instruments and other financial sources**. The experience gained in terms of the implementation of the responsibilities of beneficiaries under OP SESG will be of great help in the processes of project preparation and implementation in the new programming period 2021-2027.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

5. GOOD PRACTICES ON THE IMPLEMENTATION OF FINANCIAL INSTRUMENTS IN OTHER EU MEMBER STATES

5.1. Good practices on the implementation of financial instruments by specific objectives

In terms of good practice in the implementation of financial instruments, depending on the different thematic objectives, it should be noted that the focus will be on those receiving funding from the European Social Fund (ESF), namely:

- 8) promoting sustainable and quality employment and supporting labour mobility;
- 9) promoting social inclusion, combating poverty and all forms of discrimination;
- 10) investment in education, training, including vocational skills training and lifelong learning.

In particular, the financing of investments in education and training are covered by thematic objective 10.

Good practices in education and training under TO 10 (ESF):

Finland

Financial Instrument “Adult Education Incentives”

The purpose of the instrument is to support voluntary vocational training for employees and self-employed persons by providing financial support (adult education grant) and to support the development of the vocational training system by providing loans and grants for the acquisition of qualifications and key competences. The resource for the financial instrument is provided by the Education Fund, which is administered by the social partners of the Finnish labour market. The Education Fund is financed by the Unemployment Insurance Fund and the State, and its activities are supervised by the Finnish Financial Supervisory Authority (FIN-FSA). Eligible target groups are employees and self-employed persons participating in studies leading to a degree or in vocational further or continuing training organised by a Finnish educational institution under public supervision. Candidates must live permanently in Finland and their employment must be full-time with the same employer for at least 1 year. In addition, applicants must be employed by a Finnish employer or have worked as self-employed in Finland for at least 8 years.

Great Britain

Loans for professional and career development

A debt scheme provided by banks in the form of borrowed funds. It is administered by the Young People's Training Agency in terms of the application process and the assessment of applications submitted, but the administration of the loans/credit lines themselves is carried out by the commercial banks.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

The facility is aimed at people over the age of 18 who are resident in the UK. The target group includes:

- ✓ Unemployed (recently made redundant and looking to retrain or start their own business; long-term unemployed and on benefits);
- ✓ Employed (full/part time employees looking to progress their career/increase salary prospects, and full or part time employees looking for a career change);
- ✓ Students (looking to gain an additional degree, postgraduate qualification or professional qualification and those looking for work but with a skills gap).

The type of training should be aimed at acquiring professional qualifications and competences. The scheme supports those seeking to develop professionally, to gain additional qualifications to provide better career development or those seeking comprehensive retraining opportunities.

The maximum loan amount is up to £10,000 and the interest rate can vary between banks. Loan repayments start within 1 month of the courses being completed.

Italy

Financial instrument "Microcredit Fund for the Campania Region"

The financial instrument was launched in 2011 with a resource of 100,000,000 euro, provided by the European Social Fund (58,300,000 euro), within the regional operational programme of the Campania region in Italy. The objective of the facility is to improve access to finance for young people, the unemployed, women, migrants and disadvantaged people, by providing loans of between EUR 5 000 and EUR 25 000, without interest and without providing collateral. The first call under the financial instrument closed on 19 December 2012 with 5 283 applications, requesting loans amounting to EUR 119 000 000. During the next call, 6 835 applications were submitted, requesting a credit resource of EUR 164 000 000. This success was achieved thanks to a good communication strategy among the 551 municipalities in the region. Participation in the financial instrument is predominantly by young people up to 35 years of age, as well as women. As a result of the implementation of the instrument, competitiveness and entrepreneurship in the Campania region of Italy has improved significantly.

"ESF Guarantee Instrument for Social Inclusion", Marche, Italy

The instrument is a guarantee scheme to encourage the private sector to provide loans for business start-ups and promote entrepreneurship. Financial support is targeted at young people and women, including the unemployed, by providing guarantees for medium-term loans between EUR 25 000 and EUR 50 000, without collateral requirements. In addition, start-ups receive non-financial support in the form of advice and training during their first year of development. The guarantees have led to increased incentives for lending by financial intermediaries as well as non-financial support that has led to skills development for new entrepreneurs.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

The amount of financial resources under this instrument is €3.8 million (€1.5 million from the ESF and €2.3 million from national public funding).

The instrument was operational between January and August 2015. The EU leverage achieved was 10.9 times.

As a result of the implementation of the financial instrument, 867 micro-enterprises of entrepreneurs were supported.

France

Financial instrument "Microcredit ADIE professionnel"

Aimed at unemployed and young people without enough capital. The instrument offers micro-loans of up to EUR 10 000, co-financed by the ERDF, combined with an operation co-financed by the ESF to provide mentoring and training. The objective of the financial instrument is to provide support for start-ups as well as the reintegration of disadvantaged people into the labour market.

The size of the instrument is EUR 300 000, resources under OP (EUR 150 000 ERDF and EUR 150 000 regional co-financing). The additional financial resource of EUR 160 000, of which EUR 72 000 from the ESF, is for the provision of training and mentoring services for certain operations. The EU leverage achieved is 2 times. The instrument is implemented from October 2009 to December 2010. A total of 286 entrepreneurs have been supported as a result of its implementation.

5.2. Good practices on the implementation of financial instruments under different forms of financing

In addition to the decentralised management of financial instruments, there are, within the relevant operational programmes, those financed under the European Structural and Investment Funds, and those managed centrally, through the European Investment Bank and the European Investment Fund.

Pilot guarantee mechanism to improve access to finance for individuals and organisations wishing to invest in skills development and education

The pilot scheme of the European Investment Fund (EIF) and the European Commission amounts to €50,000,000 and supports learners as well as enterprises that want to invest in upgrading their skills and competences. The debt instrument stimulates investment in education, training and skills development in response to the changing needs of the European economy. In its pilot phase, the S&E Pilot will provide an EU guarantee of up to €50 million, backed by the European Fund for Strategic Investments (EFSI), triggering debt financing for skills and education projects in Europe, with the aim of mobilising more than €200 million in total funding. The EIF will provide a free initial loss guarantee (or counter-guarantee) to selected financial intermediaries building new portfolios of debt finance for students and businesses. Eligible applicants will have access to various forms of financing (e.g. loans, instalments, income-related loans, etc.) through dedicated financial intermediaries such as



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

EU guaranteed financing institutions, universities and vocational training centres.

The main beneficiaries of aid include:

- ✓ Individuals (learners) - who want to continue learning and upgrade their skills through vocational training, lifelong learning and other forms of education;
- ✓ European enterprises - which contribute to and facilitate the transformation of such skills through investments to improve the qualifications of their employees. This helps to improve the competitiveness and productivity of enterprises;
- ✓ European organisations active in the field of training, skills development and qualification of the workforce and committed to project implementation in the field of education and lifelong learning. Their aim is to significantly improve the ecosystem of education, training and skills provision, including through digital means.

Bulgaria

The European Commission has granted a €100,000 guarantee to the Bulgarian company Coursedot for the development of an online ICT training application. The initial funding for the start-up Coursedot was provided by Elevon Ventures, an investment firm backed by the European Investment Bank. The start-up has a portfolio of international trainers, making ICT training easily accessible. It provides online sessions, webinars and face-to-face training, depending on the needs of stakeholders/clients, and also offers e-books on IT topics.

The training enables participants to acquire knowledge and skills to enhance their competitiveness in an increasingly digitalized job market. Through online courses, which are increasingly preferred by employers, the competitiveness of the businesses themselves is also enhanced by providing them with access to a workforce with digital skills and competencies.

Coursedot's database has more than 70,000 IT courses from more than 400 sources and 2,000 trainers. 80% of the startup's business comes from Europe. In the first 2 years of its existence, more than 375 training courses have been delivered, mainly focused on business. 8 full-time positions have been created. The company's partner is Microsoft.

5.3. Applicability of the good practices considered in the area of intervention of the PE 2021-2027

On the basis of the good practices reviewed, the schemes for the implementation of financial instruments in the form of loans and guarantees in the financing of lifelong learning, as well as in the form of loans, guarantees, equity and quasi-equity investments in support of the start-up of own business or other entrepreneurial activity by students, postgraduates and lecturers can be replicated within the framework of the PE in the programming period 2021-2027.

Their applicability depends to a large extent on the demand for this type of financial products on the market and on whether the grant provided will be able to cover the needs of all those in need of



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

working capital to cover the needs and demands arising from the need to develop professional skills and competences and active participation in a lifelong learning process.

The implementation of financial instruments in the programming period 2021-2027 is set among the EU priorities in order to address the significant investment gap. Grant funding cannot cover the needs available in every area, including education. Financial instruments can play a significant role through their leverage effect and their greater proximity to the market. Separately, the combination of financial instruments with grants is also facilitated, which directly corresponds to the lessons learned and good practices discussed in the examples above.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

6. ANALYSIS OF THE NEEDS AND POTENTIALS FOR IMPLEMENTING SUPPORT THROUGH FINANCIAL INSTRUMENTS IN THE AREAS OF INTERVENTION UNDER THE PROGRAMME FOR EDUCATION 2021-2027

Taking into account that for the 2014-2020 programming period within the Operational Programme "Science and Education for Smart Growth" 2014-2020 (OP SESG) for the Education sector no financial instruments have been used to support public support for the final recipients, the activities under this contract will be a challenge for both the contractor's team and the relevant responsible government institutions. To this end, appropriate forms of financing through financial instruments of the actions under study within the relevant priorities of the Programme of Education 2021-2027 were reviewed and analysed. Following the review of "lessons learned" and the exploration of "good practices" in the implementation of financial instruments, both in the country and in other EU Member States, efforts were focused on areas of interventions involving dual training as well as the start-up of own business or other entrepreneurial activity by students and postgraduate students.

6.1. Survey of the opinion of potential final recipients

In order to explore the views of the target groups for the analysis of the possibilities for financing interventions and identifying areas of impact through financial instruments, invitations to participate in a survey were sent to higher education institutions, through the Council of Rectors of Higher Education Institutions in the Republic of Bulgaria, to vocational schools, through the Union of Employers in the National Education System in Bulgaria and to enterprises from the information database of employers that meet the requirements for participation in partnerships for the implementation of the training at works to the Ministry of Economy. The survey involved filling in questionnaires addressed and adapted for the needs of the study to higher and vocational schools on one hand and to enterprises, employers and branch organisations on the other hand.

In response to the invitation, completed questionnaires were received only from higher education institutions and these are considered below in the preparation of the analyses covered in this section. From the enterprises, a completed questionnaire was received from only one enterprise which did not declare an interest in dual training. In addition, through the Council of Rectors of Higher Education Institutions in the Republic of Bulgaria, an invitation was extended to all students, PhD students and lecturers to participate in the survey to explore their attitudes towards starting their own business or other entrepreneurial activity.

Additionally, the experience of higher and vocational education institutions in implementing policies and measures for work-based learning and practical training in a real work environment was examined, as well as partnerships with enterprises, sectoral and employers' organisations or other business representatives for the implementation of projects in the field of education and training. For the above reasons, only higher education institutions were analysed.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

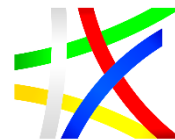
6.1.1. Analysis of funding opportunities for interventions involving dual training and identification of impact areas through financial instruments

In order to explore the views of the target groups for the analysis of funding opportunities for interventions involving dual training and the identification of areas of impact through financial instruments, samples were drawn from the survey carried out due to the fact that the areas of intervention were grouped under one common question and included interventions in the fields of education and science. In this subsection only the interventions related to project ideas in the field of dual training are considered and analysed. Of the participating HEIs, 3 declared their readiness for project proposal ideas in the field of dual training. Due to the low number of universities declaring such readiness, it cannot be reasonably concluded that universities are willing and ready to use financial instruments in the field of dual training. Rather, these results show that there is a lack of such an attitude. In addition, the lack of a general attitude towards the use of financial instruments in the field of dual training is supported by the survey of the views of potential final recipients mentioned in section 6.1. "Survey of the opinion of potential final recipients". Therefore, the consideration of the possibility of applying financial instruments to finance interventions involving dual training is excluded in the framework of this Ex-Ante Assessment.

