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Assistance to MNESR for
Capacity Development for Monitoring and Evaluating the
Implementation of Education Strategies

OUTPUT 5

Methodology for Monitoring and Evaluating the Implementation of Education Strategies

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Abbreviations

ANS	National Platform for collecting statistical data for higher education
ARACIS	The Romanian Agency for Quality Assurance in Higher Education (Agenția Română a Asigurării Calității din Învățământul Superior)
CNDIPT	The National Center for VET Development (Centrul Național pentru Dezvoltarea Învățământului Profesional și Tehnic)
COR	Classification of Occupations in Romania
CPLC	Community Permanent Learning Center
ISJ	County School Inspectorate (Inspectoratul Școlar Județean)
CVET	Continuing Vocational Education and Training
EC	European Commission
ECD	Early Childhood Development
ECEC	Early Childhood Education and Care
ECE	Early Childhood Education
ECVET	European Credit System for VET
EMIS	Education Management Information System
EQF	European Qualifications Framework
ESF	European Social Fund
ESIF	European Structural and Investment Funds
ESL	Early School Leaving
ET2020	Strategic Framework for European Cooperation in Education and Training
EU	European Union
GDP	Gross Domestic Product
GDSMPP	General Directorate for Strategic Management and Public Policies. Referred to in the Methodology as Public Policy Unit (PPU)
GoR	Government of Romania
HE	Higher Education
HEI	Higher Education Institution
ICT	Information and Communication Technology
SIIR	Integrated IT System for Education in Romania (Sistemul Informatic Integrat al Învățământului din România)
IES	Institute of Education Sciences
ISCED	International Standard Classification of Education
ISCED0	Level of education equal to Early Childhood Education
ISCED1	Level of education equal to Primary education
ISCED2	Level of education equal to Lower secondary education
ISCED3	Level of education equal to Upper secondary education
ISCO	International Standard Classification of Occupations? ESCO- European
IVET	Initial Vocational Education and Training
LLL	Life Long Learning
AMR	Annual Monitoring Report
M&E	Monitoring and Evaluation
M&E Methodology	Methodology for the Monitoring and Evaluation of the Implementation of the Education Strategies
MoEF	Ministry of European Funds
MoNE	Ministry of National Education
MoLSJ	Ministry of Labour and Social Justice
MoPF	Ministry of Public Finances
ANPCDEFP	National Agency for Community Programmes in the Field of Education and Vocational Training (Agentia Nationala pentru Programe Comunitare În Domeniul Educației și Formării Profesionale)
NAQ	National Authority for Qualifications (ANC)
NIS	National Institute of Statistics

ANPIS	National Agency for Social Payments and Inspection (Agentia Nationala pentru Plati si Inspectie Sociala)
CNFP	National Centre for Training of Pre-University Teaching Staff (Centru Național de Formare Profesională)
NGO	Non-Governmental Organization
NQF	National Qualifications Framework
NQR	National Qualifications Register
OECD	Organization for Economic Cooperation and Development
OIPOSDRU	Intermediary Body for the Operational Program for Human Resource Development (POSDRU)
OI-POCU	Intermediary Body for Human Capital Operational Programme (Organismul Intermediar- Programul Operational Capital Uman)
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
POCA	Operational Programme Administrative Capacity
POCU	Operational Program Human Capital
PODCA	Operational Programme for the Development of Administrative Capacity
POSDRU	Operational Program for Human Resources Development
PPUT	Public Policy Unit Team
RAS	Reimbursable Advisory Services
RBM	Results Based Management
RMU	Student Enrollment Register (Registru Matricol Unic) in Higher Education
RO	Romania
RON	New Romanian Lei
POR	Regional Operational Programme
SAS	School-After School
SC	Second Chance
SME	Small and Medium Enterprises
TE	Tertiary Education
TEIs	Tertiary Education Institutions
TIMSS	Trends in International Mathematics and Science Study
ToR	Terms of Reference
TVET	Technical and Vocational Education and Training
UEFISCDI	Executive Unit for Funding Higher Education, Research and Development, and Innovation
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational Education and Training
VTS	Vocational Training Standard (SPP- Standard de Pregătire Profesională)
WB	World Bank
WG	Working Group

OVERVIEW

The education sector in Romania is currently implementing key strategies addressing Early School Leaving, Tertiary Education, Lifelong Learning, and Vocational Education and Training. These strategies represent *ex-ante conditionalities* for Romania's access to EU funds under the Programming Period 2014-2020. They were adopted by the Government of Romania (GoR) in 2015 and 2016, as well as formally endorsed by the European Commission (EC). An important compliance criterion was the inclusion of a monitoring and evaluation framework in each of the strategies to help assess progress of implementation and ultimately achievement of envisaged results.

In this context, the World Bank supported the Ministry of National Education (MONE) with designing a Monitoring and Evaluation (M&E) Methodology and associated instruments for collecting and analyzing data and information to provide direction for action, help mobilize and allocate resources especially for strategic decisions and plan, manage, and control operations. At the same time, the M&E approach is expected to facilitate adjustments of the strategies to reflect changes in the sector, as needed, to provide external parties information for review, as well as to enhance transparency to direct clients, but also to the broader public.

The measure of success of this endeavor depends on the M&E Methodology's application and results. To this end, during the preparation and piloting process, the relevant staff from the MoNE and key agencies were closely and actively engaged, providing feedback, but also benefitting from training, mentoring and coaching. Consequently, this Methodology is tailored to serve their needs and to trigger evidence-based solutions to the challenges faced during the implementation of the strategies.

The draft M&E Methodology was designed by the WB team in 2017 and piloted by the MoNE in late 2017 - early 2018. This process has demonstrated its effectiveness in revealing important information on the pace of strategy implementation which has been slow and has, therefore, led to the deterioration of performance in key areas, particularly early school leaving. Importantly, in 2013, the rate of ESL was at 17.3 percent, in 2016 it stood at 18.5 percent and in 2017 at 18.1 percent. The monitoring process enabled the MoNE to understand why the deterioration occurred and where the obstacles and opportunities are found, allowing it to respond effectively and hopefully reverse the decline. Moreover, through the careful analysis of data and drilling beyond the national level, the MoNE noted persistent disparities in the ESL rates in rural (26.6 percent) and urban areas (6.2 percent in cities and 17.4 percent in towns and suburbs). Such analysis was given prominent exposure in the first MoNE Annual Monitoring Report and will likely prompt a reorientation of actions in 2018 towards rural areas.

The Methodology and instruments presented in this document were revised to reflect the experience with its first application, refine the monitoring approach and expand its evaluation section. It is expected to further enhance the understanding of MoNE and other stakeholders of the conditions, factors, and constraints faced during the implementation of the four education strategies, and to facilitate corrective actions, as needed. Following the application of this revised Methodology, the MoNE is expected to prepare its second Annual Monitoring Report by early 2019. Finally, it is an easily adaptable tool kit that can be used for other education strategic frameworks to steer the education policy dialogue.

INTRODUCTION

This document is delivered under the Advisory Services Agreement between the Ministry of National Education (MoNE) and the International Bank for Reconstruction and Development (the Bank), signed on June 29, 2016. The Agreement mandates the Bank to deliver “Assistance to MoNE for Capacity Development for Monitoring and Evaluation (M&E) of the Implementation of Education Strategies”. The Agreement is part of a broader M&E project currently being implemented by MoNE and financed by the European Commission (EC) under the Operational Program for Administrative Capacity (POCA). The broader MoNE project focuses on “monitoring and evaluating the strategies representing *ex-ante conditionalities* for the education sector and improving the decision-making process through performance monitoring at central and local level”. The Agreement includes *inter alia* (i) the preparation of the draft Monitoring and Evaluation (M&E) Methodology and Instruments (delivered May 2017); (ii) the revision of the draft Methodology following its initial application by MoNE and piloting of instruments (this document); and (iii) the provision of capacity building through training and coaching to the MoNE staff and relevant agencies on M&E processes; and (iv) the application of the Methodology, including peer reviewing the first MoNE Annual Monitoring Report (delivered in early 2018), and the second MoNE Report, planned for 2019.

The four education strategies are: (i) the Strategy to Reduce Early School Leaving (ESL); (ii) the Strategy for Tertiary Education (TE); (iii) Strategy for Lifelong Learning (LLL); and (iv) the Strategy for Vocational Education and Training (VET). The strategies represent *ex-ante conditionalities* for Romania’s access to EU funds under the Programming Period 2014-2020 and were prepared with the Bank’s support, except for the VET strategy. These strategies were adopted by the Government of Romania (GoR) in 2015 and 2016 and formally endorsed by the EC according to procedures. In this context, the M&E Methodology will support accelerating strategy implementation. The first Annual Monitoring Report was completed by MoNE in March 2018 based on the application of the draft M&E Methodology delivered by the Bank team in 2017. This Report pointed at the challenges faced during strategy implementation, at the same time flagging the worrying situation of key indicators, especially the ESL rate having reached 18.1%¹ in 2017 compared to 17.3% in 2013. The draft M&E Methodology enabled MoNE to examine and analyze persisting rural -urban disparities and formulate evidence-based actions in response.

A cohesive M&E framework for the four strategies is key, as the results of the strategies are interdependent and have interrelated long-term objectives. The Methodology provides M&E reporting mechanisms for the strategies using a uniform assessment to measure the performance of implementation. This performance assessment will have a significant influence on building an integrated approach to national education reform and policies.

MoNE set up four Working Groups (WGs) to undertake the M&E activities under the coordination of the General Directorate for Strategic Management and Public Policies. The WGs were reconfirmed through Ministerial Order 3080/2018 amending a previous order from 2017. The relevant key ministries, agencies and institutions are represented in the WGs; MoNE may add or invite other relevant representatives, as needed. In addition, the Minister of National Education approved note No:111/DGMSPP/03.05.2018 which has established the Steering Committee to supervise M&E, it has also appointed the Institute of Education Sciences as the Evaluation Body.

This Methodology makes a clear distinction between monitoring and evaluation that

¹EUROSTAT database, 2018.

should not be used interchangeably. It puts mechanisms in place for Monitoring and for Evaluation, and recognizes the potential convergence of their outputs. Monitoring focuses on improving the execution of work related to strategies; it examines the performance of strategy execution; evaluation focuses on issues that can impact policies and future programs by examining whether the strategies contain the correct response to the problem. Monitoring deals with tactics, evaluation deals with strategy. The output of monitoring and evaluation are dependent on one another as monitoring will reveal weaknesses which evaluations will investigate more deeply.

The purpose of the M&E Methodology and associated instruments is to guide the MoNE in monitoring and evaluating the execution of the four education strategies. The M&E Methodology provides hands on instructions and tailored instruments that were developed and revised based on application of the draft M&E Methodology. The Bank team, working closely with MoNE, tested the draft Methodology in 2017 as preparation for the MoNE's first Annual Monitoring Report (AMR). Additional instruments, new templates, a feasible indicator matrix, and refined methods were designed based on the lessons learned while providing support through coaching the MoNE in the application of the draft Methodology; and through thorough peer reviews and inputs provided during MoNE's preparation of its first AMR. The revised Methodology is intended as a stand-alone guidance document complemented by significant training and coaching by the WB team. It contains six sections focused on: (i) the broader context of the four strategies; (ii) the approach for a unitary M&E of the implementation of the strategies; (iii) institutional arrangements with hands-on instructions about structures and functions; (iv) monitoring methodology; (v) evaluation methodology; and (vi) M&E instruments. Appendices complete the M&E Methodology providing additional background on strategies, guidelines and templates for reporting.

The first section is focused on the *Context*. To understand the importance of the M&E Methodology, it is necessary to consider the broader context within which the four above mentioned strategies operate. The document introduces the status of strategy implementation and key relevant education data. The quality of education in Romania lags EU and OECD countries; underachievement in basic skills is due to educational factors coupled with equity and inclusion challenges. The Romanian Government has been making progress in adopting the requested education strategies to access EU funds in the Programming Period 2014-2020 but the slow pace of strategy implementation and the constant underfinancing of the education sector, i.e. 3.1 percent of GDP allocated in the 2017 budget, will have long term implications for the country's human capital and economic development. Persistent disparities are evidenced by the high difference between ESL rates in rural (26.6 percent) and urban areas (6.2 percent in cities and 17.4 percent in towns and suburbs)². In addition, the OECD Programme for International Student Assessment (PISA)³ 2015 survey has found that underachievement among disadvantaged students is almost three times higher than that of students in the top socioeconomic quintiles.

The Context section also provides a concise description of each of the four strategies; including: the main objectives and key Europe 2020 indicators; EU averages and Romanian national targets; and the calculation method and their status. A summary table is presented below.

² European Commission. 2017 *Education and Training Monitor 2017 Romania*. Brussels: European Commission. https://ec.europa.eu/education/sites/education/files/monitor2017-ro_en.pdf

³ PISA is an international study that was launched by the OECD in 1997. It aims to evaluate education systems worldwide every three years by assessing 15-year-olds' competencies in the key subjects: reading, mathematics and science.

Table 1. Status of strategic indicators

Strategic indicator	Romania				EU Average	
	2020 Target	2017	2013	2016	2013	2016
Rate of Early School Leaving ESL (age 18-24)	11.3%	18.1%	17.3%	18.5%	11.9%	10.7%
Rate of tertiary education attainment (age 30-34)	26.7%	26.3%	22.9%	25.6%	37.1%	39.1%
Adult participation in learning (age 25-64)	10.0%	1.1%	2.0%	1.2%	10.7%	10.8%

Source: Eurostat database, 2018

At the same time, main challenges are identified in each strategy area in line with the 2018 EC Education and Training Monitor. Key messages refer to the need to allocate most of resources for the ESL strategy to actions in rural areas. The share of graduates in higher education is close to meeting the target of 26.7 percent set for 2020, but Romania remains in last place in terms of graduation rates from tertiary education; funds therefore need to be channeled toward non-university tertiary education, attracting non-traditional students with higher relevance to the labor market. The participation of adults to LLL was 1.1 percent in 2017 compared to Romania's target of 10 percent by 2020; this area still has financing challenges and offers too few courses with qualifications in desired fields. Finally, the VET strategy is also introduced in terms of priorities mainly related to improving access to quality training programs.

The Context section also discusses how the implementation of the education strategies largely depends on EU funding. The current EU Programming Period formally started in 2014 and it is planned to end in 2020, but, it became functional for education programs in 2017. Factors that contributed to delays include: the late adoption of education strategies in 2015-2016, even though the programming period began in 2014; delayed approval in 2017 of the institutional framework for the management authorities/intermediary bodies⁴; and the delayed launch of calls for projects in the education sector (in late 2017).

The second section introduces the *Approach* of this M&E Methodology from a management perspective that defines effective performance measurements of large and complex education strategies. This section provides key details on Results-Based Management and effective evidence-based M&E aimed at ensuring that those who are implementing the strategy have the flexibility to make timely adjustments to investments during execution.

This section also discusses Monitoring and Evaluation as two related, but separate parts of a whole with separate functions that deal with three broad categories: the inputs that go into strategy implementation; the operations that make up the work within strategies; and the results of these operations. Monitoring is the systematic observation of activities and the recording of data for control, understanding and predicting the course of implementation, and taking corrective action. Evaluation is results-oriented; it studies the substantive meaning and change leading to strategy objectives. The basic principles for M&E are also outlined as key in the process of converting raw data and monitoring information into building blocks for evidence-based decision-making at the operational and policy levels. Finally, this section proposes a unified terminology for outcome indicators to be used in the four strategies.

⁴ Management Authorities/Intermediary Bodies (MA/IBs)- implementing organisations for the EU Operational Programs

The third section presents *Institutional Arrangements: Structures and Functions*. It details the processes and human resources needed for effective performance measurement and management activities including: guidance on the role and responsibilities of the Steering Committee; the key functions of the WGs; and the coordination responsibilities of the General Directorate for Strategic Management, and Public Policies and its Public Policy Unit Team (PPUT). This section also describes the role of the Institute of Education Sciences as an evaluation body. The methodologies for monitoring and evaluation are presented in distinct sections.

The fourth section is dedicated to the *Monitoring Methodology*. The methodological instructions contain: (i) step by step processes for data collection by level, type and source of management information; and (ii) guidance on site visits as an important source of data on progress and quality of implementation through interviews and observations. These instruments, proposed by the WB team as part of the draft M&E Methodology in 2017, were field-tested by the MoNE with 2,800 students, 777 teachers, and 26 school principals in 28 schools, throughout five counties in Romania. This section also provides detailed instructions on the timing of data availability covering all relevant data sources from national levels (e.g. SIIR) to regional and international levels (Eurostat, OECD, UNESCO). This is followed by extensive guidance on data interpretation and analysis in view of sound decisions on existing and future actions to improve the chances of reaching the outcomes and targets of the strategies. This section also makes recommendations on options to execute site visits as part of routine monitoring and the importance of internalization by MoNE and WGs of the benefits for such reality checks in the field.

A clear distinction is made between the above-mentioned monitoring tools and reporting, and the controlled evaluations that fall under the responsibility of the Institute of Education Science; these require different expertise for research methodologies and significant subject matter knowledge for impact assessments.

This section also presents the process for preparing the MoNE Annual Monitoring Report: its structure, cycle and timelines from data collection by WGs through processing of WG reports by the PPUT; preparation of the Policy Unit Analytic Report; and submission to the Steering Committee and public release. Instructions on developing a measurable work plan are included. The WB team also prepared a separate dedicated guidance document in October 2017 to support WGs and PPUT with the first MoNE Annual Monitoring Report. This document was revised to reflect lessons learned following its first utilization and is included in Annex 2 to this Methodology.

The fifth section is dedicated to *Evaluation Methodology*. According to international best practice principles, the evaluation function needs to be independent from other management functions to ensure unbiased and transparent reporting to appropriate levels of decision makers. In this context, the Institute of Education Sciences was formally assigned as evaluation institution. The main reason is that the expertise required for evaluations is much more specialized than the expertise needed for monitoring.

In keeping with this principle and with the IES role and responsibility, this Evaluation Methodology emphasizes the role of the MoNE and WGs in support of evaluations. Monitoring will frame the evaluations as early warning systems for deeper structural and developmental challenges, and evaluations will be centered around investigation questions partially determined as a result of monitoring information and the big development questions that the reforms promise to deliver. Other instruments like surveys, questionnaires, and observations are also used for monitoring, and these will be designed differently for evaluations as they seek more

detailed information based on a structured scientific approach.

This section provides detailed guidance on types of evaluations by: (i) timing (ex-ante, mid-term and ex-post); (ii) focus (thematic, policy, sector, cluster, program, project; and (iii) purpose (formative, process, summative, met evaluation, and impact evaluation). Design steps for an evaluation are presented in terms of: (i) reviewing strategies to clarify the objectives, components, and drivers for achieving the proposed outcomes; (ii) defining the purpose of the evaluation; (iii) defining the type of evaluation; (iv) engaging the evaluator; (v) designing and finalizing evaluation questions (vi) launching the evaluation, including details on the interaction between the Institute of Education Sciences and MoNE relevant representatives.

The sixth section of the Methodology presents the *M&E Instruments in detail*. M&E instruments are a tool-kit that MoNE can use and expand on as necessary. They are foundation blocks that can be adapted to specific actions, programs or initiatives being monitored and evaluated.

This tool-kit is basically providing in a hands-on, accessible manner two sets of key instruments: (i) the relevant monitoring indicators to be measured for each strategy including clear definitions, data source, and calculation methods; and (ii) sample survey questionnaires aimed at obtaining qualitative data related to major strategy outcomes.

Finally, the two appendices provide: (i) a summary of each of the four strategies in terms of objectives, pillars, and programs; and (ii) detailed guidance on the preparation of the MoNE Annual Monitoring Report including: activity fiche, reporting, and action plan templates for the following year.

1 CONTEXT

The Methodology for M&E is an indispensable tool that helps to enhance the performance of the four strategies in reaching their respective targets. The Methodology is a means to collect and report data and implementation information, and it is also a method to convert data and information into evidence and building blocks for actionable decisions. The M&E Methodology makes sense of the data so that the government and all stakeholders respond effectively to the challenges and opportunities throughout strategy implementation. It is designed to diagnose and understand problems, in specific terms, thus permitting stakeholders to design appropriate responses. To understand the role that the Methodology plays, it is necessary to consider the current context within which the four strategies operate.


The four key education strategies are in place, but implementation has been slow. Since 2015/2016, the Romanian Government has been making progress with adopting a set of education strategies to: reduce early school leaving; improve quality and efficiency of tertiary education, vocational education and lifelong learning; and expand measures to include disadvantaged groups, especially Roma. These strategies represented *ex-ante conditionalities* for Romania's access to EU funds for programming period 2014-2020. However, the slow implementation of these strategies and the constant underfinancing of the education sector will have long term implications for the country's human capital and economic development. The OECD Programme for International Student Assessment (PISA) 2015 survey has found that underachievement among disadvantaged students is almost three times higher than the top socioeconomic quintiles. There are large differences between ESL rates in rural (26.6 percent) and urban areas (6.2 percent in cities and 17.4 percent in towns and suburbs)⁵. In addition to regional, urban-rural and socio-economic inequalities, Romania is confronted with a rapidly declining and aging population. In 2017, Romania's population declined to around 21.3 million, of which 3.5 million are of school age. Complicating matters, over 2 million people of working age (25 percent of the labor force) are estimated to have emigrated in search of better job opportunities in Europe and elsewhere. Action is needed to compensate for this demographic change with a more skilled and healthy labor force and to integrate those segments of the population that remain excluded. In terms of inequalities in education and labor, a profile of the Romanian working poor indicates that 92 percent are in rural areas, and 95 percent have completed secondary education at most.

Inequality has a profound effect on children, which can impede the country's long-term growth potential. About 4 out of 10 Romanian children are poor, the highest in the EU. Many children accumulate disadvantages that are a direct result of poverty and deprivation: for example, external migrants disproportionately originate from poorer regions, which leads to the breakdown of families and close to 100,000 children being left behind. The situation of Roma children is especially dire: being Roma increases the chances of poverty more than any other factor. The integration of Roma into education remains an important challenge. Roma children participation in early childhood education and care decreased from 45 percent in 2011 to 38 percent in 2016. The proportion of early school leavers among Roma is also high, at 77 percent in 2016, and 64 percent of Roma aged 16-24 are out of employment, education and training. Recent research suggests that a large share of income inequality can be traced back to unequal starts, especially in countries like Romania that spend less on education as a share of GDP, particularly at the pre-primary level.

Political volatility is among the highest development risks in Romania, leading to frequent changes at top decision-making levels in the government and creating inconsistencies. For

⁵ European Commission. 2017 *Education and Training Monitor 2017 Romania*. Brussels: European Commission. https://ec.europa.eu/education/sites/education/files/monitor2017-ro_en.pdf

example, from 2007 to 2017, Romania changed education ministers 17 times and finance ministers 14 times. Important pieces of legislation lack real impact studies and are frequently issued based on trial and error, leading them to require corrections in real time. The first education law, passed in 1995, was changed 61 times until a new comprehensive education law was adopted in 2011, which itself was amended over 100 times through governmental orders.



“The weak performance of the education system limits growth prospects in the long run. Low attainment levels in basic skills and digital skills; persistently high early school leaving; poor Roma inclusion; and rural-urban disparities in education result in lost human capital and growth potential. Quality assurance and initial teacher education programmes face challenges. Vocational education and training remains a second-choice option and in most cases, is not adapted to labor market needs. Access to adult learning is limited, in particular for the low-skilled.”
 Excerpt from **European Commission (2018a), Country Report Romania 2018, SWD (2018) 221 final.**

The quality of education in Romania lags EU and OECD countries; underachievement in basic skills is due to educational factors and equity challenges.

OECD PISA scores show that about 40 percent of Romanian students are functionally illiterate, in contrast to roughly 23 percent of students in the EU. Romanian students are broadly one-and-a-half years of schooling behind students in EU countries⁶, which points to systemic education quality issues that do not foster the development of skills required for a successful transition to the labor market or to tertiary education. At the same time, significant differences in performance are found among students from the top and bottom socioeconomic quintiles, equivalent to three years of schooling on PISA 2015. School segregation in social terms has been increasing in recent years with poorer students attending lower quality schools.

While education is a fundamental building block of human capital, significant disparities persist between urban and rural areas. There is an important urban-rural divide among schools. In Romania, only 1 percent of high performing schools and about 83 percent of low performing schools are in rural areas. Socio-economic and urban-rural inequalities, as well as constant underfinancing of the education sector will have long-term implications for the country’s human capital and economic development. Measures to address such important challenges are included in the four education strategies, as summarized in Appendix 1.