17. In which of the following areas does your idea fall?

Education and training area / Region	Nr.	Please indicate the approximate financial value of your idea	What is the approximate amount of financial support you need?
Higher School	13		
Social Sciences			
South West			
Dual training	1	500 000 BGN to 1 000 000 BGN	500 000 BGN to 1 000 000 BGN
Technical Sciences, Social Sciences			
South Central			
Dual training	1	Up to BGN 500 000	From BGN 1 000 000 to BGN 2 000 000
Humanities and Arts			
South West			
Dual training	1	500 000 BGN to 1 000 000 BGN	500 000 BGN to 1 000 000 BGN
Total	23		

Table 21 Higher education institutions - financial value of dual training ideas



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

6.1.2. Analysing the attitudes towards starting their own business or other entrepreneurial activity by students, postgraduates and lecturers and identifying areas of impact through financial instruments

In order to study the opinion of the target groups for the analysis of the attitudes towards starting their own business or other type of entrepreneurial activity and to identify areas of impact through financial instruments, samples from the survey were prepared in order to present in the most useful form the general information processed. 188 respondents voluntarily participated in the survey, distributed as follows:

- + Students - 54;
- + Postgraduates - 47;
- + Lecturers - 87.

The distribution of respondents by regions is shown in the table below, with more than half undertaking their education/training/teaching in the South West region.

You are:	Where do you do your education/training/teaching?						Did not answer	Total
	North Central	North West	North East	South West	South East	South Central		
Student	2	10		35	1	6		54
Postgraduate	1	11	1	17	1	14	2	47
Lecturer	3	3	18	57	3	1	2	87
Total	6	24	19	109	5	21	4	188

Table 22 Students, postgraduates and lecturers own business - distribution of respondents by planning area

Of those who took part in the survey, about 58% declared their intentions to finance the start-up of their own business or other entrepreneurial activity, while about 1/4 were strongly of the opinion that they had no need to finance such activities. Just over 16% of those who took part in the survey did not specify their intentions. Almost 60% of participating students, just over 38% of participating postgraduates, and almost 68% of participating lecturers indicated an interest in funding to start their own business or other type of entrepreneurial activity.

Answers received	Do you need funding to start your own business or other type of entrepreneurial activity?
Yes	109
Student	32
Postgraduate	18
Lecturer	59



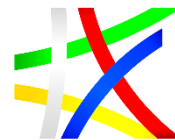
„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

No	48
Student	13
Postgraduate	20
Lecturer	15
I can't answer	26
Student	6
Postgraduate	7
Lecturer	13
Did not answer	5
Student	3
Postgraduate	2
Lecturer	0
Total	188

Table 23 Students, postgraduates and lecturers own business/entrepreneurship - distribution of those interested in funding to start their own business or other entrepreneurial activity

To determine the unit value of the financial support needed to start a business or other entrepreneurial activity, the approach of taking averages of the selected ranges of financial values was adopted, with the upper end of the range being taken as the lowest range. Despite the fact that around 58% of respondents indicated an intention to be interested in funding to start their own business or other type of entrepreneurial activity, and taking into account the fact that the majority of respondents to the survey provided responses for estimated values for financial support, all respondents were taken into account when calculating the financial support required, not just those who responded positively to an intention to be interested in funding to start their own business or other type of entrepreneurial activity. Further calculations and cross-sections of the survey show that when analysing the information relative to all respondents, the average value of financial support is BGN 27 089, while the total value of financial support required for funding to start their own business or other type of entrepreneurial activity is BGN 3 711 250.

Responses received	What is the approximate amount of financial support you need to start your own business or other type of entrepreneurial activity?	Unit value	Total
student	54	20,969	838,750
Up to BGN 5 000	3	5,000	15,000
From BGN 5 000 to BGN 7 500	3	6,250	18,750
From BGN 7 500 to BGN 10 000	4	8,750	35,000
From BGN 10 000 to BGN 20 000	14	15,000	210,000
From BGN 20 000 to BGN 50 000	16	35,000	560,000
I don't need funding	1		
Did not answer	13		
postgraduate	47	22,902	641,250
Up to BGN 5 000	8	5,000	40,000



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

From BGN 5 000 to BGN 7 500	1	6,250	6,250
From BGN 7 500 to BGN 10 000	4	8,750	35,000
From BGN 10 000 to BGN 20 000	2	15,000	30,000
From BGN 20 000 to BGN 50 000	8	35,000	280,000
50 000 BGN	5	50,000	250,000
No	1		
I am not planning this type of activity at the moment	1		
I can't start my own "business"	1		
Did not answer	16		
lecturer	87	32,337	2,231,250
Up to BGN 5 000	2	5,000	10,000
From BGN 5 000 to BGN 7 500	3	6,250	18,750
From BGN 7 500 to BGN 10 000	2	8,750	17,500
From BGN 10 000 to BGN 20 000	18	15,000	270,000
From BGN 20 000 to BGN 50 000	19	35,000	665,000
50 000 BGN	25	50,000	1,250,000
Did not answer	18		
Total	188	27,089	3,711,250

Table 24 Students, postgraduates and lecturers own business/entrepreneurship - estimated value of financial support needed to start their own business or other type of entrepreneurial activity

Starting own business or other entrepreneurial activity by students, postgraduates and lecturers is partially covered in Priority 3 "Linking education with the labour market", SO under Art. 4, para. 1 (e) - Improving the quality, inclusiveness, efficiency and coherence of education and training systems with labor market needs, including by validating non-formal and informal learning so as to contribute to the acquisition of key competences, including entrepreneurial and digital skills, also by promoting the introduction of dual training and apprenticeship systems related to the following activities: "Promoting entrepreneurship and innovation in higher education institutions in the digital economy, supporting and stimulating socially engaged activities of students and lecturers within the region, incl. increasing the project competence of university lecturers to work in European and other projects and networks, incl. in a multicultural and multilingual environment". The brief analysis shows a total expressed interest in funding for start-up or other entrepreneurial activity by students, postgraduates and lecturers of BGN 3 711 250.

6.2. Analysis of the experience of higher education institutions in project implementation

The analysis of HEIs' experience in implementing projects includes the areas of implementation of policies and measures for work-based learning and practical training in real work environments and in partnerships with enterprises, industry and employer organisations or other business representatives to implement projects.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

6.2.1. Analysis of the experience of higher education institutions in implementing policies and measures for work-based learning and practical training in real work environments

In general, the HEIs participating in the survey declare that they have experience in implementing policies and measures for work-based learning and practical training in a real work environment (over 90%), and the effect of the implementation of these policies and measures varies between positive and strongly positive (over 76%).

31. Please assess the impact of the implementation of the policies and measures on work-based learning and practical training in a real work environment?

29. Have you so far implemented policies and measures for work-based learning and practical training in a real work environment?	Neutral	Positive	Strongly positive	Did not answer	Total
Higher School	2	5	5	1	13
Natural Sciences	1		1		2
South West	1		1		2
Yes	1		1		2
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts		1			1
South West		1			1
Yes		1			1
Social Sciences	1	3	3	1	8
North Central			1		1
Yes			1		1
North West	1	1			2
Yes	1	1			2
North Eastn			1		1
Yes			1		1
South West		2	1	1	4
Yes		2	1		3
No				1	1
Technical Sciences, Social Sciences		1			1
South Central		1			1
Yes		1			1
Humanities and Arts			1		1
South West			1		1
Yes			1		1
Total	2	5	5	1	13

Table 25 Higher education institutions - assessing the experience and impact of implementing work-based learning policies and measures in a real work environment



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

This is a very encouraging assessment, but nevertheless the majority of the participants (over 53%) declare the existence of obstacles in the process of implementation of policies and measures for learning by doing and practical training in a real working environment, and basically the obstacles are of a regulatory and financial nature

6.2.2. Analysis of the experience of higher education institutions in implementing partnerships with enterprises, industry and employer organizations or other business representatives for the implementation of projects

In terms of partnership with business representatives for the implementation of projects in the field of R&D, education and training, about 53% of the participating higher education institutions declared such partnership, with the assessment of the effect of the partnership ranging between positive and strongly positive. This is a very encouraging fact with a view to orienting project proposals towards their realisation and reaching the market.

35. Please assess the impact of partnerships with enterprises, industry and employer organisations or other business representatives?

33. Have you so far partnered with enterprises, industry and employers' organisations or other business representatives to implement projects in research and development, education and training?	Positive	Strongly positive	Did not answer	Total
Higher School	4	3	6	13
Natural Sciences		1	1	2
South West		1	1	2
Yes		1		1
No			1	1
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts	1			1
South West	1			1
Yes	1			1
Social Sciences	2	1	5	8
North Central			1	1
No			1	1
North West	1		1	2
Yes	1			1
I can't answer			1	1
North East			1	1
I can't answer			1	1
South West	1	1	2	4
Yes	1	1		2
No			2	2
Technical Sciences, Social Sciences	1			1



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

South Central	1			1
Yes	1			1
Humanities and Arts		1		1
South West		1		1
Yes		1		1
Total	4	3	6	13

Table. 26 Higher education institutions - assessment of experience in partnership with business representatives

Nevertheless, the majority of those who have implemented a partnership with business representatives (about 60%) declare the presence of obstacles in the process of implementing the partnership, basically because of regulatory and financial obstacles.

36. Please specify the obstacles encountered in partnering with enterprises, industry and employer organisations or other business representatives?

33. Have you so far partnered with enterprises, industry and employers' organisations or other business representatives to implement projects in research and development, education and training?	Not applicable	Organizational	Financial, Regulatory	Did not answer	Total
Higher School	2	1	3	7	13
Natural Sciences	1			1	2
South West	1			1	2
Yes	1				1
No				1	1
Natural Sciences, Medical and Health Sciences, Social Sciences, Humanities and Arts				1	1
South West				1	1
Yes				1	1
Social Sciences	1	1	1	5	8
North Central				1	1
No				1	1
North West		1		1	2
Yes		1			1
I can't answer				1	1
Northeastern				1	1
I can't answer				1	1
South West	1		1	2	4
Yes	1		1		2
No				2	2
Technical Sciences, Social Sciences			1		1
South Central			1		1
Yes			1		1



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Humanities and Arts			1		1
South West			1		1
Yes			1		1
Total	2	1	3	7	13

Table 27 Higher education institutions - assessment of experience in partnership with business representatives

6.3. Supply and demand analysis of financial instruments

A survey prepared by FMFIB, in the period from mid-2018 to mid-2020, regarding the interest in using support with financial instruments shows more than 550 inquiries registered. The majority of enquiries are from legal entities, but the number of individuals is also growing. Enquiries are characterised by a low level of readiness for funding. Only 4% of the enquiries from individuals were developed to the point of being funded, for legal entities this proportion was higher at 21.4%, with the proportion of ideas ready for funding increasing significantly in the second half of the period under review. Guarantees are the main form of financing in which interest is shown, with 93.6% of individuals and 96.3% of legal entities interested in them. Equity finance is extremely unpopular, with firms expressing a lack of confidence both "about partnerships" in general and motivated by the prospect of exiting a profitable firm. In this respect, the experts of the FMFIB consider that additional efforts and resources should be directed to "further financial awareness, information and training of potential stakeholder groups of final recipients of financial instruments". There is strong interest in blended financing - if a grant is received, the rest of the project would be financed using a financial instrument.

On the other hand, financial intermediaries that provide financial instruments to final recipients point out that additional information and explanation procedures are needed to reach final recipients, making them aware of both the possibilities of the products offered and their requirements. Financial intermediaries offering products under OPIC 2014-2020 offer these services.

The performance of the financial instruments as of 09.2020 shows a relatively low level, however, this is more due to the late start of the offer of the financial instruments to the customers and the time it takes to conclude a transaction than to the lack of interest of the final recipients.

During the period 2014-2020, a wide range of financial instruments have been developed and are managed by FMFIB. The instruments offered cover all three types - equity, debt and guarantees. In addition, they are designed to meet the needs of companies in line with their development phase and take into account other specificities of companies in need of funds, such as economic sector and territorial coverage.

The Bulgarian Development Bank AD (BDB AD) is also active in offering financial instruments in the period 2008-2020. The Bank offers companies a wide range of products and services that are necessary to support and develop small and medium-sized enterprises. The products and services offered cover all possible types of instruments. The activity of the guarantee program of "National Guarantee Fund" JSC (NGF JSC) covers four main stages 2009-2013, 2015-2017, 2017-2018, 2019-



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

2020. Under the first guarantee scheme, 11 agreements have been signed with 11 commercial banks, which provide loan guarantees to SMEs up to BGN 500 thousand for investment and working capital loans, as well as bank guarantees. The maximum duration of the guarantees is up to 10 years. During the period of inclusion of the loans in the guarantee portfolio, NGF EAD has approved guarantees amounting to BGN 168 000 thousand for loans amounting to BGN 391 000 thousand. The total number of enterprises supported under the scheme is 2 300. At the end of 2019, the approved amount of guarantees included in the portfolios of the partner banks is BGN 4 337 thousand with a book value of the Fund's commitment of BGN 1 692 thousand.