More specifically, the Strategy for Reducing Early School Leaving includes prevention, intervention, and compensation measures to address challenges in a systematic, integrated and sustainable manner. These measures aim to ensure that all children go school and receive quality education at preschool, primary and lower secondary levels, and as many students as possible go beyond the completion of lower secondary. At the same time, the strategy includes second chance education programs expected to bring early school leavers back to school.

ESL Indicator	Romania				EU Average	
	2020 Target	2017	2013	2016	2013	2016
Rate of Early School Leaving ESL (18-24 yrs. of age)	11.3%	18.1%	17.3%	18.5%	11.9%	10.7%

Source: Eurostat database, 2018

The European Commission defines the rate of ESL as the percentage of young people between the ages of 18 and 24 who leave the education system prematurely, who have completed no more than secondary education (equivalent to grade 8 in Romania) and were not included in any form of education or training in the four weeks preceding the survey. Continued increases in the ESL rate from 2013 to 2017 shows that the country is moving away from the 2020 target of 11.3%, and it will be very challenging to reach the intended target by then. Rural

⁶ A 30-point score difference in PISA 2015 is equivalent to one year of schooling.

areas will find it most challenging to reach this target: the ESL rate is 6 percent in cities, 26.6 percent and 17.3 percent in rural areas and small towns respectively. The M&E Methodology includes a component on planning, which means that the government and stakeholders can better target strategies to reach the groups most at risk of leaving school early, especially children and young people from poor families in rural areas and small towns, or from Roma or marginalized communities.

ECEC Indicator	Romania			EU Average	
	2020 Target	2013	2016	2013	2016
Early childhood education and care (ECEC) (from age 4 to starting age of compulsory education)	95%	85.5%	87.6%	93.9%	94.8%

Source: Eurostat database, 2018

The strategy for reducing ESL addresses Early Childhood Education and Care (ECEC) measured by the participation in ECEC. Enrollment rate at ante-preschool and preschool levels is the total number of children enrolled as a percentage of the total population of that age group (0-5 years), as presented in the Box 1. Fifteen years ago, the difference between the EU and Romanian average was 17.8 percent. Since then, Romania has improved access to ECEC, but remains behind the EU average. The gap between urban and rural participation in ECEC is stark: in the 2014-2015 school year, 81.8 percent of rural children were enrolled in pre-primary education, compared to 97.7 percent in urban areas⁷. Romania can meet its 95 percent target by 2020 and the M&E Methodology will help define the bottlenecks that need to be addressed to do so, not only in terms of numbers but also in terms of quality.

Box 1. In the Romania Strategy for Reducing ESL, the indicator is measured along three age ranges:

Category	2013 Baseline	2020 Target
0-2	2.7%	23.3%
0-5	43.0%	58.5%
3-5	83.8%	93.0%

TER Indicator	Romania				EU Average	
	2020 Target	2017	2013	2016	2013	2016
Graduation rates in tertiary education (30-34 yrs.)	26.7%	26.3%	22.9%	25.6%	37.1%	39.1%

Source: Eurostat database, 2018

The share of graduates in higher education by the end of the year 2016 is close to meeting the target set for 2020. Despite the improvement, Romania remains in last place in the EU; it needs to concentrate efforts on: (i) ensuring greater flexibility in developing non-university tertiary education; (ii) supporting participation for non-traditional students from rural areas; and (iii) increasing attractiveness through higher relevance to the labor market and improved quality. The graduation rate in tertiary education is calculated as the share of persons aged between 30 and 34 years of age who have completed tertiary education (or its equivalent).

LLL Indicator	Romania				EU Average	
	2020 Target	2017	2013	2016	2013	2016
Participation of adults in lifelong learning (25-64 years of age) ⁸	10%	1.1%	2.0%	1.2%	10.7%	10.8%

Source: Eurostat database, 2018

Adults from Romania face barriers to LLL related to financing, and a limited number of course options and qualifications in desired fields. There is also a lack of practical training or apprenticeship, or clear guidance on the framework of competences. The rate of LLL

⁷ National Institute of Statistics

⁸ The labor force survey (LFS) in households measures the indicator on the participation of adults in lifelong learning process (the training received outside of the national education system).

participation in Romania has fallen since 2013 hampering progression towards the 2020 goal. Despite this, the MoNE first Annual Monitoring Report revealed that efforts on the three strategic pillars have prepared the ground for accelerating activities. The 2018 Annual Monitoring Report will show if the acceleration has managed to produce an upswing in participation rates.

The Vocational Education Strategy straddles the other three strategies. The objectives of the Strategy are: to improve the relevance of training systems for the labor market; increase participation and improve access to training programs; improve the quality of training; and develop innovation, and national and international cooperation in training. The VET Strategy was developed and adopted later than the other three strategies because the Initial Vocational Education and Training (IVET) was addressed in the ESL Strategy and the Continuing Vocational Education and Training (CVET) was addressed by LLL and the Tertiary Education Strategies. Within this context the VET Strategy did not develop its own strategic indicators but adopted those of the other strategies, meaning that investment in the VET Strategy will contribute to the headline indicators of the other three strategies (ESL, TER, and LLL) at national level. While the indicators are in line with the EU's Education and Training (ET) 2020 indicators, the VET Strategy adhered to the targets set for Romania:

1. By 2020, on average, at least 15 percent of adults should participate in life-long learning while Romania's national target is set at 10 percent;
2. By 2020, at least 40 percent of people aged 30-34 should complete tertiary education. Romania's target is set at 26.7 percent;
3. By 2020, less than 10 percent of students should be leaving the education and training system early, the target in Romania is 11.3 percent;
4. By 2020, at least 95 percent of children aged 4 to primary school age should attend preschool education, the target for Romania is 83.8 percent for children aged 3 to 5;
5. By 2020, at least 82 percent of people aged 20 to 34 who have completed a vocational education and training program should be in employment within three years of graduation, compared to 76.5 percent in 2010.

Romania allocated 3.1 percent of GDP to education in the 2017 national budget. This is the lowest level of education allocation in Europe. An allocation of 4 percent of GDP for education is the minimum to undertake the necessary reforms and corrections to meet and maintain the 2020 targets. UNESCO and other international sources recommend that investment in education should be at least 15-20 percent of public expenditure and 4-6 percent of GDP⁹. At this rate, without the EU resources for a range of operational programs, especially the Operational Program for Human Capital (POCU), the reforms will not be financed. The current programming period for the POCU theoretically began in 2014 and is slated to end in 2020. In real terms, the programming period started to be functional for education programs in 2017 and will benefit from the rule (n+3) years, until 2023. The four education strategies *are ex-ante conditionalities* that allow the Government of Romania access to European Social Funds delivered through POCU, POR, and POCA to support education reform financing, in addition to investment from the government's own sources.

The first MoNE Annual Monitoring Report showed that most implementation in 2017 was done as part of each institution's regular activities. As such, they did not require external financing as they focused on developing methodologies and proposals for financing projects

⁹ UNESCO [Unpacking Sustainable Development Goal 4 Education 2030- Guide](#)

and programs. The first MoNE Annual Monitoring Report also revealed important bottlenecks related to POCU financing and to some decisions on policies and legislation. Some of the factors that contributed to the delays include:

- the late adoption of strategies, i.e., in 2015-2016, while the programming period formally began in 2014;
- the delayed approval in 2017 of the institutional framework for the operation of management authorities/intermediate bodies for POCU;
- the late publication of the Applicant Guidebook & General Conditions in April 2016, and the Beneficiary Handbook in May 2017;
- the launch of calls for project applications in the education sector at the end of 2017 with a 2018 start.

The launch of the European structural program and investments for the period 2014-2020 was delayed significantly in other Member States, not only in Romania. Consequently, investments and support for reform projects have been postponed. The cost of these delays impacts forecasted results and target achievement, and the accumulation of these delays will make it difficult for Romania to achieve strategic targets by 2020.

An important factor affecting strategy performance is the insufficient emphasis on rural areas and lagging regions, despite the EC focus on the principle of territoriality in investment allocations. It is unlikely that Romania will be able to meet key targets without determined effort to address the contrast between urban and rural areas. Socio-economic exclusion of disadvantaged groups is the result of many factors leading to inequality of opportunities. Early year education and care are often inaccessible to the most disadvantaged groups. A key element of financing the strategies is the correlation between the calls for projects financed from the European Structural Funds and the expected outcomes of the four strategies in the context of the rural-urban gap. While particularly important for the four strategies, it is most acute for ESL. Data show that conditions in urban centers meet or surpass EU levels: 6.2 percent of ESL in urban areas of Romania but not in rural areas where 26.6 percent leave school early, suggesting that resources need to be focused on the latter. Similar patterns exist with the other strategies. One way of ensuring that investments react properly to such patterns is to concentrate political and financial effort on children; students and their families; and teachers and adults from rural areas and from low socio-economic backgrounds. More awareness will help target rural areas and disadvantaged groups; and should foster policy dialogue as part of the technical discussions.

Finally, an important contextual element is the MoNE capacity to collect and use data. MoNE has the responsibility for the collection, validation, processing, storage and dissemination of education related data. The Ministry already has a highly developed Education Management Information System called the Integrated IT System for Education in Romania or SIIR in which all data is integrated and which can be subject to queries of varying disaggregation, correlation and comparative complexities. A baseline assessment of MoNE's capacity to monitor and evaluate the implementation of its strategies was performed by the Bank team during the preparation of the Unitary M&E Framework (Output 1). The combination of the baseline assessment and the application of the SABER EMIS tool highlighted key issues requiring attention. MoNE has since made progress in addressing some of the key issues, particularly those related to data collection and use.

2 APPROACH

2.1 PURPOSE/RATIONALE

The M&E methodology is designed in the context of the four education Strategies which are aligned to the EU education objectives. The table below shows the highest-level objectives for the strategies as well as the priority programs for each. The table also shows the relationship of the strategies' objectives to those of the EU. The vertical integration extends to lower levels of planning where programs, policies and projects converge on achieving the objectives of the four strategies and of the EU.

Figure 1		ESL	TER	LLL	VET
EDUCATION STRATEGIES	Objectives of the strategy	Improve the quality and scope of prevention approaches, especially at early childhood and early primary stages, and progressively scale up intervention and compensation approaches;	Prepare specialists who can develop a competitive society in the global economy; the HEIs will be able to catalyse creativity and innovation throughout Romanian society and will assist industry in developing products and services.	Increase the participation in lifelong learning and improve the relevance of the education and vocational training systems for the labor market	Improve the relevance of training systems for the labor market, increase participation and improve access, quality to training programs, develop innovation and cooperation in training.
	Priority programs	Improve access to quality early childhood education and care services; offer remedial learning opportunities for students in primary and lower secondary education; improve the quality and attractiveness of initial vocational education and training; and provide opportunities for second-chance education.	Improve attainment; design adaptive, relevant and high-quality programs; develop strategic engagement with economic sector.	Increase access and participation for all; increase relevance and quality of LLL programs for individuals and labor market; develop partnerships for better information in close collaboration with economic, social, academic partners and all relevant stakeholders.	Improve relevance-match skills with labour market demands Improve access and participation –guidance and counselling tailored to the individual needs. Improve quality – teaching learning process, skills assessment, develop qualifications and curriculum. Improve innovation and cooperation –stimulate international mobility, exchange programs for VET students.
	The proposed measures emphasize vulnerable groups of children and youth and include two cross-cutting programs: improvements for Roma, children with disabilities, children from rural areas; and capacity building in the Ministry of National Education at the central and regional levels. <i>These efforts are collectively expected to impact 4.1 mill people with the utilization of approximately €3.28 billion.</i>				
EU FUNDED PROGRAMS	Objectives	Reduce and prevent ESL and promoting equal access to good quality early-childhood, primary and secondary education, including formal, non-formal and informal learning pathways for reintegrating into education and training	Improve the quality and efficiency of, and access to, tertiary and equivalent education with a view to increasing participation and attainment levels, especially for disadvantaged groups.	Enhance equal access to LLL for all age groups in formal, non-formal and informal settings, upgrading the knowledge, skills and competences of the workforce, and promoting flexible learning pathways including through career guidance and validation of acquired competences.	Improve the labor market relevance of education and training systems, facilitating the transition from education to work, and strengthening vocational education and training (VET) systems and their quality, including through mechanisms for skills anticipation, adaptation of curricula and the establishment and development of work-based learning systems, including dual learning systems and apprenticeship schemes.
	Thematic Objective in Partnership Agreement “TO 10. Investing in education, training and vocational training for skills and lifelong learning” Horizontal policy objectives considered for the implementation of the ESI funds are: demographic change and climate change mitigation and adaptation. <i>European Union allocates for investments in education and skills to impact 1.1 mill people with the utilization of approximately € 1.3 billion.</i>				

Monitoring and evaluation are management functions for effective performance measurement of the complex education reform strategies in Romania. The goal is to learn from past performance and adjust where necessary to achieve strategy targets to improve education results. The purpose of M&E is to increase transparency and accountability, and to inform decision-makers of the progress, challenges and opportunities of the national reforms so that they can make evidence-based decisions on policies, programs and financing. M&E is also important to inform the public of important changes that impact their lives. M&E activities must be as complete as possible and need to cover technical aspects including human capacity, and financial resources; it also needs to consider the diverse and sometimes conflicting needs of stakeholders. Timeframes and reporting obligations also need to be respected.

M&E outputs will provide value to the decision-maker if used well and if given importance beyond a bureaucratic exercise; for that, M&E professionals need to sharpen five characteristics in their work:

1. *Convert huge amounts of information into relevant ‘intelligence’.*
2. *Engage in direct dialogue with users, beneficiaries and delivery agencies, not only through reports but through site visits and random ‘audits’, as well as international comparisons to bring decision-makers the most relevant performance information.*
3. *Capture the attention of decision-makers and focus it away from regulatory boundaries towards non-biased situational assessment and understanding.*
4. *Deliver to decision-makers the best options to influence their decisions. These options emerge from the analysis of raw data and information.*
5. *Understand and account for the fact that all the above is taking place in a context imbued with uncertainty and that, for social development projects, the road to results is influenced by societal, moral and psychological factors outside the purview of the strategies. The extent and shape of change is difficult to predict. This underscores the importance of Point 2 above.*

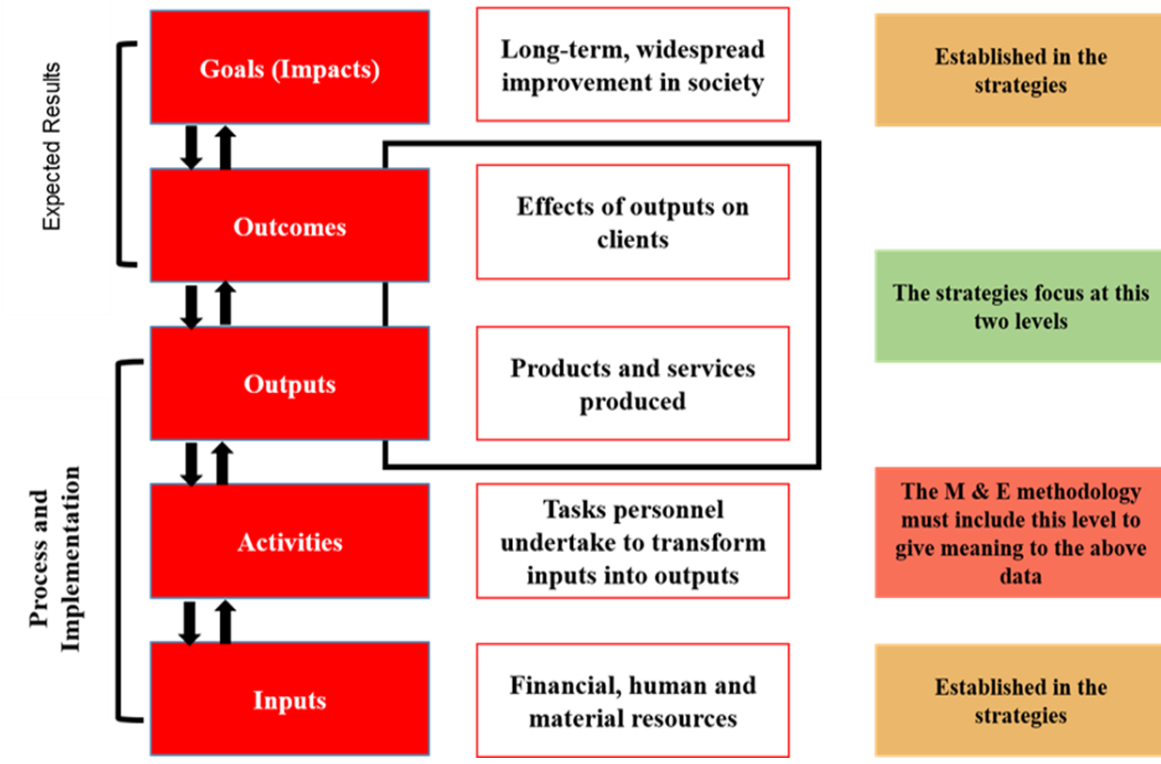
Results Based Management (RBM) was adopted when developing the four strategies and the M&E Methodology. RBM represents a full management cycle and is useful as: (i) a design and planning tool; (ii) an implementation process tool that gives managers access to regular performance data allowing them to adjust activities and allocate resources for optimal results at the output and outcome levels; and (iii) an M&E mechanism that provides evidence of progress and draws important lessons for future policies, programs and projects. As the four education strategies were being prepared, a Results Based Management (RBM) approach was proposed, and pursued in the Unitary Framework for M&E (delivered by the WB team in early 2017), as a model to assess the effectiveness of public sector policies, program and projects.

At the core of RBM is the Results Chain, a linear representation of the design logic based on causal relationships between the different elements. The Results Chain is based on the causal relationship between inputs, activities, outputs and outcomes; i.e., if we invest, then we can conduct activities; if we execute activities then we will produce outputs; and if the methodology has the right outputs then we will achieve change. All four education strategies follow this logic even though they do not all use the same vocabulary.¹⁰ The RBM results chain is useful for design and planning purposes and crucial for M&E because it provides a logical structure for investigating change and how and why it occurs. As illustrated in Figure 1, the strategies define the Goals, Outcomes, and Outputs and provide indicators. In addition to the inputs (financial, human and material resources), the strategies provide the contours of the activities.

¹⁰ In this methodology we will unify the vocabulary to be more in line with RBM.

Effective evidence-based M&E allows for timely adjustments, corrections and restructuring during execution to ensure that investment will lead to the planned outcomes. The M&E Methodology facilitates collection of information relevant to each level of the Results Chain; this will allow the MoNE to understand if efforts are leading to progress, and which alterations may be needed to improve performance and achieve targets in a timely manner.

Figure 2 Results



2.2 MONITORING AND EVALUATION: TWO PARTS OF A WHOLE

Monitoring and evaluation are related, but with separate functions dealing with three broad categories: (i) inputs that go into strategy implementation; (ii) operations that make up the work within strategies; and (iii) the results of these operations. Monitoring focuses on data related to inputs and activities (operations) while evaluation focuses on outcomes and impact. The difference between the two is evident not only in the type of data to be collected but also in the depth of analysis. Table 2 below illustrates the difference.

Table 2 Questions for monitoring and evaluations

Monitoring	Evaluation
<ul style="list-style-type: none"> ● Are all activities that were planned for this strategy being carried out? <ul style="list-style-type: none"> ○ As specified? ○ On time? ○ On budget? ● What is the immediate effect of activities on the target population ● Do activities appear to be leading to positive or negative change? ● Are activities revealing weaknesses in design? Unidentified needs? Unexpected needs? ● How does target population react to and perceive the benefits (or lack of) emerging from activities ● What have we learned for next year’s work-plan? ● Are all resources slated for the implementation [specified component or group of activities] available as planned? <ul style="list-style-type: none"> ○ Are there savings? Where? ○ Are there cost overruns? Where? ○ What is the cost activity X per unit? 	<ul style="list-style-type: none"> ● What have we learned from the various relationships of issues for example: infrastructure and student performance? ● Did the change cause improvements (or deterioration) in unintended areas? ● Was there sufficient synergy between the four strategies thus ensuring system continuity? ● What have we learned for future reforms? ● Was the design of the project sufficiently responsive to the diagnosed problem and was the diagnosis appropriate? ● What policy changes were triggered? ● Did the pace and sequence of activities impact the results of the strategy? ● Did the actual pace of implementation result in cost escalation? ● In retrospect, could resources have been better utilized? ● What factors impacted the utilization and efficiency of the resources?

Monitoring is the systematic observation of activities and the recording of data for control, understanding, and for predicting the course of implementation. As will be seen later, some basic monitoring data and information is generated by the implementation units of the various projects and programs related to the strategies. This information is reported to the Intermediary Body, which is a key institution that consolidates reliable data at the level of projects, participants, program implementation and projects implemented with ESI funds under POCU. Most programs relevant to the four strategies are expected to be funded under this Operational Programme, especially for interventions addressed under the ESL Strategy. Other types of monitoring data and information come from relevant directorates in MoNE, official data sources such as NIS and SIIIR, and site visits.

Three important considerations in monitoring are the following:

- Efficiency:** Are activities executed on time and on budget? Are they sufficiently planned?
- Effectiveness:** Are activities being executed properly? Is the budget appropriate? Are outputs and outcomes matching needed/desired outputs and outcomes?
- Relevance:** Are the right activities being executed?

Monitoring data and information will allow MoNE to take corrective action. This focuses on improving implementation measures; recommending allocation or reallocation of resources;

and conceiving of new or alternate activities to help achieve targeted outcomes. Monitoring data and information explain what activities work, what conditions enable success, and what other factors are causing or hindering change. This information will also provide sufficient depth and meaning to the outputs emerging from the activities. Another important monitoring function includes the regular and timely collection of data from SIIR and NIS. Such data is collected for tracking purposes and presented within the monitoring report so that the change at the outcome level can be correlated and/or attributed to the changes caused by activities and their outputs. Monitoring data and information will have to provide insights into:

- Whether all financial, human and other resources that were planned and budgeted for the implementation of each strategy are (a) being delivered, (b) as specified and (c) on time?
- Whether all activities that were planned for each strategy are (a) being carried out, (b) as specified, and (c) on time
- Whether all the resources that are made available for the implementation of each strategy are being utilized (a) fully as planned and (b) efficiently
- Whether the actual costs of strategy implementing are in line with the anticipated and projected costs.

Evaluation is results-oriented; it studies the significance of behavioral change leading to strategy objectives. It considers the positive and negative consequences of implementation and investigates conditions and effects of activities on outputs, and on the relation and effect (or absence of effect) of outputs on outcomes. In sum, evaluations examine the whole results chain to understand the effect of the strategy and its implementation on the system, and on its stakeholders and beneficiaries. Like monitoring, a formative evaluation may prompt corrective action on strategy implementation because it is conducted during implementation (in contrast to impact evaluations or final summative evaluations).

The combination of operational and outcome data is evaluated through the proposal of hypotheses and inquiry questions. Where operational data speaks to the conditions of execution, outcome data and information speak to change in the behavior of people and institutions in the sector. Looking at the two related sets of data we can begin to advance certain assumptions on the effectiveness of the strategy, its schedule, its cost, and importantly, qualitative factors. Evaluations also consider efficiency, effectiveness, and relevance, not limited to activities or project, but covering the entire strategy. More specifically, evaluation involves detailed investigation into and analysis of:

- Whether the mix, quality and quantity of resources allocated to the implementation of the strategy were correct;
- Whether the expected **outputs** were produced as intended and if not, why? (some of this information can come from monitoring and is validated in evaluations);
- Whether these outputs resulted in the expected outcomes and whether the Ministry should continue to produce such outputs: do more of the same, or change the outputs;
- Whether the strategy as a whole has been technically and administratively well designed;
- At what cost the outputs and outcomes were eventually achieved; could the costs be lower; and
- Whether the strategy is realistic and feasible relative to the cost.

2.3 PRINCIPLES



This section addresses basic principles for M&E. These principles focus on the conversion

of raw data and monitoring information to building blocks for evidence-based decision making at the operational and policy levels. In the process of monitoring and evaluation activities, the following principles are outlined, they are crucial to the attainment of the desired objective:

1. **Results-based** analysis and interpretation of data, supplemented by a critical reflection on the activities; these are an effective instrument for performance management. Provision of timely information and relevant analysis and recommendations for decision-making at the levels of project management, and strategy and policy.
2. **Complementarity** is necessary at two levels: (i) understanding that monitoring and evaluation are two different but complementary activities and (ii) recognizing that there is complementarity between the four strategies that should encourage greater collaboration between the four WGs.
3. **Institutional cooperation** is a necessary partnership in which the WGs identify common objectives and find ways to avoid duplication in their strategies and synergies.
4. **Planning** is an integral part of M&E; this is the process that sets the resources and actions necessary to achieve the results articulated in the strategies. This is an important issue, which highlights the distinction between performance measurement and performance management. If planning and monitoring are not integrated, then monitoring results will be limited to raw statistical data that will not be used appropriately in the decision-making process.
5. **Decomposition** of strategic objectives into work packages, tasks and subtasks; this is a necessary factor in planning, helping to understand what actions, resources and time are required to execute actions and achieve outputs and outcomes. It also supports complementarity and institutional cooperation.
6. **Coherence and integration.** The four strategies operate in the education sector, as such, there is a natural connection between them. A unified approach for monitoring and evaluation is a necessary element.
7. **Responsibility.** An important principle in the development and execution of M&E Methodology is that the Working Groups are the nucleus of M&E operations. The Working Groups are established by Ministerial Order and possess clear processes for making recommendations to decision-makers to ensure that initiatives and financing comply with objectives, and respond to the strategies and target groups. This does not absolve the ministries and agencies involved in strategy implementation from responsibility for contributing to the work of the Working Groups.
8. **Transparency** is a key outcome of effective M&E as it ensures visibility of actions, risks, outputs, and results. Adequate evidence-based monitoring and evaluation reports can be used to inform all stakeholders and interested parties in a clear and realistic manner.

2.4 STRATEGIC AND OUTCOME INDICATORS

An important step in the development of this methodology was to align the vocabulary used for strategy indicators and actions. Each strategy uses a different vocabulary for the description of outcomes and outputs. The terms: Pillars, Flagship Programs, Measures, and Strategic Actions are not commonly used M&E language of outcomes, outputs and activities, and the attempt to align the vocabulary is a result of the Unitary Framework for M&E (delivered in November 2016) and is in line with the principles of RBM as articulated by the Bank, OECD, EC and others. The logic used was not simply a change in vocabulary but a reflection of the nature of the text under each of the titles used in the strategies. This required a detailed examination of the text in the strategy to discern activity from output and output from outcome. The matrix below shows the labels used in each strategy and how these were unified under the methodology. Despite the change in vocabulary, we have attempted to maintain the integrity of the strategy documents so as not to cause confusion among the professionals in the Working Groups. We expect that the transition will become fully embedded by 2019 along with changes in how outcomes, outputs and indicators are articulated.

ESL	TED	LLL	VET	Methodology
Outcome	Pillars (& Enabling Conditions)	Measures	Strategic Objective	 Outcome
Measures	Actions	Actions	Actions	 Output

The table below represents a unified quick reference to the outcome indicators for the four strategies. The text in the table was adjusted so that it is closer to typical M&E language. The detailed indicator definition table, complete with data collection methodology for each of the indicators (section 6), maintains the original language. The gradual shift to M&E vocabulary and syntax should be complete by 2019; it was already used in the 2018 work plan within the first MoNE Annual Monitoring Report.

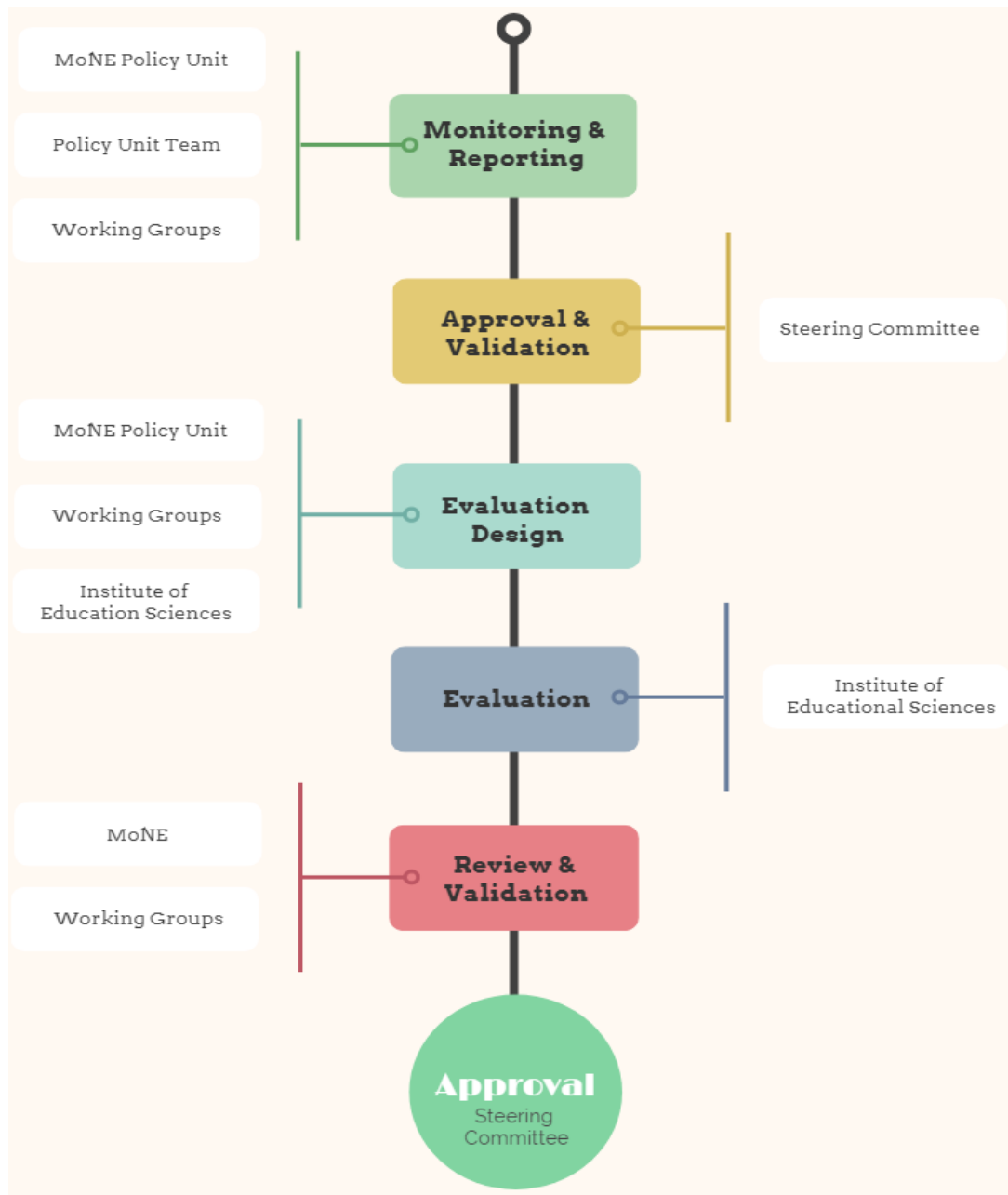
Table 3 Reference to Outcomes and Indicators

Early School Leaving Strategy (ESL)	Tertiary Education Strategy	Life Long Learning	Vocational Education and Training Strategy
Highest Level (strategic) Indicators			
1) Early leavers from education and training (age 18-24) 2) Early Childhood Education and Care(ECEC) (from age 4 to starting age of compulsory education)	Tertiary educational attainment (age 30-34)	Adult participation in learning (age 25-64)	<i>VET strategy contributes to the Headline indicators of the three other strategies</i>
Outcomes			
1. Increase Access to Early Childhood Education and Care (ECEC)	1. Adequate and efficient funding	1. Recognize prior learning for skills gained abroad and locally obtained competencies	1. Improve the relevance of training systems to match labor market needs
2. Improve access to primary and lower secondary school level for everyone	2. Enhance effective governance	2. Diversify and enhance financing to meet demand	2. Increase participation and improve access to training programs
3. Effective early warning systems, remedial, and support programs for students at risk in compulsory education	3. Ensure use of M&E Data for evidence-based policymaking	3. Support participation in European Mobility Programs (Erasmus+)	3. Improve the quality of vocational education and training
4. Improve the attractiveness, inclusiveness, quality, and relevance of IVET	4. Improve attainment in all areas	4. Establish a mechanism for financial and counseling support for unemployed and inactive persons	4. Develop innovation and national and international cooperation in training
5. Improve access to adequate supply of quality second chance (SC) education programs	5. Increase quality and adaptive academic programs	5. Improving counseling services to encourage greater participation in the lifelong learning market	
6. Strengthen the capacity of the government to implement, monitor, and evaluate the ESL reduction strategy	6. Enhance strategic engagement with economic (employment) sector	6. Create effective quality assurance, monitoring, and evaluation system	

3 INSTITUTIONAL ARRANGEMENTS: STRUCTURES AND FUNCTIONS

This section describes the structure of the Methodology focusing on the processes and human resources required for effective performance measurement and management activities. The structure is illustrated in the Figure 3 presented below, showing the departments carrying out the activities and the level of decision at every stage.

Figure 3. M&E Structure



Decision Note no 111/May 2018 was approved by the Minister on the Steering Committee. It describes the composition of the Steering Committee as well as its role to: (i) analyze and approve the MoNE Annual Monitoring Report; (ii) validate recommendations contained therein; and (iii) formulate observations and proposals related to future implementation actions.

The Steering Committee is comprised as follows:

- Coordinator
 - State Secretary coordinating Legal, International Relations and European Affairs Departments;
- Members:
 - State Secretary, Pre-university education;
 - State Secretary, Higher Education;
 - State Secretary, Education in minorities' languages;
 - State Secretary, Relation with the Parliament;
 - Representative of the Minister's Cabinet;
 - Representative of the Ministry of Labor and Social Justice;
 - Representative of the Ministry of European Funds;
 - Representative of the Ministry of Regional Development and Public Administration.

The above-mentioned Decision Note also reinforces the appointment of the Institute of Education Sciences (IES) as the Evaluation Body. This is an important development as it places evaluation within the education research body, externally from MONE and distinctly from Working Groups monitoring thus improving transparency and credibility of the evaluation process and its outputs. Monitoring undertaken by MoNE and the WGs will inform the IES evaluations and will shape the evaluation questions that will underpin annual and periodic evaluations. This organizational design will ensure that evaluations are undertaken by an independent external entity, ensuring credibility of the findings.

To fully institutionalize the M&E process, the structure of the WGs, the tasks and functions, staff nominations were approved through Minister Order No 3080/January 18, 2018. This updates the previous unitary M&E set up, initially approved in December 2015; it also highlights transversal activities and membership in an additional support group as presented in Figure 3 below.

Multi-disciplinary Working Groups (WGs) are established for each of the four strategies to plan and oversee M&E operations. The Working Groups hold a central role in the M&E Methodology. Membership for the four Working Groups is made-up of concerned agencies and ministries with one to two professionals from the General Directorate for Strategic Management and Public Policies (Policy Unit). The WGs are expected to continue operations throughout the execution of the Strategies. The approach allowed development of an integrated working environment within the WGs, supported by the Policy Unit members who form the Public Policy Unit Team (PPUT), and act as a coordinating body for the WGs. The WGs composition was revised and the number of people decreased to facilitate better communication and team work. At the same time, a Support Group for the WGs was created with representatives of cross-cutting departments such as the Intermediary Body for Human Capital Operational Program in charge of monitoring projects financed under European Structural and Investment Funds (ESIF) that support the measures in the four strategies.

Figure 4 Working Groups Composition

<p>ESL Working Group</p> <p>Coordinated by general director of GD Early, Primary and Lower Secondary Education</p> <p>Members from</p> <ul style="list-style-type: none"> • Externally Financed PMU • D for Early Education • D for Primary and Lower Secondary Education • GD for Upper Secondary and Permanent Education • PPU 	<p>TER Working Group</p> <p>Coordinated by director of GD for University Programs Management</p> <p>Members from</p> <ul style="list-style-type: none"> • GD for Higher Education • UEFISCDI (Executive Unit for Financing HE, R&D and Innovation) • ARACIS (HE Quality Assurance Agency) • NAQ • GD for Upper Secondary and Permanent Education • PPU 	<p>VET Working Group</p> <p>Coordinated by director of TVET Center</p> <p>Members from</p> <ul style="list-style-type: none"> • TVET Center • NAQ • GD for Upper Secondary and Permanent Education • PPU 	<p>LLL Working Group</p> <p>Coordinated by president of National Authority for Qualifications (NAQ)</p> <p>Members from</p> <ul style="list-style-type: none"> • NAQ • TVET Center • GD for Higher Education • GD for Upper Secondary and Permanent Education • PPU
<p>Support Group members</p> <p>Intermediate Body for POCU (monitors POCU funded programs)</p> <p>Implementation Unit of the Structural Funds Financed Projects (implements national programs funded by POCU);</p> <p>Directorate for Information Technology and Communication (manages SIIR database and provides education data)</p> <p>Directorate for Minorities (coordinates Roma and other minorities' transversal policies)</p> <p>Unit for Financing Upper Secondary Education</p> <p>National Agency for Community Programs in Education and Training (manage ERASMUS+ mobility program)</p> <p>General Directorate of Economics (financial planning and budgeting, transfers, payments, accounting within MoNE)</p>			

This organizational approach was tested during the preparation of the first MoNE Annual Monitoring Report. It forms a corner-stone for planning, M&E, and interdepartmental cooperation and collaboration. The Working Groups' set-up is a new initiative in Romania to measure and manage implementation of the four strategies under the coordination of the Public Policy Unit leading for:

- ✓ A better understanding of the four strategies both within the Ministry and within the agencies and institutions under MoNE coordination;
- ✓ Greater collegiality and cooperation within and between WGs and their member agencies;
- ✓ Greater recognition of complementarity of the strategies, identification of common challenges and opportunities;
- ✓ Greater understanding of implementation complexity and requirements;
- ✓ Evidence-based reporting and better understanding of the necessary indicators and data reporting; leading to better documentation and based on evidence of progress;
- ✓ Detailed analysis of performance data and use of these data for recommendations on the changes/adaptations needed at the level of activities and the level of hypotheses formulated during the elaboration of strategies;

- ✓ More effective annual plans of action, more realistic and reasonable with intermediate targets;
- ✓ A greater involvement of institutions with representatives in working groups.

Working Groups Key Functions. Main responsibilities include:

- Develop an annual work plan for strategy execution based on results and progress of the previous year.
- Undertake Monitoring and Evaluation activities including:
 - Retrieve and assess data.
 - Plan, prepare and undertake site visits with relevant data collection instruments.
 - Coordinate with agencies to ensure that data is being collected.
- Prepare annual progress report:
 - Analyze the data.
 - Make recommendations on actions, indicators, and targets.
 - Show extent of execution of annual plan and its progress towards the final targets.

Frequency of meetings and actions

- The WG will formally meet no less than twice per year, once each two calendar quarters in addition to regular working meetings, and ad-hoc meetings called by the Public Policy Unit as needed.
- The WG will collect data on a rolling basis to be reviewed at the regular meetings; and will undertake a data collection exercise to include in the report.
 - The rolling basis for data collection recognizes that some data will be available regularly while other data will be available less regularly; some may not be available until several months after year's end. Assessment of available data at the quarterly meetings will allow the working groups to inform site visits and give more meaning to the analysis in the annual progress report.
- The WG will conduct no less than two site visits per calendar year.
- The MoNE Annual Monitoring Report is due on March 31 of each year. Short status updates may be used to alert the Ministry of bottlenecks, challenges, risks and opportunities.

The Public Policy Unit Team (PPUT) focuses on strategy integration, common challenges, avoidance of duplication, and identifying complementarity to achieve greater synergy among the four strategies. The PPUT will add value to the 4 Working Groups by providing Secretariat services to support them. The Public Policy Unit could consider appointing one or more Counselors to act as WG coordinators. This becomes more necessary as POCU financed projects begin to scale-up implementation and as field visits become necessary. The Public Policy Unit Team's scope of work is as follows:

- Organize meetings called by members of the WGs
- Ensure availability of venue and that all documentation is available for the meeting
- Ensure record of attendance at the meeting
- Ensure record of meeting minutes including decisions, recommendations, and follow-up action
- Follow-up with various members of the WGs, as necessary
- Facilitate inter- and intra- WG communication and cooperation
- Prepare and submit data requests for official data, for example: SIIR, NIS, and

Ministries

- Coordinate WGs communications with government agencies and departments
- Organize and facilitate site visits; when necessary or relevant, participate in site visits
- Make enhancements to the reporting templates
- Support the data gathering for WG reports and plans
- Prepare the summative annual report reflecting the four working group reports and containing detailed analysis of issues including forecasts on future completion dates, resources and other requirements, in addition to key messages and recommendations.

The addition of an M&E resource person(s) working alongside the PPUT will remove the operational constraint related to time allocation; these constraints were voiced by various members of the WGs. This support will help improve WG operations and effectiveness.

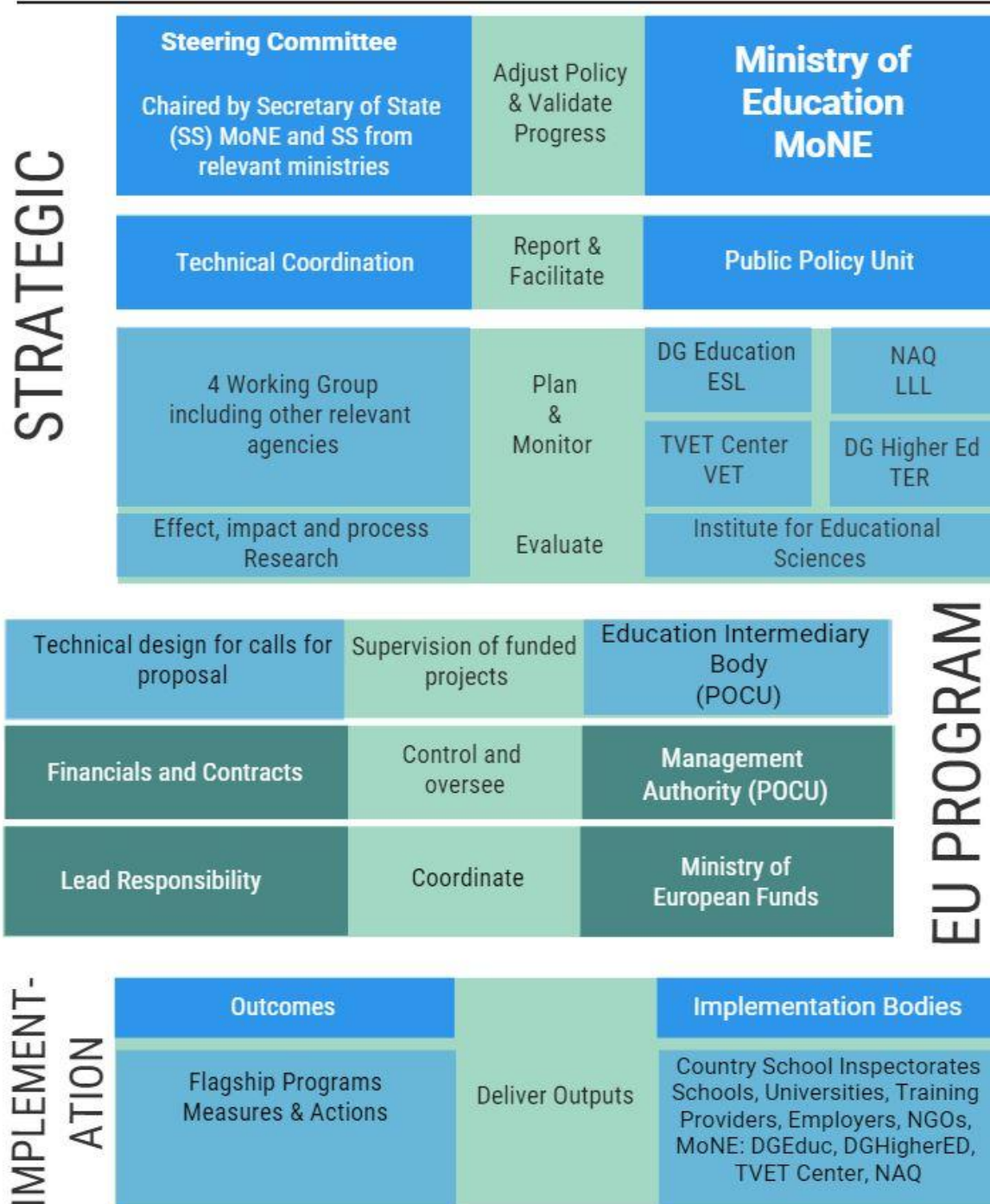
The financing, planning, implementation, and M&E of the 4 education Strategies require participation of numerous organizations within and outside of government. It is important to understand these relationships to be able to use the M&E Methodology effectively. The structure of the relationships is made up of three levels: (i) Strategic; (ii) EU Program; and (iii) Implementation. As noted in Table 1, the EU program represents just over 25% of the overall government reform program, which means that the strategic leadership and supervision of the overall program is the responsibility of MoNE.

MoNE uses four mechanisms to deliver services: (i) The Steering Committee validates implementation progress and supports policy changes. It is made up of Secretaries of State, thus it is at the right level to ensure inter-governmental cooperation in policy adjustments. (ii) The Public Policy Unit is responsible for: coordinating, reporting, and facilitating inter-departmental cooperation, also events organization, and data collection and report management. (iii) The 4 Working Groups are responsible for planning, detailed data analysis and reporting (also including data collection), site visits, and inputs to the preparation of periodic evaluations. Importantly, the WGs are key to the strategic objectives development into achievable work packages. (iv) The Institute of Educational Sciences is responsible for designing periodic evaluations and conducting them independently.

The M&E Methodology does not directly impact the EU Program level as that focuses on financing, designs of calls for proposals, and supervision of projects funded under different operational programs (POCA, POCU, POR, POC). However, the EU Program level is subject to monitoring and evaluation directed by the Strategic level. The Implementation level serves both the Strategic and the EU Program levels. It deals with implementation and operationalization of the strategies as supported by the Government and EU Program programs. This level is the primary target for M&E; the Working Groups' focus is on ensuring that the enabling environment exists for the implementation bodies to deliver services that will produce the results expected in the strategies. The Figure 5 below illustrates these structures and relationships.

Figure 5

Structures and Relationships of Strategies' financing, Implementation, and M&E



4. MONITORING METHODOLOGY

When institutions manage complex reform strategies they require constant progress updates about the intended outcomes and outputs to ensure success. Monitoring projects and programs associated with the four strategies goes beyond tracking the implementation of activities and disbursement of funds. It needs to identify details on how the strategy is being executed. This includes answering questions such as: (i) how each project or program’s aims were internalized by participants and beneficiaries (there may be various stakeholders at various levels¹¹; (ii) how the activities were implemented (beyond the declarative status); (iii) how beneficiaries reacted to the implementation, etc. The Working Groups will help answer these and other questions through the planning and monitoring mechanisms detailed in this section.

4.1 DATA COLLECTION

There are three main types of data required to monitor strategy implementation effectively. Each strategy is monitored independently, according to the approved list of indicators found in each of the strategy documents. These are:

Table 4- Data sources per level of representation

LEVEL	TYPE - EXAMPLE	SOURCES
National / EU Regional / International (System Data)	National level data covering matters such as Reduction in ESL, Tertiary Education Enrolment Rate and other data related to national education indicators. Comparative data from EU and international sources fall also under this category.	Official Statistics: SIIR, NIS, RMU, ANS, etc. and for comparisons and analysis: EC (Eurostat), OECD, UNESCO, World Bank etc.
Program Level	Data from reform programs like the National Curriculum Framework for early education development or the School After School Programs, Second Chance, Professional Scholarship and any program supporting the achievement of strategy outcomes. At this level program must be centrally funded and coordinated.	Entities implementing POCU-funded projects through the Intermediary Body (IB), IB and Managing Authority (MA) for programs funded through EU Operational Programs like POCU, POCA, POR, POC etc.
Unit and Local level	Programs supported and executed at the local level without central funding or coordination. They may or may not comply with the central programming criteria. For example, a School After School program executed at this level may not adhere to curriculum requirement and not serve an educational objective, but may provide care services only. Small initiatives at this level have been able to be innovative and have evolved into larger programs or new policies. This is the case for Roma initiatives, digital skills for children in rural areas, etc.	SIIR; more substantive data will come from school inspectorates, schools and NGOs particularly through site visits or on-line reports from entities implementing such programs.