At the end of 2015 and the beginning of 2016, guarantee agreements were signed with 10 commercial banks for a total amount of BGN 326 000 thousand. Under this scheme, the bank guarantees up to 50% of the loan amount, but not more than BGN 1 million at the related party level. By the end of the loan term (31.03.2017) the Bank has guaranteed loans in the amount of BGN 581 500 thousand, the guarantees are for the amount of BGN 258 080 thousand and are for 2 024 SMEs. At the end of 2019, the approved amount of guarantees included in the portfolios of the partner banks amounts to BGN 132,786 thousand with a carrying amount of the Fund's commitment of BGN 88,058 thousand.

The third scheme was launched in April 2017 with parameters similar to the previous one, supporting 3 000 enterprises and issuing guarantees worth BGN 354 397 thousand. At the end of 2019, the approved amount of guarantees included in the partner banks' portfolios amounted to BGN 269 685 thousand against a book value of the Fund's commitment of BGN 210 300 thousand.

The latest scheme was launched in early 2019. Self-granted loans for investment and working capital needs are eligible for inclusion. The Fund guarantees 50% of the loan amount, but not more than BGN 1.5 million at the level of a group of related parties. At the end of 2019, the approved amount of guarantees included in the portfolios of the partner banks amounted to BGN 27,050 thousand, with a book value of the Fund's commitment of BGN 24,426 thousand, supporting 147 enterprises.

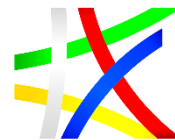
In 2018, BDB AD registered the Capital Investment Fund EAD in line with its mission to support Bulgarian business and its strategy for the period 2017-2020. The company has a capital of BGN 65,000 thousand and will participate in the capital of small, medium and start-up enterprises in order to increase business competitiveness. The following funds provide financial instruments

Eleven Ventures with total resources of EUR 6 million (private funding)

Plans for investments are about 20 companies from the sectors of IT, software applications and software as a service (SaaS), e-commerce, smart products. Important investments are LogSentinel, Payhawk, Kool and Konscious. Eleven Capital JSC - a public company with equity: 11.5 million BGN. Additional investments in companies already in the company's portfolio.

Empower Capital with a total resource of EUR 21 million (European Investment Fund - Jeremie)

The size of the investment is between 250 000 and 3 million Euro, with a direction in fast growing Bulgarian companies with the potential to gain a leading market position. The sectors covered by the fund are broad, including retail, light industry, transport and logistics, food processing, information




„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

technology, healthcare and tourism. The fund works with its investee companies at an operational and strategic level.

-  ***Impetus Capital with a total resource of BGN 7 million. (two funds, registration of a new fund is pending)***

Investments are in Bulgarian companies with growth potential

-  ***BrightCap Ventures with a total resource of EUR 25 million (European Investment Fund - Jeremie - EUR 20 million, private funding - EUR 5 million)***

Depending on the different phases of development, the amount of investment is between EUR 50 000 and EUR 3 million. The investments are in innovative small and medium-sized companies in Bulgaria and abroad. The main sectors covered by the fund are: artificial intelligence, big data processing, medical technologies, blockchain, financial technologies. In addition to financing, the fund will contribute to the business development of companies.

-  ***BlackPeak Capital with a total resource of EUR 30 million (European Investment Fund - Jeremie and private investments)***

The size of the investments is between 1 and 8 million euros, targeted at export-oriented companies with a niche position in regional or global markets or companies with a leading position in the domestic market. The fund helps in corporate governance and financial management of companies. A second fund is currently being prepared and negotiations are underway with companies in which to invest.

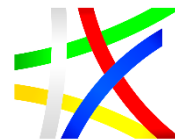
-  ***Capital Investments Fund with total resources of 65 million BGN.***

The amount of the investment is a minority holding of not more than 34% of the capital of the relevant company but not more than 10% of the capital of the Fund. In addition to financing, the Fund will contribute to the development of the equity investment ecosystem in Bulgaria by creating partnerships and co-investment opportunities with other equity investment funds.

European initiatives providing financial instruments:

-  ***Enterprise Europe Network (EEN) (2015-2021, €49 million per year for EU28 and COSME countries, excluding EU contribution to EEN Business Cooperation Centres.***

Enterprise Europe Network helps European SMEs find the right partners to innovate and grow internationally. The network helps SMEs develop their business in new markets, produce or license new technologies and access EU funding and finance. The network has around 600 partners (SME support service providers) in more than 50 countries. Network partners are selected in EU Member States and in COSME countries as well as in other third countries (business cooperation centres). The centres in Bulgaria are in Dobrich, Plovdiv, Ruse, Sandanski, Sofia, Stara Zagora, Vratsa and Yambol. The network offers specific services to help SMEs find appropriate financing, including support to further develop investment readiness, brokerage activities, linking SMEs with private investors, assistance in applying for EU risk finance schemes managed through financial intermediaries.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Erasmus Programme for Young Entrepreneurs (EU and COSME countries) (2014-2020, €55.3 million)

"Erasmus for Young Entrepreneurs is a cross-border exchange programme aimed at facilitating the exchange of entrepreneurial and managerial experience between entrepreneurs from the participating countries. Exchanges take place through a stay (lasting 1-6 months) of a newly established or potential entrepreneur with a well experienced entrepreneur managing an SME in another country. The exchange helps the new entrepreneur (NE) acquire the skills needed to set up and manage a small company. The host entrepreneur (HE) benefits from fresh perspectives on their business and gets opportunities to collaborate with foreign partners and explore new markets. In the past, the programme was implemented under the Competitiveness and Innovation Programme (CIP).

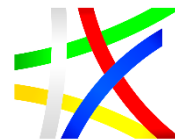
Currently, nationals from 38 countries participating in COSME can participate in Erasmus for Young Entrepreneurs. The programme currently has a local contact point in 37 participating countries (27 EU Member States, plus 10 COSME countries (Albania, Armenia, Bosnia and Herzegovina, Iceland, Moldova, Montenegro, Official Yugoslav Republic of Macedonia, Serbia and Turkey, Ukraine).

Equity Facility for Growth (EFG)

Through the COSME EFG, the European Investment Fund invests in selected venture capital and private equity funds acting as financial intermediaries that provide finance to SMEs primarily in their expansion and growth stages. The facility complements Horizon 2020's Innovfin offering, which invests in intermediaries that provide funding to innovative and small-medium caps primarily at the seed and start-up stages. COSME EFG also invests in funds that help portfolio companies grow and internationalise. The EFG is the successor to the High Growth and Innovative SME Facility ("GIF2") under the Competitiveness and Innovation Framework Programme (CIP) implemented in 2007-2013.

6.4. Analysis of the potential for implementing support through financial instruments in the areas of intervention under the Programme for Education 2021-2027

The National Development Programme BULGARIA 2030, as a strategic framework document of the highest order in the hierarchy of national programming documents, defines the vision and the general objectives of development policies in all sectors of public administration, including their territorial dimensions. For Priority 1. "Education and Skills" the main objective will be to increase the quality of human capital through the formation of highly educated, innovative and active individuals, able to successfully realize themselves as professionals and citizens and thus contribute to their personal well-being and sustainable development of all social spheres. Education and training policy will cover each of the stages of personal development, following the principles of lifelong learning (LLL). They will be oriented towards increasing the scope and quality of education and training, with an emphasis on the acquisition of analytical skills and the development of creative thinking, increasing people's capacities for timely adaptation to technological transformation and the resulting changes in the labour market.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Increasing the coherence between the needs of business and society on one hand, and higher education and vocational education and training programmes on the other, will remain a key aspect of policies. Closer cooperation and communication between the private and public sectors will be promoted within the learning process and in research activities. These activities will also be key to improving the quality of higher education, increasing their role in generating innovative research and stimulating the relevance of curricula in a global context. In this service, measures will be taken to consolidate public universities by providing financial incentives, focusing public support and increasing opportunities for public-private partnerships.

A particular focus of government policy in the area of upskilling the working age population will be on the effective provision of LLL opportunities. A system of incentives and effective mechanisms for upskilling the population (including the elderly population) will be put in place to enable the reintegration into the labour market of the unemployed, including the structurally unemployed, the long-term unemployed and economically inactive low-skilled workers. Upgrading their skills and bringing them into employment will contribute to increasing labour productivity in macroeconomic terms, while playing the role of an instrument for social inclusion.

From the analysis of the impact areas included in the NDP Bulgaria 2030, the following are considered as relevant with included viable activities that can be financed with financial instruments:

- + 1.1.c - Motivation to learn - estimated financial resources required of - 565 000 000 BGN;
- + 1.2.b - Academic training of pedagogical specialists - estimated required financial resources of - BGN 30 000 000;
- + 1.2.c - Continuing qualification of pedagogical specialists - estimated required financial resources of - 35 000 000 BGN;
- + 1.3.b - Applicability of education to achieve professional realization - estimated required financial resources in the amount of - 745 000 000 BGN;
- + 1.4.b - Quality and relevance of the forms of lifelong learning - estimated required financial resources of - 120 000 000 BGN;
- + 1.5.b - Educational innovations - estimated financial resources needed - 740 000 000 BGN.

The total required financial resources for these impact areas amount to BGN 2 235 000 000 for the whole period of the NDP 2030 or EUR 1 142 737 354, and the following sources of funding are foreseen to provide the required financial resources - State Budget, European Funds and Instruments, Municipal Budgets and Collected Fee Revenues, including from State Higher Education Institutions.


On the other hand, the surveys carried out among the target groups within the framework of the Education Programme 2021-2027 showed interest in the area of support for starting their own business or other entrepreneurial activity on the part of students, postgraduates and lecturers in HEIs. The analysis of the actions foreseen under the PE 2021-2027 shows overlap with the following types of actions under specific objectives and priorities:



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

PRIORITY 3 - LINKING EDUCATION TO THE LABOUR MARKET

SO under Article 4, par. 1(e) - Improving the quality, inclusiveness, efficiency and relevance of education and training systems to labour market needs, including by validating non-formal and informal learning so that it contributes to the acquisition of key competences, including entrepreneurial and digital skills, also by promoting the introduction of dual systems of training and apprenticeships

-  Career guidance of students through internships and development of entrepreneurial skills, including:
 - Encouraging entrepreneurship and innovation in higher education institutions in the digital economy, supporting and stimulating socially engaged activities of students and teachers within the region, including enhancing the project competences of HE teachers to work in European and other projects and networks, including in a multicultural and multilingual environment.

These types of actions may be subject to change and must correspond to the types of actions described in the final draft of the Programme for Education 2021-2027. The set of actions for the implementation of the financial instrument represents a very small part of the types of activities under Priority 3 of the PE 2021-2027, as the total financial resource foreseen under this priority, including funds for grant, amounts to EUR 392 531 998.

For the purposes of determining the potential market gap in education, the total resources under the 2030 NDP impact areas described above and the identified interest in the area of interest by type of action under Priority 3 of the PE 2021-2027 were compared. For this purpose, the corresponding required financial resource under NDP 2030 has been aligned for the duration of PE 2021-2027 and the resulting required financial resource under NDP 2030 is EUR 799 916 148. A market gap of around EUR 750 million has thus been identified. The market gap thus identified should be largely covered by other sources of funding beyond those under the PE 2021-2027, such as Municipal Budgets and Fee Revenue collected, including from public universities. Following the recommendations of the European Commission to increase the share of funds to be supported by financial instruments, the measures taken by the state for the possibility for state higher education institutions to take on annual debt in the total amount of up to 20 million BGN to finance projects through financial instruments, and taking into account the stated interest and available expertise to apply for funding through a financial instrument by the representatives of the target groups who participated in the survey, we believe that there are prerequisites for structuring a financial instrument in the scope of Priority 3 of the PE 2021-2027.

Taking into account the fact that this type of support will be applied for the first time for the education sector in the country, we consider it appropriate to include a limited resource for structuring a financial instrument within the framework of the PE 2021-2027, as at a certain point in the implementation of the program it can be optimized taking into account the results achieved. In addition to the fact that there is a strong interest in the use of financial instruments by the target groups for the mentioned area within the PE 2021-2027, these types of actions have the potential to generate revenues or savings in



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

several areas. Firstly, support for start-ups of students, postgraduates and lecturers could include much needed start-up capital for a start-up on concessional terms for the specific final beneficiary. This would create the conditions for generating higher revenues and savings for the final beneficiary in the critical first years of the start-up.

The comprehensive analysis for the implementation of a financial instrument within the framework of the PE 2021-2027 warrants the identification as **the most appropriate area for structuring a limited-resource financial instrument to support the start-up of own business or other entrepreneurial activity by students, postgraduates and lecturers in all higher education institutions**. The proposal is that this should be the area in which to focus all the resources for a financial instrument under the PE 2021-2027 as the size can be optimised at a certain stage of the Programme implementation. Regarding the identification of appropriate forms of financing, an analysis has been made on the one hand of the market consultations carried out by FMFIB EAD in connection with the structuring of the Financial Instruments "Venture Capital Fund" and "Technology Transfer Fund" supported by the Operational Programme "Innovation and Competitiveness" 2014-2020 and on the other hand of the surveys carried out on the attitudes towards starting their own business or other entrepreneurial activity and the identification of areas of impact through financial instruments among students, postgraduates and lecturers in higher education institutions, carried out in the framework of the preparation of this Ex-Ante Assessment, as well as the prepared study of FMFIB, in the period from mid-2018 to mid-2020, in connection with the interest in using support with financial instruments from legal entities and individuals.

The market consultations carried out by FMFIB EAD in the period late 2017 and early 2019 aimed at gathering feedback from a wide range of stakeholders in the area of risk and equity capital and R&D sectors, additionally taking into account the needs and potential of the prevailing market environment and to help optimise the terms and structuring of the Venture Capital Fund and Technology Transfer Fund financial instruments. These two funds are closest in nature to the proposed structuring area of the FI under PE 2021-2027 and their structuring approach could be used in structuring the FI under PE 2021-2027, with both funds have a chosen form of investment through equity financial products in the form of capital and quasi-capital investments.

On the other hand, the results of the surveys conducted on the attitudes towards starting their own business or other entrepreneurial activity and identifying areas of impact through financial instruments among students, postgraduates and lecturers in higher education institutions show mixed interest in the different forms of financing - almost 45% of respondents prefer financing in the form of a loan, just over 36% are interested in equity financing and about 19% in financing in the form of guarantees. In addition, the findings of the survey prepared by FMFIB, in the period from mid-2018 to mid-2020, show that the main form of financing in which interest is shown is guarantees, with 93.6% of individuals and 96.3% of legal entities interested in them. Equity finance is extremely unpopular, with firms expressing a lack of confidence both "about partnerships" in general as well as and motivation of exit of a profitable company. The analysis carried out to determine the appropriate form of structuring a financial instrument to support start-up or other entrepreneurial activity by students, postgraduates and lecturers in all higher education institutions shows that there are divergent interests between target



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

groups and stakeholders. In order to minimise the risk of these interests not being addressed during the implementation of the financial instrument under the PE 2021-2027, the proposal is that the financial instrument should include equity financial products in the form of equity and quasi-equity investments and debt financial products in the form of loans and guarantees. The specific forms and their financial resources would need to be determined in the process of market consultation by the financial intermediary and certain variant assumptions are used below in this Ex-Ante Assessment for the purpose of determining the effects of implementing the proposed structure of the financial instrument under the PE 2021-2027.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

7. REGIONAL AND SPATIAL DEVELOPMENT PRIORITIES AND OBJECTIVES FOR THE PERIOD 2021-2027

Regional and spatial development in the country for the period 2021-2027 is enshrined in the Integrated Spatial Development Strategies of each of the six NUTS 2 planning regions⁹, which are strategic planning documents setting out the overall political, spatial, economic and thematic framework for the development of a given region in the years of the 2021-2027 programme period. The Integrated Spatial Development Strategies have been developed in accordance with the National Spatial Development Concept for the period 2013-2025 (Update 2019) and take into account the projections of sectoral strategies at regional level in the fields of economic development, health, education, science, social services, transport, water, energy, broadband, tourism and the environment.

They also use the results of the Socio-economic Analysis of the Regions in the Republic of Bulgaria (July 2019), after updating the information with new data available at the end of 2019. The objectives and priorities for the development of each of the regions in the period 2021-2027 are in line with the objectives and strategies of the National Development Programme: Bulgaria 2030, the Updated National Spatial Development Concept, as well as the objectives of the EU cohesion and regional development policies after 2020.

7.1. Regional and spatial development priorities for the period 2021-2027

The basis of the defined priorities for the development of each of the regions in the period 2021-2027 is the analysis made and the revealed main specificities, problems and key factors of regional development. Below is a summary of the priorities defined for the education sector in each of the six integrated territorial development strategies for the period 2021-2027.

North West region

The focus of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the North-West Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 2: Preservation and Development of Human Capital. The formulation of the priority is justified by the need to solve the identified, long-standing problems in demographic and social development, which put the NW Region in an unfavourable position compared to other regions in the country. The priority includes three main strategic objectives, which will be implemented through integrated activities and projects due to the broad but complex nature of the needs and problems addressed. In planning the measures in this area, there is a need for coherence of services in the individual sectors as well as at the regional and local level, by improving the mechanisms and procedures for interaction between institutions, introducing a multidisciplinary approach to service

⁹ <http://www.bgregio.eu/programirane-i-otsenka/proektite-na-regionalni-shemi-za-prostranstveno-razvitie-sa-publikuvani-za-obshtestveno-obsazhdane.aspx>



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

provision, individualising services, implementing integrated policies in different areas - education and training, labour market, social, sports and health services, etc.

North Central region

The focusing of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the North Central Region for the period 2021-2027, concerning the education sector, fall under Strategic Priority 2: Development of Human Potential and Achievement of Social Growth. The focus of this priority of the Integrated Territorial Development Strategy of the North Central Region is on the development of human resources as the most important for the vitality and prosperity of the region.

North East region

The focusing of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the North-Eastern Region for the period 2021-2027, concerning the education sector, fall under Strategic Priority 2: Achieving equal access to quality education, health and social services. social inclusion. This priority is aimed at improving human capital and enhancing the livability of the different parts of the NE Region.

South West region

The focusing of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the South-West Region for the period 2021-2027, concerning the education sector, fall under Strategic Priority 2: Investing in human capital and overcoming regional imbalances in ensuring access to quality services. The specific characteristics and significant differences in the conditions of human capital reproduction between the regions and municipalities in the SW Region determine the importance of this priority. Improved quality of and access to essential public services - education, health care, social services, active social inclusion of vulnerable groups, as well as effective labour market implementation, lead to the preservation of regional demographic resources and improve the quality of life, social cohesion and enhance the liveability of each territorial community.

South Central region

The focusing of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the South Central Region for the period 2021-2027, concerning the education sector, fall under Strategic Priority 1: Strengthening the competitive position of the South Central Region through investment in growth factors. The growth and competitiveness factors in the South Central Region - research, technology and innovation, high added value products, internationalisation of the economy and regional specialisation according to the specific local potentials - have a number of deficits and face significant challenges. In this respect, the steps taken to create a 'regional economic model for smart specialisation' can be seen as a positive development.

South East region

The focus of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the South-Eastern Region for the period 2021-2027, concerning the education sector,



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

fall under Strategic Priority 2: Improving the educational level of the population and the quality of life in the SE Region. A determining factor for the development of the region is the preservation and development of human capital through the improvement of education, health, social, cultural and sports services.

7.2. Regional and spatial development objectives for the period 2021-2027

The defined priorities for the development of each of the development regions in the period 2021-2027 include the formulation of a set of specific objectives, envisaged implementation measures, as well as the implementation of measures using the Integrated Territorial Investment (ITI) approach based on integrated concepts. Below is a summary of the specific objectives defined for the education sector in each of the six integrated territorial development strategies for the period 2021-2027.

North West region

The focus of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the North-Western Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 2: Preservation and Development of Human Capital, Specific Objective 2.1. Equal access to quality education and training. Within this specific objective, three objectives are identified as follows:

Objective 2.1.1. Promote equitable access to and completion of quality and inclusive education and training

The measures envisaged under this objective are aimed at:

- Improving the functioning of the Mechanism for joint work of institutions on enrolment and retention of children and pupils of compulsory pre-school and school age in the education system as a local and regional policy;
- Implementing policies to cover and include children and pupils in pre-school and school education and to reduce early school leaving rates. Particular efforts should be made for those groups facing learning difficulties and/or being severely disadvantaged;
- Ensuring access to education for those in localities without functioning schools (through student travel, online learning, etc.);
- Digital transformation of school education, including vocational education and training;
- Support for innovative curricula, innovative classrooms and innovative schools;
- Implementation of projects to organize group and class visits to nearby villages in order to study traditions through various activities and classes on the territory of local abandoned schools, such as cultivation of domestic products and animals, traditional crafts, etc., to be led by elderly villagers;
- Creating conditions for access to education by overcoming demographic, social and cultural



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

barriers;

- Implementation of comprehensive programmes at territorial and municipal level for desegregation of schools, prevention of secondary segregation and anti-discrimination.

It is envisaged to implement the following measures using the Integrated Territorial Investment (ITI) approach based on integrated concepts:

- Creating conditions for access to education by overcoming demographic, social and cultural barriers;
- Implementation of comprehensive programmes at territorial and municipal level for desegregation of schools, prevention of secondary segregation and anti-discrimination.

Objective 2.1.2. Skills acquisition in line with the labour market

The measures envisaged under this objective are aimed at:

- Analyses and forecasts of labour market needs with a view to policies for restructuring education and training and preparing workers to meet the needs of existing businesses as well as the expectations of future businesses that will be attracted by a skilled workforce;
- Introducing early career guidance programmes. Developing standards and curricula for vocational qualification in cooperation with business;
- Expanding the regional scope of dual training and increasing the opportunities for its implementation in different professions, which is in line with the needs of the business at regional and local level;
- Optimising the network of vocational and specialised schools to increase their attractiveness in line with labour market needs;
- Offering training in professions and specialties of priority importance for the regional labour market;
- Development of flexible modular curricula and programmes in occupations, taking into account the real needs of the labour market, and a mechanism for flexible adaptation, including part-time, evening and distance learning in cooperation with employers;
- Acquiring better digital literacy;
- Expanding systems and promoting lifelong learning;
- Adult literacy programmes, mainly among the Roma population and other vulnerable groups;
- Transition to a dual form of higher education.

The following groups of activities are planned to be implemented at territorial level through the Integrated Territorial Investments (ITI) approach:

- Supporting VET at regional level;



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

- Development of the dual system of training;
- Adult literacy;
- Validation of knowledge, skills and competences.

Objective 2.1.3. Modernization of educational infrastructure

All levels of the education and training system need continuous improvement of infrastructure and modern equipment, providing opportunities for modern learning. In this regard it is necessary:

- Continuing to upgrade and build new facilities for pre-school education, schools, personal development support centres, dormitories, sports grounds and gyms (as needed);
- Supply and installation of specific and innovative tools and equipment for the supported infrastructure;
- Increasing the use of ICT as part of the modernised educational infrastructure.

North Central region

The focusing of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the North Central Region for the period 2021-2027, concerning the Education Sector, fall under Strategic Priority 2: Development of Human Potential and Achievement of Social Growth, Specific Objective 2.1. Improving access to education and raising the educational attainment of the population. The measures envisaged under this specific objective are aimed at:

- Ensuring equal access to quality education at all levels of compulsory education (pre-primary, primary and secondary), with an increased focus on early childhood development;
- Implementation of integrated policies to ensure the right of every child to quality education and to prevent school drop-out, with a focus on children and students from vulnerable groups, as well as policies and measures aimed at increasing the secondary completion rate and promoting the participation of young people in formal and non-formal education and training;
- Increasing the relevance of school education for achieving professional realization by expanding the geographical scope of dual and vocational education and training and increasing the opportunities for its implementation in different professions, tailored to the needs of business at regional and local level; ▪ literacy programmes, mainly among the Roma population and other vulnerable groups, for the acquisition of higher education, mainly implemented by schools;
- Supporting municipalities to implement educational desegregation activities;
- Development of programmes for attracting and retaining children in school according to specific local conditions, following the model of the Mechanism for joint work of institutions on enrolment and retention of children and pupils of compulsory pre-school and school age in the education system;
- Developing and implementing policies and measures to develop vocational training in a



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

work-based environment, including through the organisation of internships in enterprises during and after training;

- Inclusive education of children and students with special educational needs;
- Reintegration into the education system of young people under 18 who have dropped out of school;
- Ensuring access to lifelong learning;
- Building partnership networks between secondary and higher education institutions, research organisations, business and local government, including the creation of learning regions;
- Introduction of information and communication technologies (ICT) in the system of pre-school and school education.

Measures related to creating conditions for access to education by overcoming demographic, social and cultural barriers and complex programmes at municipal level for desegregation of schools, prevention of secondary segregation and anti-discrimination are envisaged to be implemented at territorial level using the Integrated Territorial Investments (ITI) approach. The following groups of activities are also planned to be implemented through the ITI approach:

- Supporting vocational education and training at regional level;
- Development of the dual system of training;
- Adult literacy;
- Validation of knowledge, skills and competences.