Although these data sources appear independent, there is a high degree of interaction and dependency between them. The three levels require different approaches and mechanisms for data collection to provide information on implementation progress; to identify potential bottlenecks and success stories; and to learn important lessons for future activities. Users should not present their analysis per type of data but should provide more complex analysis using as

¹¹ Parents, students, teachers, schools or universities, companies involved in the education process, tutors of various kinds, participants in lifelong-learning exercises, etc.

many sources as relevant. Section 4.2 on data analysis and interpretation addresses this in greater detail and the Indicators Definition tables (in section 6.1) give specific sources for data collection.

The first level of data includes existing information in SIIIR, RMU, INS, and ANS, etc., and provides much of the basic data (official statistics). Simple computations are used to aggregate data from these sources to meet indicator requirements. This will reveal enrolment rates, number of users, etc. However, some information contained in these databases is not directly relevant to the strategies, but is important for decision making; it allows the experts to go beyond simple queries for aggregation purposes; users may submit more complex queries when detailed analysis is required, for example: (i) the number of the students not enrolled in the following school year (disaggregated by the previous school year enrollment status, such as completed, expelled, not completed etc.); (ii) number of absences per semester in correlation with end of school year status - disaggregated by rural/urban; (iii) correlation between baccalaureate exam simulation and the exam results; (iv) correlations between the number of absences per semester and the marks obtained at national examination (end of 8th grade); (v) infrastructure (buildings' condition) in relationship to the number of students/dropout etc. These are custom queries submitted to data managers, and will need to be built and run manually. The level of query complexity is not limited and can be used for complex evaluations to help understand what is driving the results (or absence of results). It is important to recognize that the Systemic Data sources, particularly SIIIR, may not contain some specific information sought by the Working Groups. In such cases the Working Group(s) may make a specific request for the data to be collected.

The first level of data also includes regional and international data from non-national sources such as the EC (Eurostat), OECD, UNESCO, World Bank etc. This information is important when used for comparing Romania to other countries in the region and the world. In some cases, this data can be queried but only within the parameters allowed by the provider site.

The Second type comes from the various initiatives, programs and projects related to the strategies that are receiving POCU and other centrally-directed financing and are governed through central guidance and requirements. The implementation bodies of centrally coordinated and financed programs may be NGOs, educational institutions, private entities, or government agencies. Their implementation units are contractually obligated to produce implementation information through monitoring systems required by the Intermediary Body and the responsible government agency or ministry. For POCU-financed projects, this type of information flows to and through the Intermediate Body. Examples of such programs are those devoted to nurseries, or Community Permanent Learning Centers. The information from these programs is used to document activities and outputs, and is measured against the corresponding strategy and POCU indicators which, for the most part, match those of the four education strategies. POCU and the Intermediary Body's active participation in the Working Groups will facilitate the exchange of this information as needed.

The Third level comes from local units implementing initiatives, programs and projects related to the strategies but not receiving POCU financing and that are not necessarily compliant with or supervised by central directives on process, content, or methods. In some cases, programs such as the School After School are financed by parents or the School Authority. The M&E methodology requires the same type of information as that emerging from the second level data. However, this information will need to be collected through site visits or direct online queries because this information will not come from implementation bodies nor will it be found in other sources. Some SIIIR or district offices may have some statistical

information on these programs but substantive information must be secured at the source.


For levels 2 and 3 the data should answer basic questions such as: (i) was the activity implemented as intended with all details accounted for, including time, budget and financing sources; (ii) attitudes of those involved; (ii) reception by beneficiaries; (iii) perceived usefulness; (iv) number of users; (v) educational tools used and produced; etc. Basic issues such as efficiency, effectiveness, and relevance of activities are fundamental.

An additional level of information will come from the ministries and agencies that engage in preparatory work that will enable strategy execution and resource allocation.

LEVEL	TYPE - EXAMPLE	SOURCES
Enabling Operations	Operational level data related to work conducted in the normal functioning of an agency or ministry, for example, developing an early warning checklist, developing a checklist of equipment for day care facilities, developing curriculum requirements, developing policy or program proposals.	Data on this level should be provided by the responsible agency and its subordinates or partners.

This additional level of information comes from routine work of the relevant government agencies in their efforts to implement the strategies. Such data is often overlooked but it has significant substantive importance as it spends time and resources on achieving strategy objectives, and creates the enabling environment for implementing strategy measures. This data reflects progress on the foundational work required for the effective strategy implementation.

It is vital management information. For example, the following are important activities that provide the basis of the program/project implementation: (i) the development of checklists for material in nurseries; (ii) program and project proposals; (iii) public consultations and outreach; (iv) studies. Without information on the extent of preparatory work required there is no way of understanding management factors such as level of effort or human, material and financial resource requirement. There will also be no way to get insights on the status of reform implementation. The story in the box illustrates this type of information. The ESL strategy also includes the measure to “provide (continuing) training to educators-puericultors on inclusive teaching methods”, much work remains to be done before training can be provided. The 2017 work plan included the development of a “1st draft of course handbook for early education teaching staff”. This handbook will frame the nature of training for “12,740 teaching staff, inspectors and educators” and ensure positive outcomes when trainees return to work. The Handbook will help focus training on real needs to make the investment worthwhile.



An old farmer decided to plant apple trees in the thickly wooded area behind his house. He cut down and uprooted the oaks and maples trees; removed the brush and thicket; turned the soil; planted the seeds and tended the orchard. Many years later, his family had apples to sell at the market, they made jam and pies to sell across the kingdom and they became very rich. Could the descendants achieve such success without the work of the old farmer?

Much of the data discussed thus far is related to management information in terms of how much is needed and the length of time over which it should be collected; it does not directly address qualitative information needs; such data is gathered in part through field visits and more significantly through evaluations. Field visits are addressed below, and evaluation will be addressed in section 5 of the M&E Methodology. However, it is important to understand that

the Monitoring data and information, and the corresponding analysis is central to informing future evaluations.

4.1.1 Field visits

Field visits are an important source for data and information on progress and quality of implementation. Field visits have four objectives: (i) they are an important way to validate the data collected from all sources; (ii) they provide important qualitative information, (qualitative tests) outside the context of detailed evaluation studies; (iii) they provide the Ministry and central agencies with direct exposure to the challenges and opportunities of initiatives; and (iv) they allow for greater cooperation between the regions and the center, creating greater cohesion between the implementing parties.

Periodic site visits for monitoring should not be confused with evaluations. The purpose of site visits is grounded in monitoring, which is fixed on operational management; evaluations are a detailed examination of issues and require expertise in primary data collection and in statistical methods. Site visits will be framed by a number of tools, each relevant to the type of activity or type of host entity. These tools are designed to provide quantitative and qualitative information; and instruments to be employed include tailored questionnaires, checklists, and observation guides that seek information about initiative implementation, usually for a specified period of time. They will be used to gather information on the target groups, participation rates and user feedback. Although some quantitative information may already be reported through routine channels, here the objective is validation.

The qualitative elements of monitoring seek information about meaning and value that various social actors attribute to the actions being implemented.¹² The qualitative elements answer questions related to the effect that initiatives are having student learning, on teaching, or on the lives of the target groups in general. Importantly, monitoring visits provide information on challenges and opportunities during initiative implementation, these will raise flags if an investment does not appear to be producing the expected results and if it needs to be adjusted or redesigned. Additionally, site visits will reveal questions and issues that may need to be addressed during in-depth evaluations. It is evident at this point that although monitoring and evaluation are different and require different approaches and skills, they also intersect. Monitoring and evaluation examine similar areas but monitoring acts as an early warning system that may trigger in-depth evaluations, it is a continuous scan whereas evaluation is an in-depth investigation. Interviews and observations are key instruments for site visits and are described below.

A. Interviews

Interviews are a dynamic way of gathering information that allow for personal interaction between individuals. They are framed by a guide or protocol for conduct and for recording of responses, and are used to gather the views of key informants, such as direct beneficiaries of an initiative. They complement quantitative information with qualitative insights.

Effective interviews are well planned and have clear objectives. A key part of the preparation process is the development of interview questions related to the initiative and its connection to the outcomes expected in the strategies. Section 6 contains sample interview questions;

¹² Social actors include: principals, teachers, educators, students, local authorities, NGOs

however, it is vital that these questions are revised to fit the specific requirements of the review before each site visit. The type of questions will depend on the timeline of the initiative: i.e., at the start, mid-point, or end of implementation. The questions are also shaped by the type of initiative and the target respondents. To illustrate: in the four strategies, interviews related to POCU- and non-POCU funded projects and are needed, these require different approaches and questions to the stakeholders even though interviewees may be the same, i.e.: teachers, parents, students.

While this Methodology contains sample questions and instruments, these will need to be reviewed and adjusted prior to each site visit to suit the timing and type of respondent being interviewed.

Effective interviews necessitate two-way communication: they must be conducted by persons who have some knowledge in the subject matter and a detailed understanding of the strategies. Without such dynamism, the interviews will be static and will not elicit information to help better understand the effect of initiatives. The interviewers must have an awareness of non-verbal communication and an ability to establish trust and credibility with the interviewee(s).

B. Observations

Observations are an important method of data collection for understanding behavioral change caused by initiatives. Observations conducted in the context of Monitoring should not be confused with controlled evaluation observations that require knowledge of research methodology and significant subject matter knowledge. Observations in the context of monitoring require some knowledge of the strategy that is subject to the monitoring and a level of objectivity to avoid instilling a bias; this is sometimes difficult. The observer must avoid being disruptive by being unobserved because the mere presence of the observer will trigger what the observed will perceive as the ‘correct’ behavior. Like interviews, observations must be framed by a guide or protocol to ensure that this instrument is consistent and that it focuses on the required information.

Observation allows the reviewer to compare findings with reported data and to understand why an initiative is working or not. For example, assume that 100% of teachers at a school have been trained in student-centered teaching methods, but observation of classroom organization and student behavior shows that this method is hardly used. Such an observation will trigger additional questions about why the student-centered method is not being applied: is it a regulatory obstacle? Was the training ineffective? Is the curriculum not conducive to the student-centered method? Such an issue may be referred to an evaluation if the site visit cannot produce satisfactory responses.

For all its benefits, observation has some challenges as a data collection method that can be mitigated through effective planning. In addition to the ‘correct behavior phenomenon’ noted above, there are difficulties associated with observations, most of which can be treated with effective preparation. Not all informative instances can be observed: for example, the improved behavior of children at home who have participated in Early Childhood Education and Care activities. Such an observation would require access to homes which may cause discomfort for families. To avoid such a situation, the parents or caregivers can be asked to complete an observation check-list on their own. Observations are not laboratory experiments and as such, may have weak reliability: generalizations must be made. They are susceptible to the personal bias or faulty perception of the observer. Observations are also time-consuming:

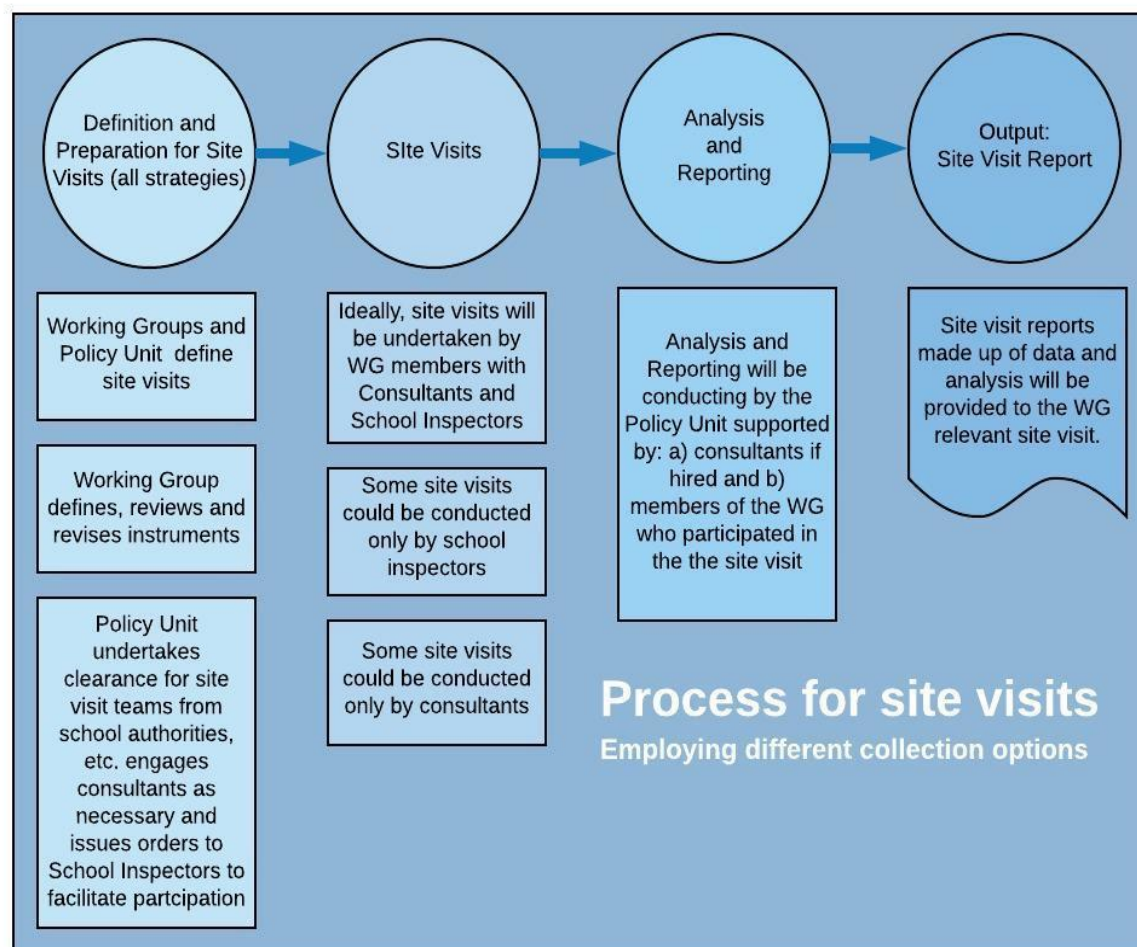
the observer needs patience and sometimes more than one session is required.

Like interviews, observations must be well prepared and tailored to the initiative. An observation checklist to gauge how well teachers are applying skills acquired through training will be vastly different from a checklist for observing the School-After-School program. It is therefore imperative that checklists are revised to fit the specific requirements of each initiative before each site visit. The type of items on the observation checklist will depend on the timeline and type of initiative. This Methodology contains a sample, which will need to be adjusted prior to each site visit to suit the timing and type of each initiative.

The MoNE and the Working Groups have several options for field visits: (i) subcontracting a third party; (ii) hiring consultants within the MoNE Policy Unit; or (iii) using a combination of WG, Public Policy Unit and School Inspectors. Every site visit should ideally include a representative from the relevant WG as well as a member of the Public Policy Unit Team. However, considering the size of the target population it is reasonable to conclude that the most efficient and effective method would be the third option with periodic engagement of consultants as necessary. Even though this approach relies on external consultants from time to time, the process ensures that the activity is internalized to MoNE and the WG. Three of the instruments prepared for the May 2017 iteration of the M&E Methodology were field tested in February and March 2018 within the context of the ESL and VET Strategies. Interviews, questionnaires, and focus group sessions were administered to 2800 students, 777 teachers, and 26 school directors in 5 counties. Additional administration of the instruments is taking place throughout 2018. The field testing allowed the Working Groups, the Public Policy Unit, and the Bank to reflect on the utility of the instruments and importantly, on the overall process of collecting, interpreting and reporting on the site visits. Figure 6 below details the refined process.

Field visits are to be scheduled no less than 2 times per year in addition to ad-hoc visits as needed. Each WG should determine its own schedule for site visits and should choose the specific initiatives it wishes to examine. In some cases, two or more Working Groups may choose to conduct site visits jointly if there is overlap in their program. The level of resources that are available to conduct site visits mean that not all initiatives can be examined in one operational year; the initiative to be examined needs to be driven first and foremost by a reasoned motive. For example, the data being reported by POCU-funded activities may appear inflated or deflated, the data being reported in one region is vastly different than other regions with the same initiative, or the initiative is an important pivotal one on which future initiatives depend, etc.

Figure 6 Process for the field - site visits



The process outlined in the M&E Methodology engages the main participants in the overall process while maintaining flexibility for the Policy Unit to choose the most effective method for the visit. Regardless of the method, or combination of methods, the Working Groups and the Policy Unit remain deeply involved in the definition and design of site visits while the Policy Unit retains the role of supervision and analysis. The use of School Inspectors for site visits will increase efficiency and ensure sustainability of M&E beyond the life-cycle of the strategies through embedding the principles and objectives of the M&E Methodology.

GIS data represents an intersecting source of information that can help in providing depth to data and information collected from the various sources discussed above. The WB implemented a separate RAS which included technical assistance to prepare a Strategy for Infrastructure Investments in Education Institutions. This technical assistance covered an assessment of geospatial functionalities of the existing SIIIR to better inform decisions on investments in education infrastructure. Of interest to the M&E Methodology are the following attributes of the GIS:

- All attributes of schools from SIIIR, including GIS coordinates of schools and pre-schools.
- All attributes about nurseries.
- Spatial data on Territorial Administrative Units (TAU) of Romania.
- Spatial data on the location of marginalized communities (both urban and rural), as well as relevant attributes associated with these communities.

The GIS has a powerful online search and filter functions allowing users to locate and sort information. Users can search for a location (a county, commune, or school based on name) by typing the name in a predefined field. The GIS therefore represents a powerful tool for the purposes of the four education strategies. The MoNE may wish to consider whether some adaptation will make the GIS more relevant for the purposes of the M&E Methodology.

Official data sources operate on a schedule that is not always aligned with the timeline of the M&E Methodology. The table below shows the main sources of official data and the timing of their availability.

Table 5 Timing of Data Availability

Data source	Registry	Periodicity	Availability
NIS-NBS	Resident population on January 1 by age and age groups, gender, residence areas, regions and counties	Yearly	End of May/ Upon official request
	Resident population on July 1 by age and age groups, gender, residence areas, regions and counties	Yearly	End of December/ Upon official request
	School population by levels of education, school age and gender	Yearly	End of April/ Upon official request
	Household Labor Force Survey - AMIGO research	Quarterly	1 month after the end of the quarter
	Custom data request	Upon request	2 weeks from the official request
MoNE-SIIR	School network	Yearly	End of February for the following school-year
	School offer	Yearly	End of April for the following school-year
	Enrolment, completion and study formation	Yearly	End of October (for the beginning of the current school-year) End of June (for the end of the current school-year)
	National Examination (8th grade EVNAT)	Yearly	2 weeks after the final results (end of June)
	Custom data request through SIIR	Upon request	2 weeks from the official request
MoNE-RMU	Enrolment, completion for students enrolled in the first year	Yearly	End of October (for the beginning of the current university year) End of August (for the end of the current university year)
	Custom data request regarding student enrolment	Upon request	2 weeks from the official request
OECD	PISA results	Every 3 years	2 months after the assessment
CNDIPT	Data on VET Programs	Upon request	2 weeks from the official request
MA/IB POCU	Data on POCU indicators	Upon request	2 weeks from the official request

A reliable and effective source of information that is updated regularly is EUROSTAT database (<http://ec.europa.eu/eurostat/news/release-calendar>). Romania is reporting to this data base

through the National Statistics Institute based on the agreements signed by Member States. The European Statistical System (ESS) is comprised of: [Eurostat](#) (the statistics office of the EU), the statistics offices of each Member State, and other organizations that compile European statistics. The ESS guarantees that European Statistics are reliable; that they adhere to the same criteria, definitions, and methods to allow for comparable data among EU countries. European Statistical information is broad and covers all economic, demographic and social matters. Official European statistics are regulated by principles, included in the European Statistics Code of Practice, which seek to ensure the quality of the data. These principles include: professional independence, protection of confidentiality, reliability of the results, precision, timeliness, punctuality, accessibility, clarity, comparability and coherence.

The EUROSTAT database offers a selection of the most important Eurostat data in a user-friendly way and contains a full range of publicly available data. They are presented in multi-dimensional tables with various selection features and export formats; databases and tables are organized on nine statistical themes. Tables related to EU policy present a selection of data organized according to specific EU policies. Statistics that are most relevant to reporting on: strategy implementation, programs, actions and achievement of indicators are presented in the table below.

Table 6. Eurostat statistics relevant to education and training policies

Type	Theme	Sub-theme	Area
Database and tables by themes	Population & social conditions	Demography & migration Population projections	Population, fertility, mortality, international migration, immigration, old-age dependency ratio, national census, population change etc.
		Health	Access to education & training for disabled people
		Education and Training (ET)	Participation, learning mobility, education personnel, education finance, ET outcomes
		Labor market	Employment, unemployment, labor costs, labor market policy
		Social protection	Social protection expenditures, benefits, pensions beneficiaries
		youth	Population, participation and ET
Tables on EU policy	Europe 2020	Employment, R&D, poverty and social exclusion	Employment rate, GDP on R&D, people at risk of poverty and social exclusion, severely materially deprived people
		Education	Early leavers, tertiary educational attainment
	Sustainable Development Indicators	Goal 4- Quality Education	ECE participation, underachievers in reading, math and science, employment rates, adult participation in learning, young people NEET, Early school leavers, tertiary educational attainment.
Cross cutting topics		Indicators on migration	Children in migration
		Skills related stats	Skills demand, skills supply, skills development
New items			Population by educational attainment, young people NEET, credit mobile graduates, cost of CVT courses


Table 7. Release calendar for reports and statistics relevant for education

Data source	Registry	Estimated date
EUROSTAT	Euro statistics - Data for Short term economic analyses	monthly
	Access to childcare services	February, 2018
	GDP main aggregates Government expenditures by function Young people in the labor market	March, 2018
	General sectoral accounts, households Q42017 Labor cost in 2017, EU 2020 education indicators EU employment indicators Regional unemployment in 2017	April, 2018
	EU population in 2017 EU 2020 strategy- preliminary report	July, 2018
	Social Development Goals Poverty and Social exclusion	September 2018 October, 2018
	Key figures on education	October, 2018

The National Statistics Institute of Romania (NSI), is publishing the results of all the statistical surveys carried out through the website www.insse.ro. The statistical data and meta databases relevant for data users in education and training are: TEMPO-online time series, Sustainable Development Indicators, Population and Housing Census.

4.2 DATA INTERPRETATION AND ANALYSIS

Interpretation and analysis of data and implementation information give depth and meaning to facts (data) in monitoring reports; and support evidence-based decision making. This is a crucial step in the M&E Methodology and one that needs time, attention, as well as resourcefulness and subject matter knowledge. The analyst must also display a reasonable level of objectivity. As the fable in the box illustrates, the angle of perception of the analyst can have as much to do with the conclusions he/she draws as the data itself. Most experienced analysts will recognize this and will adjust to accommodate it by trying to collect as much data as possible not only to fill in the gaps but to compare for a complete picture. Just for illustration purposes, if the people in the fable could walk around the elephant and feel all its sides, its trunk, tail and feet then they would have been able to reach a different conclusion by connecting the information into a coherent conclusion.



In an old fable, six blind people are introduced to an elephant and asked to describe it by touching only one part. One touches the broad side of the elephant and concludes it's a wall; another touches the tail and decides it's a rope, and so on. Each of the blind persons arrived at a conclusion depending on the data that he/she collected and though each described their own data correctly, none arrived at the true nature of the elephant.

The sense and meaning derived through analysis is used to make sound decisions on existing and future actions to improve the chances of reaching the outcomes and targets expected in the strategies. Qualitative and/or quantitative data and information is analyzed and interpreted by a variety of methods, the most common are: (i) describing and summarizing the data; (ii) identifying relationships between variables; (iii) comparing variables; (iv) identifying the difference between variables; (v) forecasting (modeling) outcomes. The analyst must look

for patterns and insights relevant to the key issues, and use these to develop responses appropriate to the challenges and opportunities emerging from implementation of the initiatives related to the strategies. It is important to eliminate some common myths associated with data analysis and interpretation before exploring some of the basic characteristics of methods.