North East region

The focusing of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the North-East Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 2: Achieving equal access to quality education, health and social services. social inclusion, Specific Objective 2.1. Investment in education and skills. The North East region has a well-developed network of educational institutions and the number of people with higher education qualifications is relatively high. However, the education and training system is not yet sufficiently flexible and reformed to meet more fully local and regional needs for professional and technical staff in the different sectors of the economy, and to build the new knowledge and skills needed by the workforce. The planned policies and measures will address the following areas of impact:

- Building new and improving the quality of the existing educational infrastructure, including the provision of compulsory pre-school education for children from 4 years of age;
- Implementing integrated measures to improve access to education;
- Support for vocational and specialised schools;
- Literacy programmes, mainly among the Roma population and other vulnerable groups, for the acquisition of higher education, mainly implemented by schools;



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

- Supporting municipalities to implement educational desegregation activities;
- Inclusive education of children and students with special educational needs;
- Implementing social support mechanisms;
- Reintegration of early school leavers.

Measures to improve skills and their alignment with regional requirements labour market will focus on:

- Pursuing policies to restructure education and training and prepare workers to meet the needs of existing businesses, as well as the expectations of future businesses, for a skilled workforce. At the same time, emphasis will be placed on improving the skills and knowledge of staff involved in the tourism supply and agricultural sectors;
- Periodic updating of the educational curriculum of the 48 vocational schools operating in the NE region - 21 in Varna and 9 in each of the districts of Dobrich, Targovishte and Shumen - in broad partnership with the business and key skills needs;
- Expanding the regional scope of dual training and increasing opportunities for its implementation in different professions, in line with the needs of the business at regional and local level;
- Optimising the network of vocational and specialised schools to increase their attractiveness in line with labour market needs;
- Active involvement of business organisations in defining specific skills and knowledge requirements;
- Offering training in professions and specialties of priority importance for the regional labour market;
- Acquiring better digital literacy;
- Providing an educational environment for equitable access to lifelong learning.

The integrated territorial investment approach will be widely reflected in the measures implemented. Activities defined as appropriate to this approach are related to:

- Creating conditions for access to education by overcoming demographic, social and cultural barriers;
- Comprehensive programmes at municipal level for desegregation of schools, prevention of secondary segregation and anti-discrimination;
- Supporting vocational education and training at regional level;
- Development of the dual system of training;
- Adult literacy;
- Validation of knowledge, skills and competences.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

South West region

The focus of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the South-West Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 2: Investing in Human Capital and Overcoming Regional Imbalances in Ensuring Access to Quality Services, Specific Objective 2.1. Education and training for a skilled workforce. Ensuring equitable access to pre-school and school education of the required quality has emerged as a key issue and will focus the implementation of a number of interventions, many of them in integrated packages of investments.

Planned interventions in preschool and school education include:

- Building new and improving the quality of the existing educational infrastructure;
- Creating conditions for transition to single-shift education;
- Implementing measures to improve the quality of education and students' educational achievement;
- Updating and modernising curricula in priority vocational areas, in partnership with the business sector, in line with the needs of the regional and local labour market;
- Optimizing the structure of schools, creating conditions for financing vocational schools of national and regional importance, protected professions, according to the needs of municipalities, as well as for the introduction of training through work (dual training);
- Support for access to education for students from specific target groups. Introduction of literacy programmes, mainly among the Roma population and other vulnerable groups, to acquire higher levels of education, implemented mainly by schools;
- Preventing early school leaving through a targeted approach and promoting flexible second chance programmes;
- Investing in productive potential by establishing and maintaining vocational schools or classes that ensure the training and reproduction of a quality workforce;
- Improving opportunities for additional and continuing teacher training, including in professional fields;
- Support to ensure access to quality education in small settlements and hard-to-reach areas.

A particular focus of the measures implemented is on creating the conditions for promoting lifelong learning, in particular flexible opportunities for up-skilling and re-skilling for all.

It is particularly urgent to address the low level of computer and digital skills of human resources, which hinders the widespread use of ICT and ICT-based services.

A significant part of the measures under this specific objective will be implemented through the Integrated Territorial Investment (ITI) approach. The following are identified as appropriate packages of ITIs with a regional scope within individual constituent regions and municipalities:



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

- Creating conditions for access to education by overcoming demographic, social and cultural barriers;
- Comprehensive programmes at municipal level for desegregation of schools, prevention of secondary segregation and anti-discrimination;
- Activities to support vocational education and training;
- Development of the dual training system;
- Adult literacy;
- Validation of knowledge, skills and competences.

South Central region

The focus of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the South Central Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 1: Strengthening the competitive position of the South Central Region through investments in growth factors, Specific Objective 1.3. Good education, new knowledge and professional development. The activities and measures under this specific objective are aimed at improving the knowledge and skills of the workforce and investment in human resources as a factor for achieving higher competitiveness of the economy, as well as at ensuring a balance between the demand and supply of knowledge and skills to better adapt the workforce to the needs of the labour market in the face of new development challenges. The educational characteristics of the population in the South-Central region outlined in the analysis make it the most problematic region in the country after the North-West. Difficulties in finding a job and the mismatch between the acquired qualifications and the realisation opportunities emerge as a problem for a significant part of young people in the South Central Region.

The priority actions under this specific objective are oriented towards:

- Expanding equal access to quality pre-school and school education;
- Support for the Mechanism for inclusion of all children in the education system;
- Building adequate infrastructure for education;
- Implementing effective measures to include vulnerable children in education;
- Reducing early school leaving and raising the educational attainment of the population;
- Increasing the relevance of school education for career development. Expanding dual training and increasing opportunities for its implementation in different professions, which is in line with the needs of the business at regional and local level, will be of key importance;
- Creating conditions for acquiring new skills.

Some of the measures are aimed at increasing the relevance of higher education for career development. Priority will be given to funding areas related to science, technology, engineering and mathematics (STEM), in particular ICT and mathematics. Support is foreseen for the transition to dual



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

training in higher education. A particular focus of the measures being implemented is on creating the conditions to promote lifelong learning, in particular flexible up-skilling and re-skilling opportunities for all.

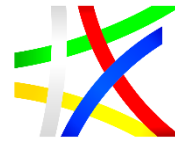
Measures to stimulate employment in the region and increase the inclusion of people who are outside the labour market will focus on:

- Strengthening regionally differentiated active labour market policies;
- Updating and modernisation of curricula in priority vocational fields, in partnership with the business, in line with the needs of the labour market;
- Supporting the socio-economic integration of disadvantaged groups, who in most cases are at risk of social exclusion and poverty;
- New forms of employment related to the social, economic and technological changes, requiring training in key competences, digital and transferable skills, aimed at facilitating the adaptation of the workforce to new forms of employment.

Investment in people's key skills will continue. There is a particular need to address the low level of computer and digital skills of human resources, which hampers the widespread use of ICT and ICT-based services. The following groups of activities are planned to be implemented at territorial level, using the Integrated Territorial Investments (ITI) approach: Creation of conditions for access to education by overcoming demographic, social and cultural barriers and Integrated programmes at municipal level for desegregation of schools, prevention of secondary segregation and anti-discrimination. The activities under the ITI approach will be implemented on the basis of integrated concepts, which will be designed and implemented in partnership between different local stakeholders (municipalities, NGOs, educational institutions, etc.) in order to maximise the impact on the territory concerned. It is appropriate to organise these activities within the different areas of the region, insofar as there are specific territorial features.

The activation of the economically inactive and their retraining have the potential to boost employment in the future. This includes measures targeting the group of inactive persons, including the unemployed from vulnerable groups, groups with low education and no qualifications and insufficient labour market participation. The number of people outside the labour force aged 15-64 in 2018 in the South-Central Region was 276 thousand. Youth not in education or employment, whose share in the population aged 15-24 is 16.7% in the South-Central Region, is the object of special attention and measures to include them in training or the labour market. Activating the labour force participation of these groups is important to overcome the labour shortage in the region. Integrated Territorial Investments (ITIs) approach are identified as appropriate to be implemented at territorial level:

- Activities to support vocational education and training at regional level;
- Development of the dual system of training;
- Adult literacy;
- Validation of knowledge, skills and competences.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

South East region

The focusing of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the South-Eastern Region for the period 2021-2027, concerning the education sector, fall under Strategic Priority 2: Improving the educational level of the population and the quality of life in SE region, Specific Objective 2.1. Investment in human resources. Within this specific objective three objectives are identified as follows:

Objective 2.1.1. Stimulate investment in education

Investments in education are focused on quality and inclusive education for all, linked to changing labour market trends. Particular efforts will be made for those groups facing learning difficulties and/or being severely disadvantaged. The introduction of modern forms of learning will be encouraged, including the creation of digital learning resources. Innovative curricula, innovative classrooms and innovative schools will be supported. Vocational and dual training will be expanded. Educational infrastructure will also be improved.

Използването на подхода на интегрираните териториални инвестиции (ИТИ) ще бъде прилаган според конкретните териториални дисбаланси и потребности, в т.ч. и по отношение на следните дейности:

The use of the Integrated Territorial Investment (ITI) approach will be applied according to specific territorial imbalances and needs, including the following activities:

- Creating conditions for access to education by overcoming demographic, social and cultural barriers;
- Comprehensive programmes at municipal level for desegregation of schools, prevention of secondary segregation and anti-discrimination.

Objective 2.1.2. Improve the link between education and skills and the labour market

The matching of supply and demand in the labour market and transitions to new industrial development will be achieved through:

- Developing open training systems regulating vocational training according to regional labour market needs, in cooperation with socio-economic partners;
- Providing opportunities for vocational training and acquisition of professional knowledge, skills and competences by students.

The following activities emerge as suitable for the integrated territorial investment approach in SEE:

- Supporting vocational education and training;
- Development of the dual system of training;
- Adult literacy;
- Validation of knowledge, skills and competences.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

To address the challenges arising from the transition to a climate-neutral economy, activities will support:

- Upgrading and retraining of workers;
- Job search assistance to job seekers;
- Ensuring the active participation of jobseekers.

Objective 2.1.3. Higher education

Higher education projects include:

- Improving the infrastructure of higher education;
- Introduction of dual training in higher education;
- Support for the development of the Faculty of Medicine to provide world-class modern education to attract international students;
- Renovation of the training facilities of the College of Tourism in Burgas;
- Opening of new branches of higher education institutions in the region in accordance with the National Map of Higher Education, which will determine the profile and territorial structure of higher education by professional fields and specialties of regulated professions;
- Building facilities, equipping classrooms, practices and laboratories in the system of higher education in specialties related to the production, processing and expansion of the business application of essential oil crops, including oil rose;
- Development of new Master's programmes in line with Industry 4.0 and new trends in the labour market, in cooperation with the business.

Activities related to providing more people with access to the higher education system will be supported, such as the promotion of flexible forms of learning, the stimulation of mobility, research, etc.

7.3. Funding mechanism through Integrated Territorial Strategies

The overall assessment of the resources required for the implementation of the Integrated Territorial Development Strategies (2021-2027) of each of the NUTS 2 planning regions represents an estimate of the overall financial framework that is foreseen to be implemented as a prerequisite for the achievement of the set strategic priorities and specific development objectives by the end of the period. Although only indicative, it objectifies the resources needed to implement the strategic priorities and objectives of the strategy. The financial framework is also a condition for the mobilisation of all possible sources of funding - European Union funds, national and municipal budgets, additional resources from other sources - public and private. It is oriented towards directing external and internal investors to the selected priority areas, which will receive public funding and thus create a more favourable business environment in the respective sectors.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

The financial resources are estimated in the following areas:

- National public funding (national/central budget, municipal budgets, public funds);
- European Regional Development Fund (ERDF), European Social Fund (ESF) and Cohesion Fund (CF);
- European Agricultural Fund for Rural Development (EAFRD);
- European Maritime and Fisheries Fund;
- International financial institutions;
- Funds of natural and legal persons (investors), civil organizations;
- Other additional sources.

The funds are estimated on the basis of previous experience in the use of similar sources, as well as on the basis of the potentially needed and realistically available resources. They can be reported as moderately optimistic. The new COVID-19 challenge will make its mark, under the EU, national and municipal budgets, at least within the first two years of the new programming period. Given the ongoing discussions regarding the seven-year EU budget framework and the upcoming negotiation process, the exact amount will be determined at a later stage.