Myths in Analysis and Interpretations

- **Complex scientific analysis is the only acceptable form.** This may be the case for academic research or in-depth evaluations grounded in scientific research methods. Practical and understandable analysis that can be used for decision making is required for monitoring. The focus is on practical tools that can be used to interpret and analyze Monitoring data and information.
- **Analysis and interpretation come at the end, only after all the data is collected.** Analysis and interpretation is an ongoing process; it detects what data is missing, and helps us understand what additional information is required or what trends need to be followed more closely.
- **Numbers are more accurate than perceptions.** It's true that quantitative information appears more objective, and when collected properly, has a high degree of accuracy. Qualitative information can be equally accurate and valid when the collection process is sound. There is a close relationship between both types of data in analysis, for example, quantitative data will give information on how many teachers are trained, whereas qualitative data will give information on how well the new skills are applied and what effect this application is having on the students' performance. When combined they allow the analyst to determine whether too many or too few people were trained and will be able to recommend reductions or increases in resources or time.
- **Data has its own meaning.** This is an often-mistaken approach to presentation of data. Traditionally, analysts presented declarative reports that contained raw data. For example, "student results improved by 10%". This is meaningless unless it is coupled with other information such as: how much money and effort went into this improvement; if this was efficient compared to other initiatives; what the base line was; how far the current situation is from the target; how it compares to EU regional student results; demographic characteristics; main causes for the improvement?
- **Recognizing limitations to analysis weakens the findings.** Quite the opposite is true. All methods of analysis have weaknesses; recognizing these will only enhance the credibility of the findings and help in future data collection and analysis activities.

As noted earlier, interpreting and analyzing data is a process used to examine change. This can be done in several ways. Note that these ways are not necessarily complete or exclusive of each other, they can be combined.

Type	Description	Source level
Descriptive	Describes the facts of an initiative using data; for example, 100,000 children benefitted from Milk and Croissant program, of which, 40% girls, 60% boys and 60% in rural areas, 25% in towns and 15% in urban centers.	*National/Regional: SIIIR, PMIPN, Eurostat, OECD etc.
Comparative	Determines whether groups are the same or different, and if so how much. When the focus is on whether one region is performing or reacting differently than another region to the same project; or comparing the situation to baseline or to comparable countries.	*Operational Program: Official initiative reports *National/Regional: SIIIR, PMIPN, Eurostat, OECD etc.

Relational	Considers how variables relate to one another e.g.: Degree of participation in Milk and Croissant program and absences, or absences and early school dropout.	*Operational Program: Official initiative reports *National/Regional: SIIR, PMIPN, Eurostat, OECD etc. *Site visits data will complement the official statistics and reports
Content analysis	This technique may appear as if it belongs in evaluation, and, in a way, it does. The information gathered here will certainly help shape evaluation questions. Keep in mind that monitoring is an early warning system. Examples of questions to explore: Is there meaning to frequency of occurrence? Is it different in different regions? With different genders? Is context driving the result? Are initiatives producing unexpected results?	This will mostly come from site visits although the analysis is framed by the other sources.
Illustration of situation/ Anecdotes	Short case study or vignettes that illustrate a point using quotes, pictures, “thick” description	This will mostly come from site visits although the analysis is framed by the other sources.

An integral part of interpretation and analysis of data is judgment. The table below provides a guide that illustrates the trajectory from data to information that is useful for decision-making, and future policy and program design.

Facts	A fact is a piece of information that has been verified. For example: 25% increase in tertiary education enrolment in 2017 from 2016
Findings	A finding is an analysis of related facts. Example: Although tertiary education enrolment increased by 25% in 2017, investment in tertiary education has remained at the 2016 levels at 2% of total education spending.
Conclusions	A conclusion covers a major aspect and is generally based on a collection of findings. Conclusions can be presented as key messages in the executive summary of the annual monitoring report. Example: Investment in education, engaging more professors or instructors, and improving infrastructure is a priority if the tertiary education system is to keep up with increased demand.
Recommendations	Recommendations must be stated clearly and simply; ideally, they include what is to be done, by whom and by when. Example: The ministry of education must request an increase in its 2018 budget to accommodate rising demand in tertiary education, and must put in place programs and projects to address the shortage of teaching staff and weak infrastructure. Importantly, the recommendations should include any alteration that is to be made in the strategies, for example, a change in indicator, target value, or even activities. Such operational recommendations must be made clearly and must include rationale as to why such a change is necessary. Ideally, the recommendation would also explain whether and how future planning will be impacted.
Lessons learned	A lesson is a hypothesis that is based on the findings related to a set of initiatives. A lesson is presumed to relate to a general principle that may be applied more widely. Example: The outcomes of staff training in new methods are more likely to be transferred to the job if the ministry (agency or entity) is willing to modernize its procedures to adopt the new methods.

Interpretation and analysis may be hampered by many factors. In some instances, there may be too much information that is unrelated to the strategies and therefore not useful. Other factors include unreliable, insufficient or contradictory data. There is no precise rule for dealing

with such issues however, using multiple lines of evidence can help alleviate the effect of these issues. For example, comparing the results of site visits to reports made to the Intermediary Body by the entities implementing programs: if they do not match then there is contradiction that must be investigated. Data interpretation and analysis is a complex process that is often undertaken by specialized researchers who are involved in academic research in the pure sciences or in the social sciences. This section of the Methodology focuses on adapting and simplifying these complex methods to allow the monitoring process to bring important implementation information to the fore. In this sense, interpretation and analysis brings meaning to operational implementation data that has been collected; within this context, the PPU Team needs to be entrepreneurial and inquisitive in their analysis, particularly during site visits.

4.3 MONITORING OPERATIONS AND REPORTING

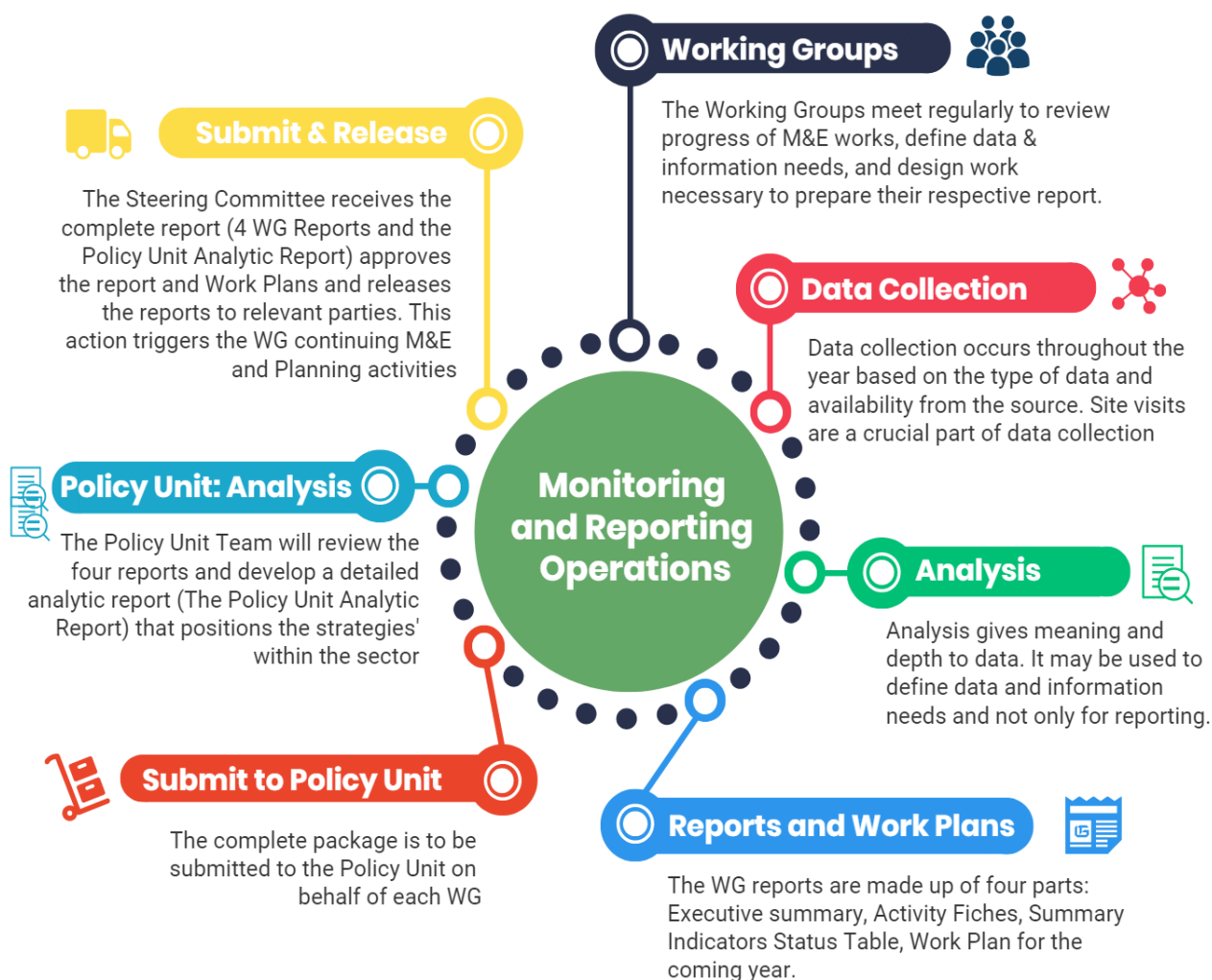
This section describes the main process of preparing the Annual Monitoring Report. This is complemented by the Guidance document developed in October 2017 to assist the Working Groups in preparing the first MoNE Annual Monitoring Report. The guidance document has been updated and included in Appendix 2 to reflect the lessons learned from the first monitoring and reporting exercise.

The Working Groups and the Bank team, with significant support from the Policy Unit, jointly developed the templates and process for the M&E Methodology.¹³ The standard planning and reporting templates examine implementation progress and factors related to progress for the year under review. The results of this examination provide a basis for planning activities for the year ahead. This approach helps build on successes; improves allocation of resources, emphasis, and efforts; and addresses challenges and obstacles encountered by adjusting plans and allocations for the next year. It integrates performance information into planning: using analysis to turn raw performance data into more effective future activities– it turns insights into action. The importance of this approach cannot be understated. The year-to-year continuity and the evidence-based decision-making improve the chances of achieving strategy objectives. This approach will help move strategy implementation from execution of a set of detached activities within separate strategies to an integrated education reform program.

The templates are populated by the Working Groups through queries of national and international databases, research, outreach, site visits, consultations, and analysis. Site visits and outreach play an important role in giving voice to local/unit level entities that are executing projects, programs and activities. This approach produces an integrated evidence-based report on past activities with analysis on opportunities and challenges, along with a reasonable plan of action for the coming year. The ensuing sections of the M&E Methodology describes how this will be achieved as encapsulated in the infographic below.

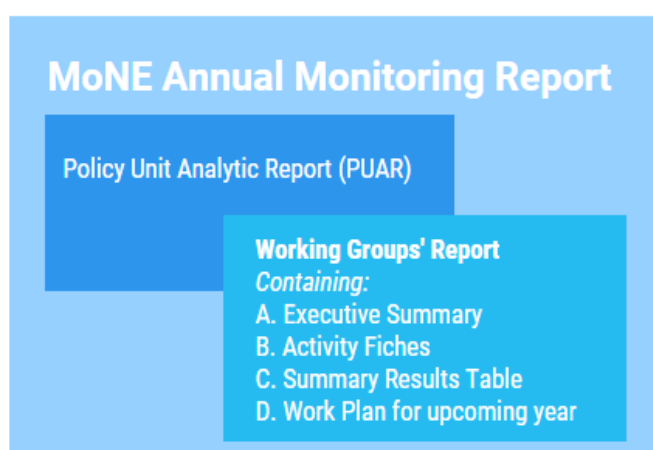
¹³ The joint development process began with two workshops on M&E held in Romania, the first in August 2017 and the second in October 2017. It continued through December 2017 with intensive training and group and individual coaching.

Figure 7 M&E Operational Cycle



4.3.1 Process and Structure of the Annual Report

The steps below are presented by order of occurrence in the process not by the actual sequential order in which they appear in the report. The process begins with each working group collecting data and conducting basic preliminary interpretation and analysis throughout the year. By October, most of data should be collected, recognizing that some government statistics will not be available until early in the new year. Nonetheless, in late autumn, the Working Groups will begin organizing the data into activity fiches and begin undertaking deeper analysis of the previous year's progress. This will result in a detailed description of each activity for which investment was made: in kind, or in financial resources. The summary results table shows these findings and the main issues related to the activity to give the reader a quick reference. The work plan for the coming year is addressed next: it is a function of the assessment of the previous year's progress. Finally, the executive summary is produced at the end of the process so that it can provide key findings on performance recommendations



and deliver key messages for each of the four strategies. When all four Working Group reports are ready, they are submitted to the Policy Unit, at which point the Policy Unit Team takes ownership of the process and proceeds to perform a deep analysis of the progress. The output of this analysis is titled: Policy Unit Analytic Report (PUAR). The Annual Monitoring Report is comprised of the PUAR with the four WG reports and plans attached in appendix.

The activity fiches are the backbone of the Annual Monitoring Report. Activity fiches have been developed for use by the Working Group to help organize data and progress information on each activity into the current year's workplan. Each fiche covers one or more activity within a Measure or Flagship Program; it captures all information related to those activities including relevant information from the parent measure or flagship program such as the final target, the target for the year for the specific activity, and the current progress value for the indicator. This is explained in detail in the Guidance document attached in Appendix 2.

The fiches represent the organized building blocks from which to construct the overall strategy status of the strategy; they are functional analytical tools. This section requires drilling deeply into: (i) what worked and what didn't; (ii) the relationships between activities within strategies and across strategies; and (iii) the presence or absence of enabling factors such as human, material and financial resources, and/or regulations or laws that are required to proceed. Every aspect as to why an activity proceeded as planned, in part, or not at all, must be investigated, examined, and analyzed: (i) in its own context; (ii) in connection to related activities; (iii) for its effect on future activities, other measures within the strategy, and on activities in the other strategies. For further guidance on data interpretation and analysis, please refer to section 4.2: "Data Interpretation and Analysis". As a result of the examination of activity implementation, the Working Groups will make recommendations on future activities or the continuation of the activity (if that is expected). The recommendations will also cover issues such as the validity of the indicator and final target; requirement of additional resources; or changes in tactics or target group(s). The recommendations must be supported by activity implementation analysis: **there must be a direct link between the recommendation and the findings from the activity analysis.** The Working Group may (and often will need to) cross reference other fiches related to the recommendation.

The activity fiches include a section related to the work plan for the coming year. The results of the activities and the lessons learned from implementation will inform future planning along the same measure and/or flagship program. As such the Working Group provides a rationale that underpins its planning in the Work Plan Section of the report. The rationale may come from recommendations or lessons learned from activity or strategy implementation, it is important to note that a recommendation may call for an activity to be cancelled if it has proven redundant or misaligned to the objectives of the parent measure.

The Summary Results Table is simply a quick reference to the activity fiches. It allows the reader quick access to key activity details for the year: indicators, planned and actual target, as well as a short commentary capturing the key successes, obstacles and recommendations.

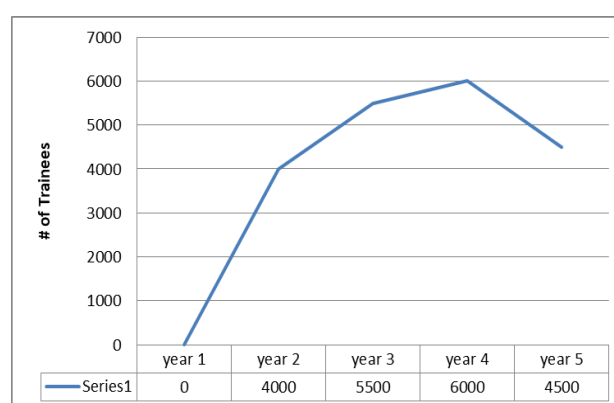
Effective planning is based on lessons and findings from the previous year's implementation; this allows the Working Groups to update activities that were designed in 2013 and which may no longer be valid or relevant. The project fiches examined what worked and what didn't and have recommended how to continue, what to change and what to stop doing. They provide a clear point of progress, also defining the starting point for the next year. When the planning process is combined with examination of previous work, the planning exercise shifts from a static administrative activity to one of cohesion and continuity from year to year and that helps it respond more directly to the high-level strategy objectives (Vertical

Integration). The new activities must be grounded in past accomplishment or challenges – this factor will have been addressed already in the activity fiches, and will be expanded to include important details such as: (i) activity target forecast for the coming year, (ii) output indicator; (iii) responsibility for execution; and (iv) time line.

During the preparation of the first MoNE Annual Monitoring Report which tested the May 2017 draft M&E Methodology it became apparent that the Working Groups did not decompose the strategies into achievable work packages in their 2017 work plans. In technical terms, they did not develop a sufficiently detailed Work Breakdown Structure (WBS) that showed the key steps needed to complete outputs and by consequence, achieve outcomes. For example: “establishment of a specialized unit” was entered in the LLL workplan simply as “establishment of a specialized unit”. Such an approach fails to detail, sequence, and organize every important activity related to setting up a specialized unit such as legal, financial, operational, and institutional actions required for an output. As the work plan does not recognize the actions required to develop the specialized unit, the report cannot capture or gauge progress and by consequence no one can address obstacles and challenges. The report will merely state that the work is in progress or incomplete. The training and coaching provided to the Working Groups, including that for preparation of the Annual Monitoring Report, addressed this matter. Additional training will be provided in 2018 to improve and imbed this work planning process in the Working Groups and for selected professionals from various ministries, departments and agencies.

Targets and time lines are key elements of the work plan and are intricately tied to the Work Breakdown Structure. Previous work plans that were examined during the preparation of the First MoNE Annual Monitoring Report showed that annual targets and time lines were either arbitrarily set or the product of a basic calculation. For example, if the final target is 20,000 teachers trained in 5 years, the planner merely divided 20,000 by 5 and arrived at an annual target of 4000 per year. However, such an approach is incorrect. Setting annual targets and time lines must take into consideration enabling factors. For example, if an activity to train teachers in an advanced teaching method required: (i) testing to precede the training to select the appropriate teachers, and (ii) availability of external financing, then training could not commence until these two conditions were met. In this case, dividing the target of 20,000 teachers by the 5 years will create a negative assessment for the first year because it would be impossible to train 4,000 teachers when the effort is dedicated to preparatory work. Similarly, setting a target within a year also requires careful consideration. Using the same example, if the preparatory work is complete in the first year but external financing is not available until mid-way through the second year, a simple calculation will not be reasonable; the planners need to consider the number of teachers who can be trained in remaining 2 quarters rather than the whole year. It should be evident at this point that setting targets and timelines require careful consideration and calculation even when built on uncertainty. Planning would generally be expected to follow the graphical curve shown in figure 5, however; workplan design does not always follows a typical trajectory. Each year changing factors and conditions need to be taken into consideration to evaluate what can be done, how much, and when.

Figure 8 Typical Target and Planning Curve



Planning is not always an accurate and precise exercise; unpredictability and uncertainty are common. While it is difficult to predict availability of external budgets or new legislation with accuracy, it is possible to apply a conservative forecast that allows planners to set reasonable time lines and targets based on the collective knowledge and experience of the Working Group members. This gives the work plan a good structure that reflects some of the bottlenecks and allows Working Groups to take advantage of opportunities as they occur. In case the enabling conditions occur sooner than anticipated, the work may begin earlier and the target may be exceeded. But, if the enabling conditions are not present, then careful planning will have lessened any potential damage caused by expectations set too high.

The Working Groups will include an executive summary to their respective reports. This should be the last part of the process so that the WGs have useful information about progress, challenges, and opportunities. The executive summary should not be a copy of recommendations and issues detailed in the Activity Fiches and work plan. It should contain a synopsis of the key recommendations made in the project fiches, but this needs to be a deeper analysis of strategy performance based on the findings of the Monitoring activities. The executive summary should contain, at a minimum: (i) connection to the other strategies; (ii) connection to other government strategies and initiatives that could have an impact on the strategy; (iii) material and financial resource issues such as bottlenecks and obstacles; and (iv) changes recommended by the analysis. It should also contain an exploration of the key issues facing the sector, and how these will impact the strategy.

Each Working Group, using the same templates, will submit their respective report to the Policy Unit. The PPU Team will then begin its detailed analysis and preparation of the Policy Unit Analytical Report.

The Policy Unit Analytical Report contains all four WG reports, giving the reader, a clear understanding of the status and issues revealed by the WGs. While the WG reports are focused on the progress of the previous year's activities and on planning for the coming year within each of the strategies, the PUAR produced by the Policy Unit Team uses a wider lens to examine the obstacles, challenges and opportunities common to the four strategies. The PPU Team members are also members of the four working groups, as such, by the time this stage is reached, the PPU Team has had the time to reflect and absorb all factors affecting implementation and the implications and consequences of these factors. The PUAR examines the strategies' effect on the education sector as a whole, as well as the effect that the changes are expected to bring to social and economic development in Romania. The PUAR will also contrast Romania's progress to that of the EU. The PUAR should also develop a forecasting model on whether and when strategic targets will be met. For example, if the ESL rate is to be decreased to 11.3 percent by 2020 and if the current status is 18.5 percent, given the rate of progress/regress so far, when and how could the 11.3 percent target be met? It will also need to look at the different scenarios that are available with increased resources, and how future programming should be designed to achieve this reduction.

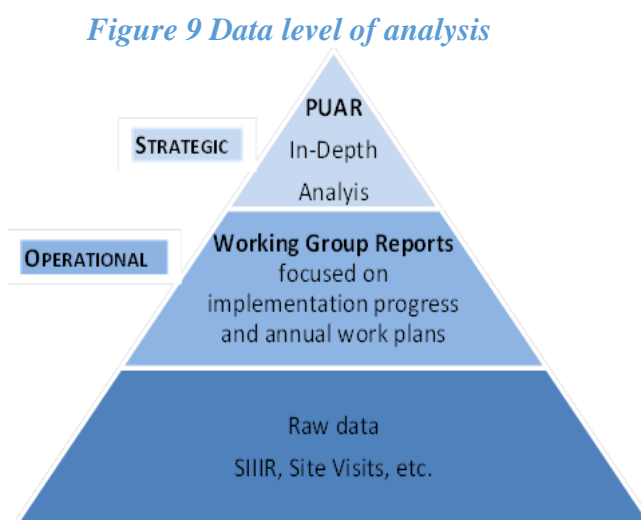
The PUAR includes key messages and key recommendations that impact strategies. The First Monitoring Report found that there are financing delays that have impacted progress in all four strategies; additionally, not all available was targeted where it was most needed, i.e., rural areas. These issues are best addressed by the PUAR as they impact all four strategies. Other issues may arise in the future and will need to be addressed at this level.

The PUAR is not exclusively a progress report, but a report card on strategy intervention; it will draw from the executive summaries of the Working Groups' reports and expand on the sector analysis found there. It will compare the current position of the key indicators within

each strategy to those of the EU or to other comparable countries, and it will reinforce key messages in a clear and concise manner. The PUAR needs to be a standalone document that captures the comprehensive state of play of the four strategies within the national and regional contexts. The Working Groups provide the detailed technical information that support the conclusions and recommendations in the PUAR. The first MoNE Annual Monitoring Report is available as a background document, it was subject to WB team peer reviewing and substantive inputs. It can be used by MoNE as a model, to be revised as necessary.

The PUAR draws on the all the elements found in this Methodology with special emphasis on analysis.

The PUAR is not a summary repetition of the contents of the Working Groups Reports but a critical analysis of the implementation of the strategies based on these reports and on other data and information (e.g. EU reports, international assessments). Section 4.2 of this Methodology provides guidance for analysis which should be most prominent in this section of the MoNE Annual Monitoring Report. While the Working Groups Reports inform the



reader of the progress of the implementation of the four education strategies, the PUAR provides the meaning of that status to the education sector. The PUAR converts the information in the Working Groups Reports into information that can be used for strategic decisions on (i) resource allocation; (ii) strategic orientation; (iii) corrective redesign and (iv) upcoming calls for project proposals. The PUAR’s analysis should be as deep as it is broad. Deep in the sense that it should investigate, validate, and scrutinize the findings of the Working Groups for meaning for the education sector, employment, equity; in short, all social conditions to which the strategies contribute. Broad in the sense that the PUAR should (i) compare the position of Romania’s result and position to that of the EU and other comparator countries; (ii) examine the trends of change and investigate the reasons for divergence in these trends (for example: reduction in ESL in EU while increase in Romania); and (iii) draw from international lessons where similar reforms were undertaken and similar challenges faced.

The table of contents of the PUAR is shown below with explanatory notes for each section.

Table 8 – The Public Unit Analytical Report Outline

	CONTENT	DESCRIPTION
	Summary	The summary should always be written last. The Public Policy Unit and Working Groups would benefit from training on the World Bank’s Writing Executive Summaries.
1	Introduction	In the First MoNE Annual Monitoring Report this section provided important context; in subsequent reports this section will include changes to the methodology and the rationale for these changes, particularly as they deviate from the initial M&E Methodology.
1.1	Methodology	
1.1.1	Principles	
1.2.1	Methodological approach	

	CONTENT	DESCRIPTION
2.	General Situation (Context)	<p>This section provides an opportunity for evidence based messaging, and for context and continuity. Generally, this section should contain: (i) a snap shot of the year under review; and (ii) an exploration of trends from year to year with explanation and forecast models where possible; (iii) synergies between the strategies; (iv) main impacts of the strategies on the sector; and (v) when Site Visits become more common, vignettes and data to show effect on persons and institutions.</p> <p>The sections 2.1.1 and 2.1.2 are determined by the main issues raised in the year under examination. In the 2017 MoNE Annual Monitoring Report the two main issues were the slow start of the funding program and the rural-urban gap. In 2018 there may be different issues, there may be less or more, or the issues may remain the same. In all cases the section should state whether major challenges from previous years were resolved or not.</p> <p>This section should also show the main strategic indicators, their status at the time of reporting and comparison to EU performance on those indicators. Detailed discussions should explain the discrepancies and evidence should be used when targets are met or exceeded. This section should also draw forecasting models based on implementation information.</p> <p>In the future, when evaluations begin, the PUAR should include discussion on evaluations in the analysis found in this section.</p>
2.1	Prerequisites for implementing the education and training strategies	
2.1.1	The 2014-2020 programming period- an arduous start	
2.1.2	The rural-urban gap- a challenge in meeting strategic targets	
2.1.2	Progress of the education and training strategic indicators	
2.1.3	The status of the education and training 2020 strategic targets	
2.1.4	Budgetary effort of the Ministry of National Education in 2017	
3.	Status of implementation of the education and training strategies	<p>This section is dedicated to the analysis of the reports of the four strategies. Building on the analysis provided by the Working Groups, the PPU Team will take a birds-eye view for each of the strategies highlighting main constraints, opportunities, weaknesses and successes. The PUAR will not provide operational depth as this is in the Working Groups Reports. Instead, the PUAR will look for synergies between the four strategies and between the strategies and other government and non-governmental initiatives. The PUAR will also explore what worked, what didn't and why, and will make recommendations based on the evidence provided by these reports.</p> <p>The First MoNE Annual Monitoring Report</p>
3.1	Strategy on reducing early school leaving in Romania	
3.1.1	Specific indicators	
3.1.2	Status of implementation of the main pillars of the strategy	
3.1.3	Action plan for 2018	
3.2	The strategy for vocational training and education in Romania for 2016 – 2020	
3.2.1	Specific indicators	
3.2.2	Status of implementation for strategic objectives	

	CONTENT	DESCRIPTION
3.2.3	2018 Action Plan	provided a starting point, subsequent Monitoring Reports will need to show the trend from previous years so that the reader gets the sense of the change taking place, whether negative or positive.
3.3	National Strategy for Tertiary Education 2015-2020	
3.3.1	Specific indicators	Finally, the PUAR should make a critical analysis of the annual work plan for the upcoming year showing high level links to the main indicators and highlighting changes in the operations that will enhance performance. Since the PPU Team is part of the Working Groups and therefore participants in the design of the annual work plan, they will be familiar with the issues and changes.
3.3.2	Implementation status for the main strategy pillars	
3.3.3	2018 Action Plan	
3.4	National Lifelong Learning Strategy 2015-2020	
3.4.1	Specific indicators	
3.4.2	Implementation status for the strategy pillars	
3.4.3	2018 Action Plan	
4	Findings and recommendations	This is the most important section of the PUAR, it contains the validated findings and recommendations for actions by the various government institutions responsible for the organization, financing and implementation of the strategies. Recommendations will be clearly stated with timeline and responsibility and will be drawn directly from the analysis found in the body of the report.
4.1	Challenges in the monitoring process	
4.2	Recommendations	In future reports, this section should also detail the status of recommendations from previous years and provide an explanation as to why a recommendation was abandoned (rejected) or not implemented.
Annex	Working Groups Reports	The annex contains the four reports of the Working Groups based on the templates and formats provided in this methodology.

Figure 10 - M&E Process Time Line



5 EVALUATION METHODOLOGY

The Institute of Education Sciences (IES) was officially appointed as the Evaluation Body in Decision Note No:111/DGMSPP/03.05.2018. The significance of this appointment is that evaluations will be implemented by an independent external entity according to international best practice principles.

The WB follows the same principles with its Independent Evaluation Group (IEG). The Sourcebook for Evaluating Global and Regional Partnership Programs states that:

The evaluation function must be located independently from the other management functions so that it is free from undue influence and so that unbiased and transparent reporting is assured. Accordingly, the members of an evaluation unit or team should not have been directly responsible for setting the policy, design, or overall management of the program, nor expect to be in the near future. Members of an evaluation unit or team evaluating a GRPP should report to a unit separate from program management.

This position on evaluations is not unique to the WB IEG; the UNDP echoes the same principle in its evaluation policy from 2011:

The evaluation function should be structurally independent from the operational management and decision-making functions in the organization so that it is free from undue influence, more objective, and has full authority to submit reports directly to appropriate levels of decision-making.

In keeping with this, the evaluation methodology is limited to approaches where the emphasis is on the role that MoNE, the WGs and others will play in support of evaluations. Another important reason for appointing the IES as the Evaluation Body is that the expertise required is vastly more specialized than the expertise needed for monitoring. Evaluations must be conducted by experts in research methodology, data science, with a strong background in statistics in addition to subject matter knowledge. The IES possesses the necessary subject knowledge to formulate insightful and probing evaluation questions; it also has experience in undertaking investigations with scientific and ethical standards, and therefore appears to be the ideal choice to undertake evaluations for the four strategies.

The evaluation unit at the Ministry of European Funds has developed a robust evaluation plan for POCU which includes several evaluation activities pertaining to the Education Priority Axis. It will be important for the Working Groups and IES to correlate evaluation activities to avoid duplications. Cooperation and correlation of evaluation activities will be facilitated inter-alia, through the participation of the Intermediary Body in supporting the activity for the WGs.

Monitoring is in the scope of work of the Working Groups, MoNE Policy Unit and the Policy Unit Team, these units also have an important role in the evaluation process. As noted earlier, monitoring will reveal issues that are not resolved at the operational level and therefore merit more profound investigation. Monitoring should frame the evaluations; it is the early warning system for deeper structural and developmental challenges. The WGs, PPUT and the MoNE Public Policy Unit will trigger evaluations, supervise and support the work; and working with IES, will define the evaluation questions. Evaluations are typically centered on investigation questions that are determined as a result of monitoring information and by the big social development questions that the reforms promise to deliver. Evaluations use some of the same

instruments as monitoring, i.e. surveys, questionnaires, observations, but they need to be designed differently as they seek more in-depth information using a structured scientific approach. Evaluations should be conducted annually. There are a variety of reasons for evaluations, typically a function of time, focus and purpose. Below are samples of the various types of evaluations that can be undertaken for the four strategies.

Table 9 Types of Evaluations

Timing	
Ex-Ante evaluation	conducted before the implementation of a program
Mid-term evaluation	conducted in the middle stages of a program
Ex-post evaluation	conducted after the completion of a program
Focus	
Thematic evaluation	Focused on a specific thematic priority that cuts across regions or sub-sectors, for example: the effect of the 4 strategies on rural communities.
Policy evaluation	Examines the appropriateness of one policy (or more if related) and its implementation.
Sector evaluation	Examination of a collection of projects in a specific sector that contribute to specific objective. For example, examination of the effect of nurseries, milk and croissant, and school after school on ESL.
Cluster evaluation	Examination of a series of activities, projects, or programs in a specific sector or a specific geographic region.
Program evaluation	Evaluation of a centrally supported and coordinated program organized to achieve a national sectoral objective.
Project evaluation	Evaluation of a single projects
Purpose	
Formative evaluation	The purpose of this is to examine ways to improve performance. Such evaluations are conducted during the operational life of projects or programs.
Process evaluation	The focus here is on mechanics of operations. Some of the issues examined include internal dynamics of implementing agencies, policy instruments, process and systems of service provision, management, and the interaction of these issues.
Summative evaluation	This is an evaluation conducted at the end of a project, program or reform initiative. It helps determine the extent to which the outcomes have been achieved and the changes that took place as a result of implementation.
Meta-evaluation	It involves an aggregation of findings from a set of evaluations. In essence, it is the evaluation of evaluations and of evaluators.
Impact evaluation	There typically needs to be sometime between the end of an initiative and start of an impact evaluation. Impact evaluation needs to examine how outcomes have produced (intended and unintended) changes of the objective and goal statements of the initiative. Impact evaluations explore the state of the beneficiaries in the absence of the intervention (counterfactual). For example: without the school after school program would ESL drop or increase?

Step 1: Review the Strategy to clarify the strategic objectives, components and drivers

The starting point for designing an evaluation is to review the original strategy documents and available monitoring documentation. This task can be delegated to an ad-hoc Evaluation Sub-Group (ESG) made up of members of the Working Groups that includes a member of the Policy

Unit Team. The task involves identifying and extracting key issues that could be the subject of an evaluation. The issues should not be limited to outcomes (expected change from the strategies) only but can also include matters related to process (implementation mechanisms).

There are several cross cutting themes that should be incorporated at this design stage: gender, residential area, ethnicity, and the socio-economic background of students.

Step 2: Define the purpose and scope of the evaluation

In defining the purpose and scope, the ESG may consider the following questions:

- Why is the evaluation necessary at this time?
- Are there important decisions that depend on the evaluation?
- What information will assist decision makers and stakeholders?
- Is there a contractual obligation to undertake the evaluation? Is this the only motive?

Step 3: Define the type of evaluation:

There are typically two types of evaluations that will be used to look at the effect of the strategies on the education sector: (i) formative evaluations conducted during the implementation of the strategy or any of its programs or components; (ii) summative evaluations conducted at the end (or at renewal) of implementation of the strategy or any of its programs or components. Within these two types the focus can be on process, outcomes, or a combination of both.

Process evaluations	The focus is on questions related to inputs, resources, activities, outputs, user experience and perception	Questions for a process evaluation will: <ul style="list-style-type: none"> – Focus on the program or a program component – Ask who, what, where, when, why, or how – Use exploratory verbs, such as report, describe, discover, seek, or explore
Outcome evaluations	The focus is on change, effect and impacts. These will be different depending on the timing of the evaluation in relation to the timing in implementation: <ul style="list-style-type: none"> (Short-term) Knowledge Skills Attitudes Opinions (Medium-term) Behaviors Actions (Long-term) Conditions Status 	Questions for an outcome evaluation will: <ul style="list-style-type: none"> • Be direct and specific as to the theory or assumption being tested (i.e., program effectiveness or impact) • Examine changes, effects, or impacts • Specify the outcome(s) to be measured

Formative Evaluations occur during the life of the project and are intended to strengthen or improve strategy implementation by providing insights into opportunities, success, and obstacles. This information allows decision makers to make changes to the strategy itself. Formative evaluations define the quality of implementation; they assess the design and organizational context; and examine resources, personnel, procedures, and inputs. They also inform implementation with the aim of maintaining, changing, or improving actions to ensure that the objectives will be met. Major questions for formative evaluations include:

Where is the problem identified by the Monitoring data and information, and how serious is it?

The most common method used here is an analysis of existing data and a review of its sources; the method also includes the use of surveys, interviews, expert testimony, and focus groups.

What changes are required to address the problem?

Simulation techniques are effective here as are: exploratory causal modeling, decision-making methods, project planning and implementation methods such as flow charting, PERT/CPM, and alternative project scheduling.

What change do we observe? Is in line with expected outcomes?

And if there is no perceptible change when we expect some, why is that? (Even during the project, we should be able to see some evidence of change.)

How well is the overall execution of the projects/programs?

Monitoring data and information is most useful here to help in the analysis of implementation.

Summative evaluations examine the effects or outcomes of strategies on the sector and society; they typically take place at the end of an initiative or at the renewal stage. They identify and describe the causes or attribution of results to the investment and activities or other factors outside the initiative. Summative evaluations also look deeply into the relative costs associated with the initiative and make judgments on the adequacy and accuracy of budgeting. They inform future initiatives, programs, and policies to help avoid mistakes; produce efficiencies and improve the effectiveness of future investments. Major questions for summative evaluations include:

What has been the effectiveness of the intervention?

Observational and correlational methods can be used to demonstrate that objectives have indeed been achieved. Analysis of implementation also helps to determine whether results can reasonably be attributed to the intervention and not to external, unrelated factors.

What is the net highest-level result?

Assessing cost effectiveness and cost/benefits along with qualitative methods that enable the Ministry to capture the full range of intended and unintended impacts is relevant here. Importantly, there is a need to draw lessons for future interventions to help improve performance.

Step 4: Launching the evaluation

Following completion of steps 1 to 3, the Evaluation Sub-Group reports to the Working Group for discussion and validation of the evaluation's scope, purpose and type. The validation triggers the engagement of the ESG with the Institute of Educational Sciences to plan and design the evaluation. The interaction between the ESG and the IES deals first with matters such as costs, time, personnel, and outputs, as well as potential constraints. When the ESG and IES arrive at an agreement on the evaluation implementation factors they will begin defining the evaluation question(s).

Step 5: Design and finalize evaluation questions

Evaluation questions are a short list of questions to be answered at the end of the evaluation; they should not be confused with questions in interviews or questionnaires. They represent the subject matter of the evaluation and should have the following characteristics:

- Clear, specific, and well-defined
- Focus on specific components or elements of the Strategies or their associated programs
- Measurable by the evaluation
- Aligned with the objectives of the Strategies

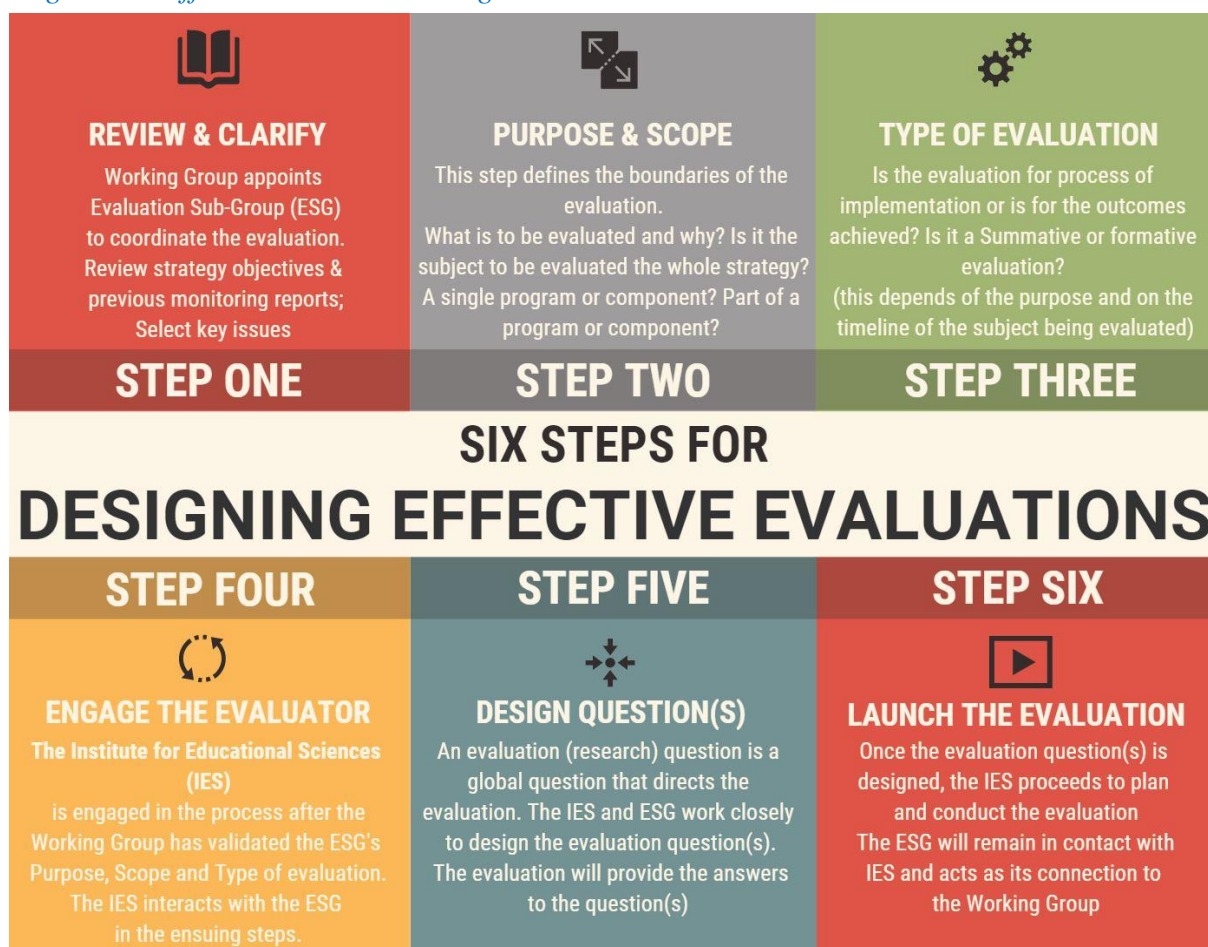
When developing the evaluation questions, keep in mind the following:

- Do the evaluation question(s) fit with the purpose, scope, and type of evaluation?
- How are the evaluation question(s) aligned with the objectives of the strategy and the components of the strategy that will be evaluated?
- Are these questions responsive to normative requirements?
- Evaluation questions are the cornerstone of an evaluation from which all evaluation activities follow.
- Evaluation questions will vary for process and outcome evaluations.

Once there is agreement between the ESG and IES on the main evaluation question(s), it is important to narrow down the number of proposed evaluation questions by a process of prioritization. Each of the questions should be tested for validity and if it represents a priority. For example: there may not be sufficient time to conduct a process and outcomes focused evaluation in the same timeframe. If the program is less than half complete a process evaluation may be more of a priority than an outcomes evaluation. Additional criteria to consider when prioritizing questions are:

- Importance to the strategy and stakeholders
- Provision of information which can be acted upon to make improvements
- Issue does not warrant an evaluation as it can be addressed in a focused monitoring visit and within reasonable timeframe

Figure 10- Effective evaluation design



When all these matters have been addressed and agreed upon between the ESG and IES, the IES will: (i) develop a detailed evaluation plan; (ii) adapt or revise instruments from the M&E Methodology or develop new instruments with new relevant content; (iii) identify the

respondents and calculate sample size necessary for meaningful results; (iv) prepare and undertakes all necessary steps for effective research; and (v) launch the evaluation. Although an ad-hoc group, the ESG will remain effective until completion of the evaluation and submission to the Working Group and the Policy Unit. During the evaluation and until submission by IES, the ESG will function as the intermediary between the Working Group and Policy Unit on one hand and between the Working Group and IES on the other. The ESG will address and resolve any issues that emerge during evaluation.

Impact evaluations are an important feature in the evaluation methodology. These occur later in the implementation time-line as they aim to measure the ‘effect’ of the reforms on the target population. The effect to be measured is behavioral, not merely quantitative. Impact evaluations will focus on the behavior of the system and the main participants. For example, if the target for lifelong learning is met, it will be important to understand what this means in terms of employment, economic change, quality of life etc. Impact evaluations will follow the same design and implementation process as the periodic evaluations however, with greater consultation during the design phase. Impact evaluations allow the evaluators to examine causal attribution and unintended impacts (change). The OECD-DAC (2010) provided the following definition: impact evaluations capture “positive and negative, primary and secondary, long-term effects produced by a development intervention, directly or indirectly, intended or unintended.”

An example of an effective impact evaluation can be found in the Ready-Set-Go Project (RSG) implemented by the Roma Education Fund (REF) Romania and supported through technical assistance by WB and funding from the Norway Grants. The project was aimed at addressing the early learning gap for Roma children. It was subject of an impact evaluation using the IDELA instrument (International Development and Early Learning Assessment), to assess the impact of RSG activities both on the development of children and on the home-learning environment in families benefiting from the program. In addition to program participants, the study included two control groups from similar localities. The design was developed with the objective of measuring the impact of program participation against a statistically similar group of non-participating Roma children as well as their non-Roma peers.

Impact evaluations require a counterfactual, i.e., what would have happened had the reform not taken place. This is done by comparing the target population that has benefitted from an initiative to a similar population not targeted by that program. Counterfactual investigation allows the evaluators to produce evidence of an initiative’s effectiveness and efficiency. However, the evaluators must be careful in choosing the group, for example, a comparison group that has not benefitted from the initiative being evaluated may in fact be the beneficiary of another initiative that has produced equal or better results. It is important therefore to fully understand the conditions of the comparison group. The complexity of impact evaluations reinforces the need for the type of scientific rigor found at the Institute for Educational Sciences. Appendix 3 provides hands-on guidance on possible impact evaluations.

6. M&E INSTRUMENTS

6.1 MONITORING INDICATORS TABLE

A major weakness observed by the Working Groups during the preparation of the first MoNE Annual Monitoring Report is the absence of clear indicator definitions. The Working Group returned often to the original strategies in an attempt to identify why such an indicator was chosen, what the rationale of its associated activity was, where the information would be found, and what calculations would be required among other issues.

To mitigate this time-consuming challenge, this section contains detailed monitoring indicator tables with clear definitions for each strategy:

Table Headings	Description
Outcomes and measures	As stated in Strategies
Indicator	As stated in Strategies
Definition	Provides a clear definition of the indicator
Method	Provides a formula to calculate the indicator and where relevant, provides the link to or location of the specific source of data
Instrument for monitoring	Defines the instrument for use in monitoring
Instrument for evaluation	Defines the instrument to use in evaluation
Availability of data	Describes whether the data is readily available
Quality of data	Describes the quality of the data
Frequency of collection	Provides information on the availability of the data
Recommendation	As necessary, methodological recommendation for gathering, analysis, and reporting are added.

The Monitoring Indicators Tables should not be static but a living document responding to changes in strategies and work plans. For example, if an indicator is removed it should be removed from the tables, and if changed, those changes should be reflected in the tables.

The development of the Monitoring Indicators Tables with a focus on clear definitions presented an opportunity to improve the horizontal integration among the four strategies. This involved: (i) focusing on the outcomes and main outputs (reserving operational outputs for annual workplans that are designed by the Working Groups); and (ii) removing duplication in indicators between strategies and recognizing synergies where they exist. In addition to the tables, the following section provides sample survey questions and questionnaires for use by the Working Groups in view of qualitative data relevant to strategy implementation; these complement the Monitoring Indicators Tables and provide additional information on methods for data collection, particularly during Site Visits.