North West region

The overall assessment of the necessary resources for the implementation of policies, activities and measures within the scope of the Integrated Territorial Strategy for Development of the North-West Region for the period 2021-2027, concerning the Education sector, falling under Strategic Priority 2: Preservation and Development of Human Capital, Specific Objective 2.1. Equal access to quality education and training, amounts to 73.7 million BGN and represents 6.8% of the total financial resources under the strategy. Thus defined, the financial resources are allocated to 52.3 million BGN from the ESIF (70.96%) and 21.4 million BGN (29.04%) from national public, private participation and other instruments.

North Central region

The overall assessment of the necessary resources for the implementation of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the North Central Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 2: Development of Human Potential and Achievement of Social Growth, Specific Objective 2.1. Improving access to education and raising the educational level of the population, amounts to 98.3 million BGN and represents 9.7% of the total financial resources under the Strategy. Thus defined, the financial resources are allocated to 72.3 million BGN from the ESIF (73.55%) and 26.0 million BGN (26.45%) from national public, private participation and other instruments.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

North East region

The overall assessment of the required resources for the implementation of policies, activities and measures within the scope of the Integrated Territorial Strategy for Development of the North-East Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 2: Achieving equal access to quality education, health and social services. social inclusion, Specific Objective 2.1. Investment in Education and Skills, amounts to 99.7 million BGN and represents 10.5% of the total financial resources under the Strategy. Thus defined, the financial resources are allocated to 73.3 million BGN from the ESIF (73.52%) and 26.4 million BGN (26.48%) from national public, private participation and other instruments.

South West region

The overall assessment of the necessary resources for the implementation of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the South-West Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 2: Investing in Human Capital and Overcoming Regional Imbalances in Ensuring Access to Quality Services, Specific Objective 2.1. Education and training for a skilled workforce, amounts to BGN 150.7 million and represents 10.0% of the total financial resources under the strategy. Thus defined, the financial resources are allocated to BGN 110.0 million from the ESIF (72.99%) and BGN 40.7 million (27.01%) from national public, private participation and other instruments.

South Central region

The overall assessment of the resources required for the implementation of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the South Central Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 1: Strengthening the competitive position of the South Central Region through investment in growth factors, Specific Objective 1.3. Good education, new knowledge and professional development, amounts to BGN 81.7 million and represents 7.9% of the total financial resources under the strategy. Thus defined, the financial resources are allocated to 60.5 million BGN from the ESIF (74.05%) and 21.2 million BGN (25.95%) from national public, private participation and other instruments.

South East region

The overall assessment of the necessary resources for the implementation of policies, activities and measures in the scope of the Integrated Territorial Strategy for Development of the South-East Region for the period 2021-2027, concerning the Education sector, fall under Strategic Priority 2: Improving the educational level of the population and the quality of life in the SE region, Specific Objective 2.1. Investments in human resources, amounts to 105.1 million BGN and represents 11.3% of the total financial resources under the strategy. Thus defined, the financial resources are distributed in BGN 77.3 million from the ESIF (73.55%) and BGN 27.8 million (26.45%) from national public, private participation and other instruments.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

The summarized assessment of the resources needed for the implementation of policies, activities and measures in the scope of the integrated territorial development strategies for the period 2021-2027, concerning the sector "Education", shows a total resource of over 609 million BGN, with the total planned resources from the ESIF representing 445.7 million BGN (73.16%), and the resources from national public, private participation and other instruments total BGN 163.5 million (26.84%).

Planning region	Funding sources, million BGN/%				Total, million BGN
	ESIF		National		
North West region	52.3	70.96%	21.4	29.04%	73.7
North Central region	72.3	73.55%	26.0	26.45%	98.3
North East region	73.3	73.52%	26.4	26.48%	99.7
South West region	110.0	72.99%	40.7	27.01%	150.7
South Central region	60.5	74.05%	21.2	25.95%	81.7
South East region	77.3	73.55%	27.8	26.45%	105.1
Total	445.7	73.16%	163.5	26.84%	609.2

Table 28 Summary assessment of the resources needed in the scope of the integrated territorial development strategies for the period 2021-2027 concerning the education sector



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

8. OVERALL ASSESSMENT OF THE PROPOSED SIZE OF THE PROGRAMME CONTRIBUTION TO THE FINANCIAL INSTRUMENT AND THE EXPECTED LEVERAGE EFFECT


8.1. Appropriate forms and mechanism for managing the financial instrument

The main objective set by structuring a financial instrument within the framework of the PE 2021-2027 is to encourage potential target groups to invest in entrepreneurial skills, through easier access to financial resources, on more favourable terms and conditions, and by further incentivising them by financing the FI entirely with programme funds.

For the structuring of the financial instrument within the PE 2021-2027, the following types of actions were analysed by specific objectives and priorities:

PRIORITY 3 - LINKING EDUCATION TO THE LABOUR MARKET

SO under Article 4, par. 1(e) - Improving the quality, inclusiveness, efficiency and relevance of education and training systems to labour market needs, including by validating non-formal and informal learning so that it contributes to the acquisition of key competences, including entrepreneurial and digital skills, also by promoting the introduction of dual systems of training and apprenticeships

-  Career guidance of students through internships and development of entrepreneurial skills, including:

- Encouraging entrepreneurship and innovation in higher education institutions in the digital economy, supporting and stimulating socially engaged activities of students and teachers within the region, including enhancing the project competences of HE teachers to work in European and other projects and networks, including in a multicultural and multilingual environment.

These types of actions may be subject to change and must correspond to the types of actions described in the final draft of the Programme for Education 2021-2027.

The target groups targeted include:

- students, postgraduates and teachers in all higher education institutions;
- higher education institutions.

The researched experience in the implementation of the FI in the field of education at EU level, as well as the nature of the types of actions targeted by the financial instrument in the field of **support for the start-up of own business or other entrepreneurial activity by students, postgraduates and lecturers in all higher education institutions** provide a rationale for the financial instrument to include equity financial products in the form of equity and quasi-equity investments and debt financial products in the form of loans and guarantees.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

Equity investing is the provision of capital to a company, invested directly or indirectly in return for the acquisition of full or partial ownership in that company, and the equity investor may exercise some managerial control over the company and participate in the distribution of its profits. The financial return depends on the growth and profitability of the enterprise. It is generated from dividends and from the sale of shares to another investor or from the public issue of new shares.

Quasi-equity investing is a type of financing that is classified between equity financing and debt, having a higher risk than senior debt and a lower risk than equity. Quasi-equity investing can be structured as debt, usually subordinated and in some cases convertible into equity or preferred equity. The risk-return profile typically falls between debt and equity in the capital structure of the enterprise.

Loan is an agreement which obliges the lender to provide the borrower with an agreed sum of money for a specified period and under which the borrower undertakes to repay that sum within the agreed period. The financial instrument is useful in that it can provide a loan where banks are reluctant to lend on terms acceptable to the borrower. They can offer lower interest rates, longer repayment terms and have lower collateral requirements.

Guarantee is a written undertaking to assume liability in respect of all or part of a debt or obligation of a third party, or in respect of the successful performance by that third party of its obligations, in the event of an event giving rise to the activation of the guarantee, such as a default on a loan. Typically, guarantees cover financial transactions such as loans.

Determining the size of the financial instrument is about finding a balance between the analysis of demand from the target groups surveyed and the need to motivate banks and other potential financial intermediaries to participate in the implementation of financial instruments, taking into account the costs and effort of administering the specific requirements of EU funding and the potential benefits of management fees and co-financing interest. The analysis of lessons learned in the country from the implementation of financial instruments in the 2014-2020 period shows that banks and/or financial intermediaries have a certain interest in structuring financial instruments with a minimum public resource in the range of EUR 10-15 million. This minimum amount can be defined as optimal for the structuring of a financial instrument under PE 2021-2027 in view of the analyses of the resources needed from the studies carried out on the implementation of financial instruments among the target groups under PE 2021-2027. The resulting total value of BGN 3 711 250 or around EUR 1 897 500 could be increased about 8-10 times over the whole programme period or reaching a total value of the required financial support of EUR 16 760 598. The implementation of this financial resource would be greatly facilitated by a massive awareness campaign on the benefits of the application of the financial instrument in the area of support for the start-up of own business or other type of entrepreneurial activity by students, postgraduates and lecturers, as well as by the implementation of precise and targeted market consultations in the process of structuring the financial products under the proposed financial instrument in the framework of the PE 2021-2027. An additional advantage of the proposed structure of the financial instrument will be the possibility of sufficient flexibility for the Managing Authority and the Financial Intermediary in the processes of managing the financial resources and the corresponding monitoring and control of their spending.




„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

In terms of the management mechanism of the financial instrument, it is important to note that during the 2014-2020 programming period, no financial instruments and products were implemented in Bulgaria to support projects in the field of education with funds from OP SESG 2014-2020. Of the current financial instruments in the country, there is no instrument suitable to be upgraded for the purpose of implementing financial instruments in the field of education. It is therefore necessary to structure the proposed financial instrument in the field of education as an entirely new instrument with corresponding financial products. Taking into account the experience gained in Bulgaria so far, as well as the specificity of the proposed financial instrument within the PE 2021-2027, it is foreseen that the MA of the PE 2021-2027 will provide financial resources, entirely from the ESF+ programme and the corresponding national co-financing, to a Fund Manager. The Fund Manager, through an investment intermediary (financial institution) or directly, will provide financial products in the form of equity or debt financing to the final recipients.

The Fund Manager (in case of direct provision) or the Investment Firm shall be a credit or financial institution in accordance with Article 2 or Article 3 of the Credit Institutions Act. For the selection of an organisation to act as Fund Manager Regulation 2018/1046 specifies that Managing Authorities may directly award contracts to public banks or institutions. However, in order to ensure that this possibility of direct outsourcing remains compatible with the principles of the internal market, strict conditions should be established which must be met by public banks or institutions. Those conditions should include the requirement that there should be no direct private equity participation, other than forms of private equity participation that do not involve controlling or blocking powers, in accordance with the requirements laid down in Directive 2014/24/EU. Public banks or institutions should be allowed to execute financial instruments where private equity participation has no impact on decisions on the day-to-day management of the financial instrument supported by the European Structural and Investment Funds.

Financial instruments under shared management are set up and managed at national or regional level, funded by the ESIF. The financial instruments applied are subject to the CPR and State aid regimes. The management of financial instruments under shared management is most often carried out by public banks or institutions in Member States specifically set up to manage financial instruments of the "Fund of Funds" type. In Bulgaria, the management of all FIs co-financed by the ESIF, in accordance with the current provisions of the Management of resources under ESIF Act, is carried out by the "Fund of Funds" (FMFIB EAD). There are also financial instruments managed at the EU level, but in the field of education there is not enough scope for their application due to their nature for strategic investment and subordination to the rules of the Invest EU programme for the period 2021-2027. The following options are possible for the implementation of a mechanism under shared management:

-  The Fund Manager is the "Fund of Funds" (FMFIB EAD) - under this option, the MA of PE 2021-2027 provides FMFIB EAD with the contracted funds from the programme. The FMFIB EAD prepares the rules for the disbursement and disbursement of the grant by the final recipients, and it may implement them directly or in cooperation with other financial lending institutions and funds. The advantages of this option of implementing the mechanism under shared management are that FMFIB EAD has an established



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

structure with experience gained in the previous programming period, and it has a Coordination Unit which provides information and advice on the possible implementation of project ideas and investment intentions at different stages of development with appropriate support. As a drawback, it can be pointed out that FMFIB EAD has no experience in project management in the education sector;

- ✚ Fund manager is a financial institution - under this option, the MA of PE 2021-2027 provides a selected financial institution with the contracted grants from the programme. The selected financial institution prepares the rules for the disbursement and disbursement of the grants by the final recipients, implementing them directly without the need to cooperate with other financial lending institutions and funds. The advantages of this option of implementing the mechanism under shared management are that the selected financial institution will have experience in providing different financial products and, if necessary, provide additional financing under the financial instrument. At the same time, according to the Management of resources under ESIF Act, Art. 5, para. Article 5(1) of the ESIF, financial instruments financed by the ESIF, with the exception of those under Article 39 of Regulation (EU) No 1303/2013, shall be implemented through a Fund of Funds.

8.2. Combination with other forms of support, including grants

The proposal for structuring a financial instrument within the PE 2021-2027 is by financing it entirely with programme funds made available under Priority 3 of the PE 2021-2027. Given the cautious approach taken to include limited resources for structuring a financial instrument under PE 2021-2027, the introduction of additional conditions for funding by the final recipients or the financial intermediary could lead to an outflow of some potential participants in the process, both at the level of the final recipients and at the level of the financial intermediary. In principle, support for structuring financial instruments with grant is appropriate for investments where market incentives are not sufficient to make them happen. At present, the market is not a sufficient incentive for the development of education in the country and support with public funds is needed, as has been the practice in Bulgaria so far, with the OP SESG being the main source of funding for education projects. In this respect, no combination with other forms of support is foreseen in the structuring of the financial instrument under the PE 2021-2027.