MONITORING INDICATORS TABLE - STRATEGY TO REDUCE EARLY SCHOOL LEAVING

OUTCOME/MEASURES	INDICATORS Baseline Target	DEFINITION	METHOD	INSTRUMENT/ AVAILABILITY/ QUALITY/ FREQUENCY / SOURCE
Outcome 1. Increase Access to Early Childhood Education and Care (ECEC)				
Access to Early Childhood Education and Care (ECEC) is increased with emphasis on disadvantaged Groups	<p>1 Gross enrollment rate GER (0-5) Baseline: 43.0% Target: 58.5%</p> <p>2 Gross enrollment rate GER Preschool (3-5) Baseline: 83.8% Target: 93.0%</p> <p>3 Gross enrollment rate GER Ante preschool (0-2) Baseline: 2.7% Target: 23.3%</p>	Number of children enrolled in pre-school and/or pre-school levels, regardless of age, as a percentage of the total population of the official age group corresponding to ante-preschool and/or preschool education levels (0-5)/ (0-2)/ (3-5).	The official statistics are requested from the NIS by MONE, based on the agreed Memorandum, for the beginning of the school year for the reported year (ex: for 2018, data will be requested for the beginning of school year 2017/18) $GER_{t05/t02/t35} = \frac{Et_{05/02/35}}{Ptv_{05/02/35}} * 100$ where GER _{t05/t02/t35} - gross enrollment rate in ante-preschool and/or preschool, for 0-5 or 0-2; Et _{05/02/35} - total number of students enrolled in the year t, in ante-preschool or and preschool, irrespective of their age; Ptv _{05/02/35} – total population of age “v” corresponding of ante-preschool level (0-2) or preschool level (3-5), or both (0-5), in the school year “t”.	Official Statistics Available Good Annual NIS-SIIR http://statistici.inss.e.ro/
1. Strengthen and consolidate ECEC to enhance effectiveness	4 A comprehensive framework for ECEC is adopted Baseline: no Target: yes	A comprehensive framework adopted by the MONE with endorsement from labor and health sectors. A comprehensive framework must address the needs for children up to age 5, and include areas	The comprehensive framework for ECEC shall be adopted by MONE through ministerial decision, or by government through ordinance/decision.	Checklist Others Unknown One-time Official Gazette

		of healthcare, nutrition, early education, social and child protection			
	5	Number of teachers trained Baseline: 12.740 Target: 12.740	Number of teachers, puericultors, support teachers for SEN students (in ante-preschool and preschool level) trained	Cumulative Number of teachers (ante preschool and preschool level) who have benefitted from training or exchange programs under POCU projects. Each year the total number of teachers trained, including previous years, will be reported.	Data request Partially available Unknown Annual POCU Data
2. Recognize the important role of families (children 0-3 years) by engaging them directly in parental education and awareness programmes and provide financial incentives to support them	6	Number of parents engaged in ECEC activities Baseline: 867.766 Target: 867.766	Number of parents who participated in parental education activities organized through projects and/or programs, involving parents in early childcare and education in the previous year.	Data will be collected by the IT Directorate of MoNE, at the request of the PPU, using SIIR, as well from School Inspectorates and IB POCU. An attribute can be customized to collect data at the school level in SIIR	Official Statistics Partially available Unknown Annual POCU Data, SIIR, School Inspectorates
	7	Number of community- and parental-based programs in kindergartens and nurseries Baseline: not measured Target: measured	Number of community- and parental-based programs in kindergartens and nurseries organized in the previous school year	Through data request from PPU to School Inspectorates (disaggregated for ante preschool and preschool level).	Official Statistics not available Unknown Annual MONE-School Inspectorates
	8	Number of children (0-5) supported with financial incentives Baseline: not measured Target: measured	The number of beneficiaries supported with nursery tickets and social tickets to attend kindergarten. This data should be disaggregated on area (rural/urban) and (Roma/non-Roma).	The specific report on social tickets for kindergarten attendance will be extracted from SIIR- Student management module - Report no. 371 Nursery tickets are not collected through SIIR at this point and should be included in the new nursery module.	Official Statistics Partially available Unknown Annual MONE-SIIR
3. Reach local authorities, communities, parents, and other stakeholders to ensure appropriate support for	9	Number of new nurseries established and kindergartens retooled to support nursery services	The number of new nurseries set up and retooled kindergartens supported by ESI and budgetary funds.	The data will be extracted from SIIR by exporting the schooling plan – 352, filtering according to property, legal entity SIIR code, school units that have ante-preschool level and/or preschool level.	Official Statistics Available Very good Annual MOE-SIIR

enrolment and retention purposes	(disaggregated for public and private, urban/rural). Baseline: 286 Target: 1,562			
4. Develop new approaches to ensure the provision of sufficient numbers of qualified teachers (<i>educator, puericultor</i>) in all geographical locations and with required language skills, particularly in rural/disadvantaged areas, (including financial incentives, mobility schemes)	10 Number of teachers / puericultors supported, employed in remote and disadvantaged areas Baseline: 2,262 Target: 6595	The number of teachers/puericultors supported (including through financial incentives and mobility schemes) employed in ECEC, in remote and disadvantaged areas through ESI funds	The data will be reported annually, at the request of PPU, from IB-POCU, disaggregated by locality, area, financial incentives or mobility scheme.	Data request Available Good Annual Other
Outcome 2. Providing quality primary and lower secondary education for all				
Quality primary and lower secondary education for all is provided.	11 Gross enrollment rate (GER) in Primary and Lower Secondary (6-14) Baseline: 90.6% Target: >96%	Number of children enrolled in primary and lower secondary level (excluding students enrolled in Second Chance program), regardless of age, as a percentage of the total population of the official age group corresponding to primary and lower secondary education levels (6-14)/ (6-10)/ (11-14).	At the beginning of the school year for the reported year (e.g.: for 2018, data will be requested for the beginning of school year 2017/18) $GER_{t614/t610/t1114} = Et_{614/610/1114} / Ptv_{614/610/1114} * 100$, where $GER_{t614/t610/t1114}$ - gross enrollment rate in primary and/or secondary, for 6-14, 6-10 or 11-14; $Et_{614/610/1114}$ - total number of students enrolled in the year t, in primary and/or secondary, irrespective of their age; $Ptv_{614/610/1114}$ – total population of age “v” corresponding of primary level (6-10) or secondary level (11-14), or both (6-14), in the school year “t”.	Official Statistics Available Good Annual NIS-SIIR http://statistici.inss.e.ro/
	12 Gross enrollment rate in Primary (GER 6-10) Baseline: 87.70% Target: 97.00%			
	13 Gross enrollment rate in Lower Secondary (GER11-14) Baseline: 91.20% Target: 95.00%			

	14	Percentage of low achievers in reading Baseline: 37.30% Target: <30%	Percentage of low achievers in reading, math and science (PISA), maximum proficiency level 2 (basic level)	The official data sources are the PISA studies. Data will be gathered directly from OECD as soon as it becomes available, the PISA assessment is taken every 3 years.	Official Statistics Partially Available Good Other OECD
	15	Percentage of low achievers in math Baseline: 40.00% Target: <30%			
	16	Percentage of low achievers in science Baseline: 37.30% Target: <30%			
	17	Percentage of scores higher than 5 at national examination (grade 8) Baseline (2017): 76.97% Target: >85%	Percentage of average scores and scores per subject, higher or equal to 5, at the National Examination (EVNAT) relative to the scores achieved by all participants at all subjects/Romanian language/Math.	The official exam results are published by MoNE on the www.data.gov.ro portal. PrMED is calculated as a percentage, disaggregated on the school area (rural / urban) as follows: PrMED = NrMED / PrezMED, where PrMED - Percentage of 5 and over 5 averages/scores obtained at EVNAT/Romanian/Math NrMED - Number of average scores 5 and over 5 achieved at EVNAT/Romanian/Math PrezMED - The number of students participated at all subjects	Official Statistics Available Very good End of school MoNE-SIIR (PMIPN) and/or data.gov.ro
	18	Percentage of scores higher than 5 at Romanian language - National Examination Baseline (2017): 85.98% Target: not specified			
	19	Percentage of scores higher than 5 at Math - National Examination Baseline (2017): 66.01% Target: not specified			
5. Develop and implement plans to provide adequate access to quality education, especially for children from groups at risk	20	Number of students at risk of ESL supported through individual learning plans Baseline: no Target: 60,317	Number of students at risk of ESL from communities disaggregated per area, Roma/non-Roma, remote, education level and county	Based on the data reported annually by schools, through County School Inspectorates. It will be possible to collect the data from SIIR through an early detection system.	Custom Data Others Good Annual

		supported through individual learning plans		MONE-SIIR/School Inspectorates
	21	Number of teachers mentored through school based programs Baseline: no Target: 6,182	Number of teachers trained and qualified through school-based mentoring in the previous year, disaggregated by county, area, SIRUTA level 3.	Data is collected and managed by the LLL Directorate of MoNE. Official Statistics Available Very good Annual Other
6. Establish a research group within MoNE to study educational reforms (including technology) and challenges specific to Romania	22	Research Group established, staffed and adequately financed. Baseline: no Target: yes	MoNE's Research Group is established, staffed and adequately financed.	RG-MoNE is considered established at least by Ministerial Order issued, with (1) staff and (2) adequate financing. It is very likely that this Research Group will not be established at all, there is a probability that its role will be taken over by the Institute of Educational Sciences. Checklist Others Very good Annual Ministerial order
	23	Number of research projects financed and producing actionable findings. Baseline: 0 Target: increased	Number of research projects financed and producing executable findings	While the RG of MoNE is not established, the only institute able to conduct this kind of researches is the Institute for Educational Sciences, who will also provide data for this indicator. Data request Partially available Very good Annual Other
7. Establish a training program accredited by MONE for teachers working with vulnerable groups or communities	24	Number of teachers trained in working with vulnerable students, groups or communities Baseline: no Target: 123,640	Number of teachers participating in training programs accredited by MONE, to be certified, qualified to work with vulnerable students or communities including through internship or exchange programs	The data will be collected based on request from PPU to the School Inspectorates. The program will be helped by Ministry design and approval of a system allowing one mandatory training day per month for teachers Official statistics/ Assessment Others Unknown Annual Other

8. Support communities and schools to achieve representative population balance in classrooms	25 Number of events and activities displaying the cultural diversity of Romania, elimination of prejudice and valuation of national identity Baseline: 0 Target: 2,011	Number of events and activities displaying the cultural diversity of Romania, elimination of prejudice and valuation of national identity organized in the previous school year.	The data will be collected through a yearly data request provided by the IT Directorate, at the request of the Policy Unit, from the county inspectorates.	Data request Available Good Annual Other
Outcome 3. Develop early warning systems and consolidate remedial and support programmes for students at risk in compulsory education				
Early warning systems developed; consolidation of remedial and support programs for students at risk of leaving compulsory education	26 Drop-out rate Baseline: 1.50% Target: -50%	The difference between the number of pupils enrolled at the beginning of the school year and at the end of the same school year, expressed as a percentage to the number of students enrolled at the beginning of the school year.	Data will be extracted from SIIR - Statistical data - Report no. 193 ("Students in study formations" multi-dimensional report) at the beginning of the current school year, for the completed school year. Staff should be trained to extract the data and calculate the indicators based on the formula (including disaggregation).	Data request Available Very good Beginning of the school year MONE-SIIR
	27 Drop-out rate G5 Baseline: 2.60% Target: ≤ 1.30%			
	28 Drop-out rate G1 Baseline: 2% Target: ≤ 1%			
	29 Drop-out rate G7 Baseline: 1.8% Target: ≤ 0.9%			
	30 Transition rate to G9 Baseline: 96.7% Target: ≥ 98.5%	Transition rate from lower secondary to the upper secondary school level	Data will be extracted from SIIR - Statistics - Report no. 193 ("Students in study formations") at the beginning of the current school year, not earlier than the first week of October). The report is filtered on the "9th grade", the sum of COPIIDISTINCTI column = value of the INSCRcIXAnCurent variable. Similarly, the same report will be run for the completed school year, filtering the table for the "8th grade", the sum of COPIIDISTINCTI column = value of the INSCRcVIIIAnIncheiat variable.	Data request Available Very good Beginning of the school year MONE-SIIR

			The transition rate is calculated as follows: $\text{TrAncurrent} = \frac{\text{INSCRclIXAncurent}}{\text{INSCRclVIIIAnIncheiat}} * 100.$		
9. Improve conditions and quality of SAS programs offered for students from groups at risk establishing quality standards for such remedial programs	31	Number of SAS programs Baseline: not measured Target: measured	Number of SAS programs organized in the referenced school year	MoNE's IT Directorate will collect this information using SIIIR, at the request of the Policy Unit, by requesting schools to fill in the custom attribute on the school entity named "Number of SDS type programs".	Data request Available Very good Annual MONE-SIIIR
10. Develop early warning and intervention systems to detect children at risk of repetition and dropout	32	Checklist developed. Baseline: no Target: yes	A checklist developed by MoNE experts to be used at classroom level for students at risk to guide them for counseling sessions.	Confirmation of a checklist developed and used in schools	Checklist Partially available Very good Annual others
11. Complete and support existing, fragmented counselling initiatives for students within and outside of the education system (students who have left the system)	33	School counselor/pupil ratio Baseline: 1 counselor/1,600 pupils Target: 1 counselor /800 pupils	Total number of school counselors per total number of students enrolled in compulsory education	Data will be collected from county Resource and Educational Assistance Centers (CJRAE, CMBRAE), by PPU request	Data request Available Good Annual Other
	34	Number of students at risk of ESL counseled Baseline: not measured Target: measured	Number of students at risk of ESL having received counseling. ESL students are defined by those who have poor achievements, and high absenteeism; they also tend to repeat or fail classes. Evidence shows that these students come from rural areas, low socio-economic families, vulnerable communities, Roma, parents with low education attainment or who are working abroad.	Data will be collected from county Resource and Educational Assistance Centers (CJRAE, CMBRAE), by PPU request	Data request/ Assessment Partially available Good Annual Other

35	Number of out-of-school students who have returned to school Baseline: not measured Target: measured	Number of out-of-school students who have returned to school	A custom query on SIIIR to obtain the list of SIIIR codes of students who are enrolled in the current school year and are not associated with a study group (a class) in previous school years.	Data request Available Good Annual MONE-SIIIR
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Outcome 4. Improve the attractiveness, inclusiveness, quality and relevance of VET

Improved attractiveness, inclusivity, quality and relevance of IVET	36	Total GER in IVET Baseline: 51.60% Target: > 58.60%	The number of children enrolled in IVET, regardless of age, as a percentage of the total population of the official age group corresponding to IVET education level (15-18)	Formula: $RBCIVET_{tx} = EIVET_{tx} / PvIVET_{tx} * 100$, as: RBCIVET _{tx} - GER on IVET, in the tx school year; EIVET _{tx} - total number of children enrolled in IVET, regardless of their age, in the tx school year; PvIVET _{tx} – total population from the v age group, as the official age group for the IVET educational level (15-18), in the tx school year.	Official statistics Available Very good Annual NIS-NBS
	37	Number of students enrolled in IVET Baseline: 19,229 Target: 154,746	Number of students enrolled in IVET in the current school year	Data will be extracted from SIIIR - Statistical data - Report no. 193 (“Students in study formations”) at the beginning of the current school year, the first week of October. The report will be filtered by level and specialty, and the column COPIIDISTINCTI will be summed up.	
	38	VET Completion rate Baseline: 94.00% Target: 98.50%	IVET completion rate for the current school year	By request from NIS, based on the agreed memorandum.	
	39	Employment rate of graduates Baseline: 52.60% Target: > 75.00%	Employment rate of the previous school year’s IVET graduates.	An inter-ministerial data exchange between MoNE and MLSJ, regarding the employees declared in Revisal (sent with encrypted NINs with a	

				commonly agreed encryption algorithm), and the list of graduates exported from SIIR.	
12. Increase IVET attractiveness and relevance by redesigning IVET pathways to increase flexibility and permeability, and by expanding quantity and quality of work-based learning opportunities with focus on re-entry of school leavers	40	Number of students graduating through IVET pathway Baseline: 19,229 Target: 154,746	Number of IVET graduates from the current school year	Data will be provided by the IT Directorate of MoNE, from SIIR, by extracting Report no. 193 (for the previous school year. The report will be filtered for the professional level, XIth grade and the sum of the graduated students (PROMOVAT) column will be calculated.	Data request Available Very good Beginning of the school year MoNE-SIIR
	41	Number of counselled students Baseline: not measured Target: measured	Number of counselled students in career and education choices, as target group for VET programs financed by POCU	The data will be requested annually from IB POCU.	Data request Partially available Good Annual POCU Data
13. Reform and enhance IVET system through curriculum reform and training of teaching and management staff, strengthening through stronger linkages with the employment sector	42	Number of vocational streams (pathways) Baseline: not measured Target: increased	Number of the vocational pathways from the national school plan	Data will be provided by SIIR, from Schooling Plan, filtering by Professional level and High school level - Technological pathway and sum the number of specializations/qualifications.	Data request Available Very good Annual MoNE-SIIR
	43	Number of teaching staff, managers, trainers and tutors (within companies) trained in new IVET curriculum Baseline: not measured Target: 10,702	Number of persons (IVET teachers, IVET school managers, tutors and company trainers) trained in the new IVET curriculum	The value of this indicator will be provided annually upon request by the IB POCU.	Data request Partially available Good Annual POCU Data

	44	Number of VET schools (IVET or technological high schools) rehabilitated, modernized, extended, equipped Baseline: not measured Target: increased	Number of VET schools (IVET and technological high schools) with rehabilitation, modernization, extension or equipment funded through the Regional Operational Program	The value of this indicator will be provided annually upon request by the IB POCU.	Data request Partially available Good Annual POCU Data
	45	Number of work placements Baseline: not measured Target: measured	Number of work placements in current school year	The value of this indicator will be provided annually upon request by the IB POCU.	Data request Partially available Good Annual POCU Data
Outcome 5. Provide an Adequate Supply of Quality Second Chance (SC) Education Programs					
Adequate provision of quality second chance education programs	46	Enrolment in Second Chance program Baseline: 8,589 (2,577 urban, 6,012 rural) Target: 10,736 (3,221 urban, 7,515 rural)	Number of students enrolled in Second Chance program (primary and secondary level) in the previous school year, disaggregated by area (rural/urban)	Data from SIIIR, Report no. 352 - "Planning Schedule Export", filtered by "Second Chance" column = YES and sum of the "Number of students" column from RURAL and URBAN area.	Data request Available Very good Annual MONE-SIIIR
14. Mechanism to achieve a wider reach of SC programs to each county, school inspectorate, and Bucharest municipality and to improve quality through improved programming, material, and teacher training (including Second Chance IVET programs)	47	Number of counties with second chance programs Baseline: not measured Target: 42	Number of counties with Second Chance programs	Data from SIIIR, Report no. 352 - "Planning Schedule Export", filtered by "Second Chance" column = YES. Then, the number of Romanian counties for which the sum of the "Number of existing students" column is greater than 0.	Data request Available Very good Annual MONE-SIIIR
Outcome 6. Strengthen the capacity of the government to implement and monitor and evaluate the ESL reduction strategy					

15. Develop the capacity to analyze existing data and closely monitor the evolution of ESL at national, regional and local levels, creating the foundation for targeted and effective evidence-based policies	48	Number of evidence based M&E reports Baseline: 0 Target: 12	Number of evidence based M&E reports	The value of this indicator will be provided by the management team of the SIPOCA17 project, coordinated by the Policy Unit.	Data request Available Very good Annual Other
	49	Number of staff trained in evidence based policies Baseline: 0 Target: 1,000	Number of personnel from MoNE and from the institutions under its subordination and coordination who are trained in evidence-based policies	The value of this indicator will be provided by the management team of the SIPOCA17 project, coordinated by the Policy Unit.	Data request Available Very good Annual Other
16. Establish better financial continuity in strategy implementation to eliminate financing asymmetries and abrupt changes.	50	Revision of Per Capita financing to tackle inequalities Baseline: not revised Target: revised	Revision of per capita financing to tackle inequalities	At least one legislative modification at Government Decision level is needed in order to be considered as legislative amendment.	Checklist Available Very good One-time Official Gazette

MONITORING INDICATORS TABLE – TERTIARY EDUCATION STRATEGY

OUTCOME/MEASURES	INDICATORS Baseline Target	DEFINITION	METHOD	INSTRUMENT/ AVAILABILITY/ QUALITY/ FREQUENCY / SOURCE
<i>Enabling condition 1: Assuring Adequate and Efficient Funding</i>				
Increase the amount of funding allocated to tertiary education progressively over the next several years	1 % of GDP spent on TE exceeds EU average of 1.3% Baseline: not specified Target: >1.30%	Share of GDP spent on tertiary education	Data will be provided by the MoNE’s General Directorate for Higher Education at the request of the Policy Unit.	Data request Available Very good Annual MoNE
Allocate supplemental funding (pilot program) via performance funding to steer the system towards policy objectives and desired outcomes	2 % of TE budget allocated via performance funding; progress against indicators of those policy objectives targeted by performance funding Baseline: not specified Target: 7%	The percentage of tertiary education budget to fund performance		
<i>Enabling Condition 2: Promoting Effective Governance</i>				
Increase the role and representation of key stakeholders, especially external stakeholders, in governance	3 Number of external stakeholders engaged in formal governance processes/structures Baseline: not specified Target: not specified	Number of community and business members involved in the formal governance procedures and structures	Data will be obtained through (i) site visits/questionnaires, (ii) official website, (iii) MoNE’s General Directorate for Higher Education, disaggregated by community leaders, disadvantaged persons, private sector etc.	Data request/ Site visits Partially available Very good Annual MoNE
Recalibrate level of institutional autonomy (e.g., doctoral degrees, academic appointments, etc.) with accountability for	4 Comparison of Romania’s consistency with the European trends Baseline: not specified Target: realized	This comparison is already taking place by virtue of Romania’s membership in ENQA. Romania must comply with European	The WG will refer to ENQA Agency Review (the next review and report will be available in the autumn of 2018) and other relevant	Evaluation Other Unknown One-time MoNE

performance against well-defined expectations			Standards and Guidelines for Quality Assurance in European Higher Education area. Relevant data can be found in ENQA Agency Review Report.	reports, such as EQAR and UNESCO.	
Conduct a data-driven classification exercise that respects the diverse missions of institutions	5	Publication of classification methodology, relevant data and substantiation of the classification, in respect to all parameters relevant for the activity of the institution. Baseline: unpublished Target: published	Romanian National Law mandates the classification of universities every four years. The last exercise was in 2011-2012. The next one will be done in 2018-2019. The results must be published.	Track availability to the public of the classification report.	Monitoring operations Other Unknown Annual Official Gazette/ MoNE
<i>Enabling Condition 3: Utilizing Data M&E for Evidence-Based Policymaking</i>					
Increase the role and representation of key stakeholders, especially external stakeholders, in governance	6	Number of external stakeholders engaged in formal governance processes/structures Baseline: not specified Target: not specified	Number of community and business members involved in formal governance procedures and structures	Data will be obtained through (i) site visits/questionnaires, (ii) official website, (iii) MoNE's General Directorate for Higher Education, disaggregated by community leaders, disadvantaged persons, private sector.	Data request/ Site visits Partially available Very good Annual MoNE
Recalibrate level of institutional autonomy (e.g., doctoral degrees, academic appointments, etc.) with accountability for performance against well-defined expectations	7	Compare Romania's consistency with the European trend Baseline: not specified Target: realized	This comparison is already taking place by virtue of Romania's membership in ENQA. Romania must comply with European Standards and Guidelines for Quality Assurance in European Higher Education	The WG will refer to ENQA Agency Review (the next review and report will be available in the autumn of 2018) and other relevant reports, such as EQAR and UNESCO.	Evaluation Other Unknown One-time MoNE

			area. Relevant data can be found in ENQA Agency Review Report.		
Conduct a data-driven classification exercise that respects the diverse missions of institutions	8	Elaboration and publication of classification system and justification Baseline: no Target: yes	Romanian National Law mandates the classification of the universities every four years. The last exercise was in 2011-2012. The next one will be done in 2018-2019. The results must be published.	Track availability to the public of the classification report.	Monitoring operations Other Unknown Annual Official Gazette/ MoNE
Develop a tracer study to monitor graduate performance	9	Establishment of well-respected tracer study; Baseline: no Target: yes	The indicator returns if (1) there is a tracer-study mechanism and if (2) this mechanism is effective: accurate and used for developing institutional, local, and central policies.	The availability and usage of a tracer study mechanism and the number of students tracked are measured through universities' websites, site visits and reports to MoNE. The accuracy of the mechanism can be detailed through an Evaluation study.	Official Statistics Evaluation study Partially available Good Other MoNE, Universities
	10	Number of students tracked Baseline: not specified Target: not specified			
<i>Pillar 1: Committing the Sector to Improved Attainment in all Areas</i>					
1. Establish clear routes from vocational and other secondary education into tertiary education	11	Enrolment rates in non-university tertiary education Baseline: 0 Target: increase	Gross enrollment rate in non-university tertiary is the total number of people enrolled in non-university tertiary education level, regardless of age, as a percentage of the total population of the official age group corresponding to the university non-tertiary	Data request to UEFISCDI to extract form RMU the number of enrolled students in the current academic year for the reported year, disaggregated by traditional/non-traditional groups and other relevant disaggregation. Enrollment rate will be calculated as a percentage of	Official Statistics Available Good Annual NIS-NBS

		education levels.	the number of enrolled traditional/non-traditional students to the total number of students.		
2. Complement merit-based fee waivers with a program of needs-based grants and a student loan program	12	Rate of student needs-based scholarship Baseline: not specified Target: increased	Scholarships that are based on economic needs and merit designed to encourage participation from rural areas and from disadvantaged groups	Data will be provided by the UEFISCDI, at the request of the WG, using RMU in the respect of the disaggregation needs. RMU needs to be adapted to be able to collect the information about the scholarships.	Data request Available Very good Beginning of the academic year UEFISCDI-RMU
	13	Number of students who obtained PhD and post-doctoral degrees Baseline (2015-2016): 2,260 Target: 20% annual increase	Number of students with PhD and postdoctoral degrees	Data will be provided by the ARACIS at the request of the WG from the annual reports.	Data request Available Very good Annual ARACIS
3. Encourage outreach to students from underrepresented groups and to non-traditional learners, including adults.	14	Number of people participating Baseline: not measured Target: increased	The number of students from underrepresented groups and non-traditional learners, including adults, who participate to a degree or non-degree course or program. Note: this data can be useful for the LLL strategy.	Data will be provided, at the request of the WG, by the UEFISCDI from RMU database, in collaboration with General Directorate for Higher Education of MoNE in order to identify and define the underrepresented groups. Data will also be shared to the LLL WG.	Data request Not available Poor Annual MONE/ UEFISCDI
4. Increase the transparency of information and provide guidance on educational opportunities and outcomes	15	Integrated portal with information to support student educational and carrier choices.	A portal to cover all universities and all programs at all universities in Romania.	Review of the website to be similar to studyinromaniagov.ro	Data request Available Very good Annual