8.3. Financial resources for the contribution of the PE 2021-2027 to the implementation of the financial instrument by programme priority

The analyses carried out on the areas and resources for the implementation of the financial instrument under the PE 2021-2027 include the allocation of financial resources amounting to EUR 16 760 598 for a financial instrument to support the start-up of own business or other entrepreneurial activity by students, postgraduates and lecturers in higher education institutions, including equity financial products in the form of equity and quasi-equity investments and debt financial products in the form of



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”



loans and guarantees. This proposed resource is in line with the expressed interest among the target groups in the area of support for the start-up of own business or other entrepreneurial activity by students, postgraduates and lecturers, as well as with the legislative steps taken to facilitate the process of credit financing of public higher education institutions in a total amount of up to BGN 20 000 000 per year or about EUR 10 000 000. Additionally, the fact that this type of support will be applied for the first time in the framework of the PE 2021-2027 is taken into account and it is appropriate to take a prudent approach in planning the funds.

The distribution of funds within the proposed amount of EUR 16 760 598 includes EUR 13 305 611 of EU funding and national co-financing of EUR 3 454 987. For the determination of the national co-financing in nominal value, a % has been applied for the distribution of the grant in a ratio of 33% for the region in transition (South West region) and 67% for the less developed regions and the corresponding national co-financing for the region in transition - 30% and for the less developed regions - 15%. The detailed calculations are presented in Annex 1.3 of the Final Report.

8.4. Assessment of the expected leverage effect by financial instruments and priorities of the PE 2021-2027

The leverage effectiveness of any particular financial instrument depends directly on the ratio of the market deficit for the product/service to the optimal investment situation, which includes, its type, location and type of final recipients, as well as on the choices made by the Managing Authorities regarding the trade-off between leverage and revolving effect.

The main factors on which the expected size of the leverage effect depends can be summarized as follows:

-  Leveraging additional private resources is an important source of leverage, but this needs to be seen properly in the specific context of EU funds intervening where public support is really needed to avoid a deficit and to address a sub-optimal market situation or fill a market niche. It is therefore unreasonable to expect that such interventions will always attract massive private capital, but rather that public resources can help to attract private funds, acting as a catalyst, in sectors/areas that otherwise could not be addressed at all. The education sector is just such a sector with mainly public funding and not much expectation of attractiveness for private capital, respectively high leverage.
-  The expected leverage varies between products (it is usually higher for guarantees), between types of investment (it may be lower for research and innovation and other high-risk investments or for investments in micro-enterprises), between regions (in richer regions there is a priori a greater willingness of the private sector to co-invest), and between the development stages of the final recipients being supported. The reasonable expected leverage effect in education is expected to be relatively lower at the national level than other attractive areas for the private sector and to stick to the lower bound.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

- Depending on the objectives that a financial instrument is expected to support, the Managing Authority may deliberately choose the long-term impact and sustainability of EU support through products that imply lower leverage but bring higher benefits in the future, i.e. EU funds in a very highly leveraged financial instrument usually cover the highest risk share of the investment and are therefore the first to be lost (first loss). In this case, the impact of the EU funds will be very large in the short term (significant leverage), but as a result of the high risk there may be little or no revolving effect of the EU contribution over time. On the other hand, the products may have relatively low leverage in the short term, but high impact and a significant likelihood of delivering returns in the long term. In the area under assessment, there is a definite drive towards long-term sustainability of returns rather than high returns in the short term

In accordance with the EC Guidance on Financial Instrument Reporting and Leverage¹⁰ leverage is established for each product or financial instrument and in nominal prices. Also, in cases where interest, reimbursed guarantees or loans are reused, they should not be taken into account in the calculation of leverage as they no longer constitute ESIF.

Own contributions from final recipients should not be taken into account in the calculation of leverage effects, as such own contribution is not "additional public and private resources" raised by financial instruments and made available to final recipients. With or without financial instruments, these amounts were part of the financing.

Management costs and fees expected to be paid for the management of financial instruments are excluded from the total expected amount of funding, as these amounts do not reach the final beneficiaries.

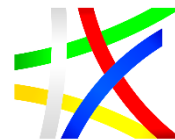
The expected leverage effect is a prerequisite for signing financial agreements and is therefore determined in advance as follows:

$$\text{expected leverage effect} = \frac{\text{Total estimated amount of reimbursable funding made available to the FR}}{\text{Amount of ESIF earmarked for FI}}$$

The total expected amount of funding is an estimate of the total amount of funding expected to reach the final recipients eligible for support through financial instruments, without including the contribution of the final recipients themselves.

For equity financial instruments, this amount includes funds received from the final recipients, through financial intermediaries and other co-investors, if any, at the level of the final recipients. For guarantee instruments, it is the amount of the total amount of the underlying loans that are guaranteed, and for credit instruments it is the total amount of loans expected to be disbursed to the final recipients.

¹⁰ https://ec.europa.eu/regional_policy/sources/docgener/informat/2014/guidance_leverage_reporting_en.pdf



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

In general, this amount should include:

- ✓ For credit and equity financial instruments, the total amount earmarked for the ESIF financial instrument + the expected public and/or private national co-financing under the Programme + the expected contribution from other investors outside the Programme;
- ✓ For guarantees, this is the value of the loan portfolio expected to be guaranteed by the programme, through the ESIF.

In accordance with the provisions of Article 68 of the CPR for the programming period 2021-2027, a threshold of 5 % for loans and guarantees and 7 % for equity and quasi-equity investments for the management of a holding fund and 7 % for loans and guarantees and 15 % for equity and quasi-equity investments for the management of a specific fund of the total amount of the programme contribution paid to the final recipients.

In order to perform the necessary calculations to determine the leverage effect, assumptions have been made on the likely distribution between equity and debt financing of the total amount of the financial instrument under the PE 2021-2027:

- ✚ Expected participation of final recipients of 0% of the total amount of the financial instrument;
- ✚ Expected participation of the financial intermediary of 0% of the total amount of the financial instrument;
- ✚ Option 1 - the total amount of the financial instrument is split 75%/25% between equity and debt financing;
- ✚ Option 2 - the total amount of the financial instrument is split 50%/50% between equity and debt financing;
- ✚ Option 3 - the total amount of the financial instrument is split 25%/75% between equity and debt financing.

The exact ratio between equity and debt financing will be specified after the relevant market consultations prior to the final structuring of the financial instrument under the PE 2021-2027.

The following tables show the sequential steps and application of the assumptions described and the impact of applying the financial products in performing the calculations to determine the leverage effect for the proposed financial instrument under the PE 2021-2027.

№	Financial instrument under the PE 2021-2027		euro
1	Amount of the financial instrument under Priority 3 of the PE 2021-2027		16,760,598
1.1	EU funding		13,305,611
1.2	National co-financing		3,454,987



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

2	Amount of management costs for equity financing	75%	2,314,225
2a	Amount of the management costs of Holding Fund	7%	736,344
26	Amount of the management costs of the Specific Fund	15%	1,577,881
3	Amount of management costs for debt financing	25%	420,768
3a	Amount of the management costs of Holding Fund	5%	175,320
36	Amount of the management costs of the Specific Fund	7%	245,448
4	Actual amount of funds for the final recipients of the financial instrument under Priority 3 of PE 2021-2027		14,025,605
5	Leverage effect		1.05

Table 29 Calculations to determine the leverage effect for the financial instrument under Priority 3 of PE 2021-2027 - Option 1

№	Financial instrument under the PE 2021-2027		euro
1	Amount of the financial instrument under Priority 3 of the PE 2021-2027		16,760,598
1.1	EU funding		13,305,611
1.2	National co-financing		3,454,987
2	Amount of management costs for equity financing	50%	1,575,783
2a	Amount of the management costs of Holding Fund	7%	501,385
26	Amount of the management costs of the Specific Fund	15%	1,074,397
3	Amount of management costs for debt financing	50%	859,518
3a	Amount of the management costs of Holding Fund	5%	358,132
36	Amount of the management costs of the Specific Fund	7%	501,385
4	Actual amount of funds for the final recipients of the financial instrument under Priority 3 of PE 2021-2027		14,325,298
5	Leverage effect		1.08

Table 30 Calculations to determine the leverage effect for the financial instrument under Priority 3 of PE 2021-2027 - Option 2

№	Financial instrument under the PE 2021-2027		euro
1	Amount of the financial instrument under Priority 3 of the PE 2021-2027		16,760,598
1.1	EU funding		13,305,611
1.2	National co-financing		3,454,987
2	Amount of management costs for equity financing	25%	805,094
2a	Amount of the management costs of Holding Fund	7%	256,166



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

26	Amount of the management costs of the Specific Fund	15%	548,928
3	Amount of management costs for debt financing	75%	1,317,427
3a	Amount of the management costs of Holding Fund	5%	548,928
36	Amount of the management costs of the Specific Fund	7%	768,499
4	Actual amount of funds for the final recipients of the financial instrument under Priority 3 of PE 2021-2027		14,638,077
5	Leverage effect		1.10

Table 31 Calculations to determine the leverage effect for the financial instrument under Priority 3 of PE 2021-2027 - Option 3

The calculations show that the actual amount of funds to the final recipients from the implementation of the financial instrument under Priority 3 of the PE 2021-2027 is highest at a 25%/75% ratio between equity and debt financing within the financial instrument, with a leverage effect of 1.10 at this ratio. The detailed calculations are presented in Annex 1.3 of the Final Report.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

9. EXPECTED CONTRIBUTION OF THE FINANCIAL INSTRUMENTS TO ACHIEVING THE SPECIFIC OBJECTIVES OF THE PROGRAMME FOR EDUCATION 2021-2027

In order to assess the contribution of the implementation of the financial instrument to the output indicators under Priority 3 of the Programme for Education 2021-2027, it is proposed to include the following output indicator, where the contribution of the financial instrument is 100%. The average value of investment in the earliest stages of start-up development in Bulgaria, which ranges between EUR 25-50 000 and EUR 200 000, has been used to determine the target value. Additionally, the common practice of making follow-up investments in some of the enterprises has been taken into account. Taking into account the accumulated expertise and practice from the application of financial instruments for equity investments in the earliest stage of enterprise development, an average value of around EUR 60 - 65 000 per support per start-up was used for the determination of the target value, where the number of supported start-ups was derived on the basis of the calculated amount of funds for the final recipients of EUR 14.32 million, with a 50%/50% distribution of the total amount of the financial instrument between equity and debt financing.

<i>SO under Article 4, par. 1(e) - Improving the quality, inclusiveness, efficiency and relevance of education and training systems to labour market needs, including by validating non-formal and informal learning so that it contributes to the acquisition of key competences, including entrepreneurial and digital skills, also by promoting the introduction of dual systems of training and apprenticeships</i>			
End product indicator	Unit of measurement	Target value	Contribution from the FI
Supported start-ups	number	227	100%

Table 32 Proposal for the inclusion of a new output indicator to assess the contribution of the implementation of the FIs to the achievement of the Priority 3 indicators under the PE 2021-2027



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

10. NECESSITY FOR DIFFERENTIAL TREATMENT OF INVESTORS

Under the CPR, assistance from the funds to financial instruments that invest in final recipients, as well as any income generated by those investments that can be attributed to the assistance from the funds, can be used to differentially treat market economy investors through appropriate risk and profit sharing.

The level of such differential treatment may not exceed what is necessary to create incentives to attract private funds, as established by a competitive procedure or independent evaluation.

The common methodology for the preparation of ex-ante evaluations allows for the following:

- ✓ Asymmetric profit sharing (e.g., sharing rate is not equal to infrastructure investors);
- ✓ Asymmetric loss sharing (e.g. guarantee schemes covering the initial risk of loss on loans);
- ✓ Asymmetric provision of public and private funds;
- ✓ Preferential payment of management fees to Fund Managers to the extent that they are also co-investors;
- ✓ Preferential exemption regime (underwriting, on non-negotiated funds).

The key parameter for evaluating preferential remuneration schemes would be a combination of the rate of return provided to private investors and the proportion of risk they take.

10.1. Assessment of the possibilities to attract additional investments under the PE 2021-2027

In principle, additional public and private resources that can be generated in addition to the resources of a financial instrument include:

- ✓ additional resources at fund level;
- ✓ financial or non-financial resources (such as land part of an investment project, etc.).







It is expected that the final recipients and financial intermediaries/independent private investors will not inject their own resources when implementing support through the proposed financial instrument. One of the main obstacles to attracting private investors in structuring a financial instrument under the PE 2021-2027 is the inability to apply high leverage. Differential treatment of investors could be applied if a need to attract additional investment from financial intermediaries/independent private investors is identified at a later stage of the implementation of the financial instrument under the PE 2021-2027.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

10.2. Identification of incentives to attract private investors and analysis of possible mechanisms for their provision

Insofar as financial instruments in the field of education are being implemented for the first time in the 2021-2027 programming period, leveraging additional resources should not be among the objectives of the proposed financial instrument in its first implementation. The inclusion of additional resources requires that the financial instruments generate revenues from implementation in order to cover costs to investors. The introduction of interest on the resource provided by financial instruments may make them unattractive in general, especially where experience in implementing them has not yet been gained. In selecting financial intermediaries/independent private investors, the following main criteria can be applied:

-  to have experience in financing start-ups and/or those that have achieved a positive financial result;
-  to have experience in managing financial instruments with private equity and debt financing products;
-  to implement a strategy and process to identify final recipients;
-  to apply transparent market practices;
-  to have a presence and/or interest in Bulgaria and/or the CEE region;
-  to have a sufficiently credible market reputation.

The remuneration foreseen for financial intermediaries/independent private investors in the implementation of support through a financial instrument under PE 2021-2027, in the form of management costs and fees, which can be declared as eligible costs, are in accordance with the thresholds of Art. 68 of CPR, as follows: 5 % for loans and guarantees and 7 % for equity and quasi-equity investments for the management of a holding fund and 7 % for loans and guarantees and 15 % for equity and quasi-equity investments for the management of a specific fund of the total amount of the contribution from the programme paid to the final recipients. There is some risk that, if the proposed financial instrument is poorly capitalised, the remuneration costs for financial intermediaries/independent private investors under the Regulation will be insufficient to cover the costs of implementing the instrument, and provision should be made to remunerate financial intermediaries/independent private investors above the permissible thresholds under the CPR, and conversely, if the capitalisation is good, it is also possible to seek levels for the remuneration thresholds for financial intermediaries/independent private investors. At full capitalisation of the proposed financial instrument under the PE 2021-2027, the level of remuneration for financial intermediaries/independent private investors under the different options considered for structuring the financial instrument varies between EUR 2.1 million and EUR 2.7 million.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

11. RISKS AND PRECONDITIONS FOR THE SUCCESSFUL IMPLEMENTATION OF THE FINANCIAL INSTRUMENT UNDER THE PROGRAMME FOR EDUCATION 2021-2027

This section analyses the preconditions and proposes concrete actions that would help to create the appropriate environment for the implementation of the financial instrument under the programme for Education 2021-2027. In addition, some possible risks to the successful implementation of the financial instrument under Programme for Education 2021-2027 are analysed.

11.1. Analysis of the preconditions for successful implementation of financial instruments under PE 2021-2027

The main stakeholder groups that should be interested in implementing financial instruments are educational institutions, students/lecturers, business representatives and potential financial intermediaries. The surveys carried out among students, postgraduates and lecturers in higher education institutions showed the existence of interest in the application of financial instruments and the analyses of these attitudes led to a proposal for the implementation of a financial instrument under Priority 3 of the PE 2021-2027 in the field of **support for starting own business or other type of entrepreneurial activity by students, postgraduates and lecturers in all higher education institutions**. The interest of business representatives and potential financial intermediaries/independent private investors in participating in the proposed financial instrument under PE 2021-2027 is crucial to create opportunities for its implementation. Financial intermediaries need to be convinced of the application of best market practices to attract their interest, as well as to be guaranteed transparency in order to promote competition among them in the process of selecting specific contractors.

Therefore, the **preparation and implementation of a massive awareness-raising campaign on the benefits of the implementation of financial instruments**, targeting all these stakeholder groups, funded under the Education Agenda 2021-2027 is an important precondition. The aim of such a campaign is firstly to maximise awareness among potential final recipients from all higher education institutions and secondly among potential stakeholders - business representatives and financial intermediaries/independent private investors. Such a campaign would also be possible in case of a policy change at national level, a change in the scope of the programme and/or an identified demand for support through financial instruments in the field of education at a later stage of the implementation of the Programme for Education 2021-2027.

The expectations of the 2017 amendments to the Higher Education Act (HEA) regarding the role of the Boards of Trustees, which were supposed to play the role of a direct link between business and higher education institutions (HEIs), have not been realised. This is related to both academic programmes and research in HEIs. The role of this structure has been reduced to supporting the work of HEIs without having an active and progressive role as a coordinator between HEIs and the needs of



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

business. It is in this coordinating activity that HE students, postgraduates and lecturers would find themselves, in their plans to start their own businesses and the Boards of Trustees extremely useful. Some of the members could be students, postgraduates and lecturers who have the desire/idea to run their own business to provide the insight needed to create the right conditions in that particular area. This will not only strengthen the motivation of companies to participate in the practical training of students and to provide their own facilities for this, but also the accessibility of students, postgraduates and young lecturers to opportunities to develop their own business.

In general, teaching by businesses, whether to lecturers or students, is regulated by the Higher Education Act in terms of requirements for those who might teach and their status. Nevertheless, in order to increase the interest of business representatives, it is necessary to take measures to enable business to be directly involved in teaching at HEIs. The selection, responsibility, duties and rights of business lecturers at HEIs need to be carefully refined, but this will undoubtedly lead to the desired balance of interests between the two sides in the process. One of these opportunities is to incentivise lecturers, but especially postgraduates from HEIs who have a desire to develop entrepreneurship or are already involved in entrepreneurial activity, to be involved in practical sessions with students. First-person experiences and examples are always more convincing arguments in teaching theory than purely hypothetical ones.

The proposals made require concrete action to change education policies at national level and should not be associated only as part of the range of measures to be funded under the PE 2021-2027. In this respect, it is expected that concrete actions will be undertaken by the Ministry of Education and Science, with the EA OPSESG, through its activities, to support possible policy changes in education.

In summary, the proposals for concrete actions to fulfil the preconditions that would contribute to creating the right environment for the implementation of the financial instrument under the Education Agenda 2021-2027 are as follows:

- ✓ Preparation and implementation of a massive awareness-raising campaign on the benefits of the application of financial instruments in the field of education and in particular in the activities for starting their own business or other type of entrepreneurial activity by students, postgraduates and lecturers of HEIs;
- ✓ Taking measures to strengthen the role and functions of the Boards of Trustees, through which students, postgraduates and lecturers of HEIs who are keen to start their own businesses can support them and be empowered to put forward their ideas for pre-assessment of their viability and accordingly be included in relevant programmes;
- ✓ Providing opportunities for businesses to become directly involved in teaching in higher education institutions by encouraging young lecturers and postgraduates who have or plan to develop entrepreneurial activities to actively participate in this process.

It should be noted that the proposals made for the implementation of the preconditions are not binding and their non-implementation would not prevent the implementation of the financial instrument under Priority 3 of the PE 2021-2027, but rather their implementation would support the processes of its structuring and implementation.



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

11.2. Analysis of possible risks from institutional, administrative, legal, etc. aspects that may hinder the implementation of financial instruments

We believe that there are some risks that need to be analysed for the purposes of creating an appropriate environment for the implementation of the financial instrument under the Programme for Education 2021-2027.

Application of State aid rules

This risk can be categorised as a legal risk due to the fact that the support with an ESIF financial instrument falls under State aid rules. The presence of State aid must be verified for all participants in the financial instrument, covering the scope of the definition of State aid, namely:

- ✓ assistance provided by a Member State or through the resources of a Member State, in whatever form;
- ✓ aid which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods;
- ✓ aid affecting trade between Member States.

This applies to any entity that carries out an economic activity by offering goods and services on the market, regardless of its legal status and method of financing. The rules on State aid for the implementation of financial instruments apply in the following areas:

- Area for beneficiaries of support through the implementation of financial instruments

Because financial instruments are a response to market failures, there may be an advantage at the level of the final recipients, which must however comply with State aid regulations. The provision of support to final beneficiaries in the form of students, postgraduates and lecturers in higher education institutions does not fall within the meaning of 'favouring certain undertakings or the production of certain goods' and thus the aid granted cannot be defined as incompatible with the internal market under Article 107 (1) of the Treaty on the Functioning of the European Union (TFEU).

- Area for spheres of influence

Article 22 "Start-up aid" of the Commission Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the TFEU (Treaty) should apply to the support provided to start-ups of students, postgraduates and lecturers.

According to Article 22 of the abovementioned Regulation, aid schemes for start-ups are compatible with the internal market within the meaning of Article 107 (3) of the Treaty and are exempt from the notification requirement of Article 108 (3) of the Treaty if the conditions laid down in Chapter I of the Regulation and in the abovementioned Article are fulfilled.

To be eligible, enterprises must be small enterprises within five years of their establishment, not yet listed on a stock exchange, not yet distributing profits and not created by mergers. For eligible



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

enterprises that are not subject to registration, the eligibility period of 5 years is deemed to start from the moment the enterprise starts its business or is subject to taxation for it.

Article 22 (3) lists the forms of aid to start-ups that are compatible with the EU internal market, including interest rate loans, premium guarantees and grants, including equity and quasi-equity investments.

• Area for private investors

There is no advantage for the investors or co-investors (and therefore no State aid) if the investment is made on an equal and proportional basis between public and private investors or if the public investment is in line with market conditions as established on the basis of a comparative study or other valuation methods. The structure of the proposed financial instrument under the PE 2021-2027 does not include expected co-financing by private investors and is therefore not subject to the presence of State aid.

• Area for fund manager/financial intermediary



In this area, it is necessary to ensure that the bodies implementing financial instruments (fund managers/financial intermediaries) do not receive State aid. This is the case if the remuneration for services or reimbursements for implementing the financial instrument do not exceed market prices. One way to ensure this is by selecting the fund manager through a competitive, transparent, non-discriminatory selection procedure¹¹.

Lack of previous experience in the implementation of FI by the MA of the PE

This risk can be attributed to the administrative and institutional risks, based on the fact that the MA of the Programme for Education 2021-2027 has no experience in implementing financial instruments with the support of the ESIF. In the implementation of the proposed financial instrument under the Programme for Education 2021-2027, this may make it difficult for the Managing Authority to prepare the implementation of the instrument, select the Fund Manager and conclude an agreement with him, and subsequently monitor the implementation of the instrument.

Reducing the administrative burden for final recipients

This is a major risk in the group of administrative and institutional risks. As no financial instruments have been implemented in the field of education so far, when implementing a financial instrument under the Programme for Education 2021-2027, it is necessary for the MA of the Programme for Education 2021-2027 to take certain actions to reduce the likelihood of this risk occurring, namely:


-  to apply a flexible approach to the definition of the programme activities, the target groups of final recipients and the rules for the combination of FIs and grant;
-  to apply flexible and simplified procedures for monitoring and verification of expenditure for support through the financial instrument, so as not to hamper the implementation of the financial

¹¹ [Насоки относно държавната помощ за финансовите инструменти по европейските структурни и инвестиционни фондове през програмния период 2014—2020 г.](#)



„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

instrument and not to impose unnecessary administrative burdens on financial intermediaries and final recipients;

-  for interventions that are in scope for support through the financial instrument, not to launch schemes fully financed by the grant, in order to avoid the possibility of lack of interest of final recipients to benefit from support through the financial instrument for such interventions.







„Preparation of ex-ante assessments for implementation of financial instruments under operational programmes in the programming period 2021-2027”

12. SIGNIFICANT PARAMETERS TO BE MONITORED AND CHANGES THAT WILL LEAD TO NECESSITY TO REVISE AND UPDATE THE EX-ANTE ASSESSMENT

This section analyses the essential parameters and changes to be monitored that would contribute to establish the appropriate environment for the implementation of the financial instrument under the Programme for Education 2021-2027.

Modification of the present Ex-Ante Assessment for the implementation of the financial instrument under the Programme for Education 2021-2027 may be required and/or would be appropriate if the following conditions occur:

-  Changing policy priorities at national level;
-  Insufficient uptake of the financial instrument under PE 2021-2027;
-  Change in the preconditions for successful implementation of the financial instrument under the PE 2021-2027 - presence of an aggregate change or at least of a large part of the proposed measures to meet the preconditions;
-  Increase in the impact of any of the possible risks from institutional, administrative, legal, etc. aspects, which may significantly hamper the implementation of the financial instrument under the PE 2021-2027.