to inform study choices and reduce drop-out		Baseline: no Target: yes			MoNE
5. Development and modernization of the infrastructure and relevant resources of HEIs, including learning spaces, considering the economic development trends in respect to market requirements	16	HEIs with rehabilitated, modernized and equipped educational infrastructure under ROP for state universities Baseline: no Target: all	Number of HEIs with rehabilitated, modernized and equipped educational infrastructure	All public universities need to undergo this rehabilitation process. The WG will tabulate the number of universities that have completed this process in less than one year.	Data request Available Good Annual MoNE
<i>Pillar 2: Promoting the Establishment of High Quality, Adaptive Academic Programs</i>					
6. Revise curriculum and develop assessment for transversal skills and entrepreneurship	17	Number of curricula developed or revised to incorporate transversal and entrepreneurial skills Baseline: 0 Target: increase	Curricula must be revised to include emotional intelligence factors, problem solving and entrepreneurship.	The information will be gathered through site visits and questionnaires. Also, validation with UEFISCDI would be applied.	Data request Other Unknown One-time MoNE/ UEFISCDI
7. Enhance the ICT offerings to complement existing offerings	18	Number of faculties where new program to target ICT enhancements to high-demand and high-impact programs are implemented Baseline: not defined Target: increased	Number of faculties in which there is a pilot program for ICT improvements for highly requested programs with major impact	Data will be provided by UEFISCDI at the request of the WG, through a data collection activity, from the HEIs, using RMU for disaggregation purposes.	Data request Available Good Annual MoNE/ UEFISCDI
	19	Number of academic staff involved in yearly training programs, especially on ICT Baseline: not defined Target: increased	Number of teaching staff involved in annual training programs, in particular ICT trainings		
8. Provide teacher training	20	Percentage of PhDs	Number of PhDs accessing	Data collection includes site	Data request

opportunities for PhD students; support professional development throughout the careers of academic staff		accessing teaching skills training opportunities Baseline: not defined Target: increased	teaching skills training opportunities expressed as a percentage of total number of PhDs.	visits and can be done by MoNE or UEFISCDI by requesting data from HEIs.	Available Good Annual MoNE/ UEFISCDI
9. Design academic curricula based on professional skills required by the labor market, the introduction of new qualifications in RNCIS, new programs for undergraduate/postgraduate studies, pertaining to such qualifications.	21	Number of programs available Baseline: not defined Target: increased	Number of new qualifications included in RNCIS	Data will be provided, at the request of the WG, by the National Qualification Authority.	Data request Available Good Annual Other (NAQ)
	22	Updated quality assurance system, correlated with labor market needs Baseline: no Target: yes	The indicator responds if there is an up-to-date quality assurance system correlated with the needs of the labor market	An evaluation study should be undertaken by the General Directorate for Higher Education of MoNE, UEFISCDI or ARACIS to assess the update and the correlation of the qualifications with the needs of the labor market and the European Framework of Qualifications	Evaluation study Other Unknown One-time MoNE/ UEFISCDI/ ARACIS
	23	Number of qualifications correlated with the labor market and the European Framework of Qualifications Baseline: not defined Target: all	Number of qualifications correlated with the labor market and the European Framework of Qualifications		
<i>Pillar 3: Promoting Strategic Engagement with Economy</i>					
10. Establish an Industry Liaison function at each institution; Develop and implement training programs in partnership - including the creation and implementation of on-the-job learning programs	24	Office or department that ensures the link between higher education institutions and the socio-economic environment, set-up Baseline: 0 Target: 1 at each institution	Number of HEIs that have points of contact (office/department) to keep in touch with the economic agents	Data collection can be done by MoNE or UEFISCDI by requesting data from HEIs. Site visits will also validate reported data. The data should be disaggregated based on Public and Private HEIs	Data request Available Good Annual MoNE/ UEFISCDI / HEIs

	25	Number of work-based learning programs delivered in partnerships between HEIs and the employment sector Baseline:0 Target: Increase	Number of (1) training programs and (2) partnerships signed between HEIs and the business environment	Data collection can be done by MoNE or UEFISCDI by requesting data from HEIs.	Data request Available Good Annual MoNE/ UEFISCDI
11. Involve employers in the design and delivery of programs, supporting staff exchanges and including practical experience in courses.	26	Regulatory revisions to internship and apprenticeship programs Baseline: no Target: yes	Number of HEIs that revised and implemented the regulations on internship programs	Data collection can be done by MoNE or UEFISCDI by requesting data from HEIs.	Data request Available Good Annual MoNE/ UEFISCDI
	27	Number of internships and apprenticeship programs Baseline: N/A Target: Increase	Rate of participation in internship programs	Data collection can be done by MoNE or UEFISCDI by requesting data from HEIs.	Data request Available Good Annual MoNE/ UEFISCDI
	28	Employer satisfaction surveys Baseline: 0 Target: 80% satisfaction	Number of HEIs conducting surveys on employers' satisfaction	Information collection can be done by MoNE by requesting sample satisfaction survey as well as results directly from HEIs.	Data request Available Good Annual MoNE/ UEFISCDI

MONITORING INDICATORS TABLE- STRATEGY FOR LIFELONG LEARNING

NOTE: (i) many methods are not methods at all but additional definitions; (ii) some definitions do not capture the “point of success”.

OUTCOME/MEASURES	INDICATORS Baseline Target		DEFINITION	METHOD	INSTRUMENT/ AVAILABILITY/ QUALITY/ FREQUENCY / SOURCE
National level		% Adults (25-64) in LLL programs <i>Baseline: 1.8%</i> <i>Target: 10%</i>	Participation rate of adults aged 25-64 in education and training. Data disaggregated by sex and residency	Statistics Official reports	MLSJ (Ministry of Labor and Social Justice) MoNE
1. Recognizing prior learning, including qualifications obtained abroad	1	Number of fully functional accredited Centers for Assessment and Certification of Professional Skills <i>Baseline: 62</i> <i>Target: 210</i>	Number of accredited centers for assessment and certification of professional skills acquired through non-formal and informal learning	Statistics Official reports Other	NAQ -National Register of Centers for Assessment and Certification of professional skills acquired through informal and non-formal learning
	2	Mechanism for recognition, validation and certification of prior learning is operational <i>Baseline: no</i> <i>Target: yes</i>	Legal framework, including methodology, to regulate the recognition, validation and certification of prior learning	Ministry Order	The Official Gazette
	3	Number of certified persons following LLL programmes <i>Baseline: 49,000</i> <i>Target: 151,200</i>	Self-explanatory	Statistics Official reports	NAQ MLSJ (Ministry of Labor and Social Justice) MNE
2. Involving vocational education and training and higher education institutions in LLL	5	Number of trained teachers in CVET ¹⁴ and adult learning. <i>Baseline: 0</i> <i>Target: 7,800 teaching staff</i>	Self-explanatory.	List of attendance Training Reports	n/a

¹⁴ CVET: continuing educational and vocational training

	6	Number of training programmes accredited by NAQ delivered in partnership with universities <i>Baseline: 0</i> <i>Target: 50</i>	Number of university training programmes elaborated in collaboration with the accredited training providers	Official reports Training Programmes offer	Universities MNE National register NAQ
3. Supporting participation in European mobility program	7	Number of participants in Erasmus mobility programmes. Data disaggregated by type of participants: <ul style="list-style-type: none"> • Teaching staff, management, administrative staff • Pupils, apprentices • Trainers adult education • Students, youth workers <i>Baseline: 50,118 (1998-2013)</i> <i>Target: 63,000 (cumulative)</i>	Self-explanatory.	Statistics Official reports Erasmus + Program evaluation	National Agency ¹⁵ Erasmus+ Universities
4. Financing to diversify provision	8	Number of Community Permanent Learning Centers ¹⁶ (CPLCs) created at national level <i>Baseline: 0</i> <i>Target: 255</i>	Self-explanatory	Statistics Official reports OPHC Program evaluation National Registries	Local Authorities NAE
5. Financing to enhance LLL demand	9	Number of subsidized apprenticeship contracts <i>Baseline: 0</i> <i>Target: 125,000</i>		No of contracts Official reports Evaluation of POCU	National registries: REVISAL MNE NAE/local offices
	10	Number of participants in training programmes to acquire transversal skills. Data disaggregated by: employment status, age, level of education, level of qualification <i>Baseline: 0</i>			

¹⁵ The National Agency for Community Programmes in the Field of Education and Vocational Training

¹⁶ GD 598/2017 – METHODOLOGY FOR THE CPLCs ACCREDITATION, EVALUATION, ORGANISATION AND FUNCTIONING

		<i>Target: 152,150</i>			
6. Supporting unemployed and inactive persons, including by means of financial incentives and counselling	11	Number of unemployed persons receiving counseling and career guidance <i>Baseline: 36,000</i> <i>Target: 250,000</i>	Self explanatory	Lists of participants Official reports Statistics Evaluation reports	POCU AIR
7. Ensuring sustainability of financing to foster the lifelong learning market, including improved counselling services	12	Number of partnerships between HEIs ¹⁷ , employers, research institutions, and/or training providers. <i>Baseline: 0</i> <i>Target: 130</i>	Self explanatory	Official reports	n/a
	13	Enrollment rate in post-secondary schools, including foreman schools <i>Baseline: N/A</i> <i>Target: 180,000 persons enrolled</i>	Self explanatory	Statistics Official reports	MNE NIS
	14	Number of people in vulnerable situations benefitting from counselling and career guidance. <i>Baseline: 0</i> <i>Target: 150,000</i>	<i>A vulnerable person can be defined as someone who belongs to a group within society that is either oppressed or more susceptible to harm: PwD, migrants, Roma etc.</i>	Lists of participants Official reports Statistics	POCU AIR
8. Improving the quality and availability of information	15	Information portal on LLL developed	Self-explanatory	Official report	website
	16	Number of studies, publications, reports with enhanced data related to LLL programmes and policies. <i>Baseline: 0</i> <i>Target: 2/year</i>	Self-explanatory	Official documents	NAQ MONE MLSJ
9. Assessing skills needs and developing a broader skill set	17	Mechanism in place to assess and track skills in line with PLA ¹⁸ or other suitable mechanism	Self-explanatory	Official documents	NAQ

¹⁷ HEI= Higher Education Institution

¹⁸ Preliminary Learning Assessment

10. Establishing a quality assurance, monitoring and evaluation system for LLL	18	The QA system for LLL in place <i>Baseline: no</i> <i>Target: yes</i>	Self-explanatory	Official documents	NAQ
	19	MIS ¹⁹ to monitor LLL programs is operational <i>Baseline: no</i> <i>Target: yes</i>	MIS can generate reports to inform policy makers on LLL market (LLL programs, target groups etc.)	Official reports	MONE
	20	% of population that is aware of LLL-related services and programs delivered in their geographic region <i>Baseline: N/A</i> <i>Target: 40%</i>			
11. Improving the National Qualifications Framework and strengthening coordination between stakeholders	21	Number of Romanian occupations correlated with EQF ²⁰ <i>Baseline: N/A</i> <i>Target: 2,500</i>	Self-explanatory	Official reports	MLSJ / National register
	22	Number of revised occupational standards <i>Baseline: N/A</i> <i>Target: 2,000</i>	Self-explanatory	Official reports Revised standards	MLSJ/National register

¹⁹ MIS = Management Information System

²⁰ European Qualification Framework

MONITORING INDICATORS TABLE- STRATEGY FOR VOCATIONAL EDUCATION AND TRAINING

ACTION LINES/ SPECIFIC ACTIONS	No.	INDICATORS Baseline Target	DEFINITION AND METHOD	INSTRUMENT/ AVAILABILITY/ QUALITY/ FREQUENCY / SOURCE
Strategic objective 1: Improve the relevance of training systems for the labor market				
1. Update the instruments that describe occupations/qualifications, curricula and auxiliary curricular resources, by qualification levels established in the National Qualifications Framework, for better articulation between sub-systems, to facilitate mobility in VET and increase relevance for labor market				
1.1. Operationalize National Qualification Register	1	National Qualification Register operational Baseline: no Target: yes	See Note below	Checklist Available Very good
1.2. Develop and activate the ECVET European Credit System VET regulatory and implementation framework, for initial and continuing vocational training system	2	ECVET regulatory and implementation framework Baseline: no Target: yes		One-time Official Gazette
.3 Develop/revise the fundamentals of the current vocational education and training curriculum: qualifications, vocational training standards, schooling plans, syllabuses, curricular auxiliaries, in terms of their relevance for the labor market, primarily for the green economy and develop national priority sectors	3	Number of vocational training standards Number of curriculum documents for vocational education and training Baseline: 0 Target: 2,400		Checklist Available Unknown Annual CNDIPT MoNE,
1.4 Develop teaching materials for children with disabilities or deficiencies enrolled in vocational training programmes	4	Number of teaching materials for students with disabilities or deficiencies Baseline: no Target: yes		Checklist Available Unknown Annual MoNE
2. Develop mechanisms for anticipation of skill needs in the labor market, define professional profiles to develop/review qualifications according to skills and knowledge which are relevant for labor market requirements and update curricula to meet the demands of labor market needs and trends				
2.1. Carry out regular studies and research for early anticipation of labor market needs for qualification and competence, and determine short and medium-term trend	5	Anticipation studies developed Baseline: 0 Target: 1		Study Other Unknown

	6	Number of company surveys taken Baseline: 0 Target: 2		One-time Other
2.2 Develop, regularly revise and implement documents for planning vocational education and training needs at national, regional and local levels, as well as the initial vocational training provision: Regional Education Action Plans, Local Education Action Plans, School Action Plans	7	Number of REAP reviewed Baseline: 0 Target: 8 REAPs reviewed		Study Other Unknown One-time CNDIPT
3. Conduct tracer studies for training graduates				
3.1. Develop a national tracer study mechanism for training graduates	8	Tracer study mechanism developed and implemented Baseline: no Target: yes		Study Not available Unknown One-time MoNE, CNDIPT
3.2 Systematic monitoring of social and professional insertion of vocational education and training graduates using administrative means and national surveys	9	Number of Administrative tracer studies Baseline: 0 Target: 4		Study Not available Unknown One-time CNDIPT
	10	Number of National surveys Baseline: 0 Target: 3		Study Not available Unknown One-time CNDIPT
4. Improve on-the-job learning in training				
4.1. Develop and implement regulations for the initial vocational training route in the national education system, including a significant on-the-job learning component, in partnership with employers	11	Number of regulations required to ensure an initial vocational training route including a significant on-the-job learning component Baseline: no Target: yes		Checklist Available Unknown One-time MoNE, CNDIPT
4.2. Develop cooperation structures of employers according to the training areas in the education system, to support on-the-job learning in each area, at various levels (national/ regional/ local)	12	Number of structures created at national, regional and local levels Baseline: 0 Target: 15		Study Available Unknown One-time MoNE, CNDIPT

4.3. Develop and implement a quality assurance mechanism for on-the-job learning in the education system	13	Quality assurance mechanism for on-the-job learning developed and implemented Baseline: 0 Target: 1		Study Available Unknown One-time CNDIPT, ARACIP
4.4. Prepare draft methodology and accreditation standards for employers to provide on-the-job training in the education system	14	Draft methodology and accreditation standards for employers Baseline: 0 Target: 1		Checklist Available Very good One-time Official Gazette
4.5. Train the employers` trainers, who provide on-the-job training to students from vocational education and training system	15	Number of tutors trained in companies Baseline: 0 Target: 1,300 tutors in 325 companies		Data request Available Unknown Other CNDIPT
5. Improve public and private funding mechanisms				
5.1. Develop mechanisms for financing public-private sector cooperation/partnership structures in vocational training (e.g. Sector Committees, Regional Consortia, Local Committees for Development of Social Partnership)	16	Mechanism developed and submitted for approval Baseline: no Target: yes		Checklist Available Very good One-time Official Gazette
6. Foster social partners` involvement in developing the training system				
6.1 Revise the regulatory framework for Sector Committees and support their institutional building	17	Regulatory Framework for Sector Committees reviewed and updated Baseline: no Target: yes		Checklist Available Very good One-time Official Gazette
6.2 Develop and deliver continuous training programs for Sector Committees experts, envisaging: The use of Occupational Standards; workplace learning etc.	18	Number of Sectorial Committees specialists trained Baseline: 0 Target: 100		Data request Available Unknown Other CNDIPT

Strategic objective 2: Increase participation and improve access to training programs				
1. Develop marketing of vocational education and training programmes and learning outcomes acquired in non-formal and informal contexts				
1.1. Develop and implement a strategy to promote increased VET attractiveness	18	Marketing strategy developed and implemented Baseline: no Target: yes		Assessment Partially available Unknown One-time MoNE, CNDIPT
2. Improve career guidance and counselling				
2.1. Develop a coherent career information, counselling and guidance system at national/regional/local level, covering IVET and CVET	19	Network of career information, counselling and guidance centers for secondary and tertiary, non-university education Baseline: no Target: yes		Checklist Partially available Unknown One-time MoNE, MMJS Official Gazette
2.2. Strengthen the coordination and cooperation between various actors at national, regional and local levels, involved in career guidance and counselling	20			Checklist Available Very good One-time
2.3. Develop and implement online career guidance instruments/tools	21	Number of online career guidance instruments/tool sets (for students in grades 7-12) developed and implemented Baseline: 0 Target: 6		Study Available Unknown Annual CNDIPT
2.4. Develop and provide continuing training programmes for professionals in career information, guidance and counselling (counselling centers staff, school counsellors and class masters)	22	Number of persons trained Baseline: 0 Target: 1.000		Data request Available Unknown Annual POCU Data
4. Facilitate access to training programs in the education system for youth, especially for those coming from rural and disadvantaged areas, and the Roma population				

4.1. Develop, modernize, rehabilitate and equip school campuses and vocational training centers in the education system for a wide range of training and qualifications and for a significant number of students living in remote areas	23	Number of campuses and training centers built/ rehabilitated and equipped Baseline: 0 Target: 126		Data request Available Unknown Annual MDRAP
4.2. Provide financial support for accommodation and meals for youth in rural areas and disadvantaged environments, and for the Roma population, who are enrolled in training programs through vocational education and training, in school campuses and vocational training centers in the education system	24	Number of students supported through scholarships Baseline: 0 Target: 42,000		Data request Available Very good Annual MoNE-PMIPN
Strategic objective 3: Improve the quality of training				
1. Develop a national framework for quality assurance in VET at system level				
1.1. Develop a mechanism for monitoring, evaluation and systematic review of the quality of training at system level, including collection and analysis of information on the satisfaction of training program beneficiaries	25	Mechanism for monitoring, evaluation and systematic review of the quality of training at system level including certification of learning outcomes Baseline: no Target: yes		Checklist Available Very good One-time Official Gazette
3. Improve the skills of people with responsibilities for providing training programs in IVET and CVET and for those assessing the learning outcomes in formal, informal and non-formal contexts				
3.1. Develop and provide continuing professional development programmes for trainers and teachers,	26	Number of teachers, trainers and external evaluators trained Baseline: 0 Target: 5,000		Data request Available Unknown Annual POCU Data
3.2. Develop a national training center for academic and instructional staff working for companies involved in IVET, capable to ensure a coherent and uniform development of skills for training providers	27	National training center created and operational Baseline: 0 Target: 1		Checklist Available Very good One-time Official Gazette
5. Promote excellence in VET				
5.1. Develop and implement a mechanism for recognition of excellence in providing training programmes	28	Mechanism developed and implemented Baseline: no Target: yes		Checklist Available Very good

5.2. Improve the relevance of trade competitions organized at local/regional/national levels and support participation of VET students in international trade competitions	29	Methodology developed for trade competitions organized at county and national levels for all qualifications Baseline: no Target: yes		One-time Official Gazette
Strategic objective 4: Develop innovation and national and international cooperation in training				
1. Develop innovation, creativity and entrepreneurship within training programmes				
1.1. Expand learning methods that develop trainee entrepreneurial skills (e.g. training company)	30	Number of programs that include entrepreneurship and soft skills training Baseline: 0 Target: 60%		Data request Available Unknown Annual CNDIPT
1.2. Financial support for organizing development and simulation competitions within training programmes (e.g. business plan) and organizing and/or participating in regional, national or international fairs for training companies	31	Number of regional fairs organized yearly Baseline: 0 Target: 8		Data request Available Unknown Annual CNDIPT
	32	Number of national/international fairs organized participated yearly Baseline: 0 Target: 1		Data request Available Unknown Annual CNDIPT
2. Develop international mobility in training				
2.1. Inform training providers on how to access European funds for international mobility in VET (ERASMUS+, ESF etc.)	33	Number of students participating in international mobility per year Baseline: 2,800 Target: 4,600		Data request Available Unknown Annual POCU Data, ANPCDEFP
2.2. Train the staff of training providers on how to develop financing applications to access European Funds for international mobility in VET (ERASMUS+, ESF etc.)				

NOTE: The VET Strategy was developed by the CNDIPT (TVET Centre). As noted in section 1.0, the VET Strategy straddles the other 3 strategies, this means that there is overlap in indicators and data requirement. In designing the Indicator Definition Table for the VET Strategy, the team aligned the VET strategy's indicators and outcomes with those in the other three strategies. It was also deemed unnecessary to provide definitions and methods for data collection as indicators are related to regulatory change and development of regulatory or quality assurance mechanism therefore they do not require formulas for calculations or complex queries as in the case with the ESL Strategy. The M&E instrument, data availability, quality, frequency and source is maintained to give the users some direction during M&E. These are complemented with site visits and the instruments noted in the body of the M&E Methodology.

6.2 EXAMPLE OF SURVEY QUESTIONS – QUALITATIVE INSTRUMENTS

The tables below provide sample questions and guides for interviews and observations. Questions and guides are not provided for every outcome in the strategies; the questions are designed for specific programs and specific outcomes. The questions do not represent a definitive comprehensive set of questions and their use is not compulsory; they are provided as a general guide to use as necessary or to possibly trigger additional questions.

As noted earlier, there is a strong, natural connection between monitoring and evaluation: regular monitoring provides early warning about difficult challenges in meeting expected results and targets during the implementation of planned activities. The compendium of monitoring questions shown below addresses potential quantitative and qualitative evaluation subjects. It is through such questions that the Working Groups can inform and design the periodic evaluations that will be conducted by the Institute of Educational Sciences.

ESL: Strategy for Reducing Early School Leaving

ESL Outcome 1: Access to Early Childhood Education and Care (ECEC), by placing emphasis on vulnerable groups
Program: Nurseries Program
<p><u>Minimum interview question:</u></p> <ol style="list-style-type: none"> 1. History of the nursery and of the current organization 2. Main operating difficulties 3. Main advantages 4. Relation/cooperation with the local community, including several types of stakeholders (authorities, local entrepreneurs, parents, NGOs, schools, other nurseries). 5. Source of current equipment (“Where does the current equipment come from?”) and maintenance (“How do you manage to cover the current needs of the nursery?”) 6. Puericultors qualification 7. Recent training 8. Presence in the MoNE or other providers’ programs related to the above-mentioned 9. Is there a concern with targeting disadvantaged groups? 10. The existence of financial incentives linked to enrollment rate 11. Have financial incentives been provided? If so, to whom? 12. What is the effect of financial incentives? 13. Evidence of local partnerships between authorities, community, parents and NGOs in new kindergartens and daycares 14. Are vulnerable groups receiving financial support (tickets)? 15. How many teachers are under the mobility scheme? 16. What is the extent of parent involvement?
<p><u>Minimum observation guide:</u></p> <ol style="list-style-type: none"> 1. Building status (inside/outside; furniture; walls; cleanliness.) 2. Yard status (outside furniture: grass; trees: cleanliness: dust; playground.) 3. Toilets 4. Sleeping area 5. Children (smiling/sullen; agitated/quiet...) 6. Interlocutors (alone/fearful; know what they are talking about/give the impression they are not up to date.)

ESL Outcome 2: Access to quality primary and lower secondary education for all**Program: Motivated Teachers****Minimum interview guide:**

1. Verification of teaching staff trained in rural areas
2. Use of new skills
3. Quality of the training program according to teachers
4. Change in education of children according to parents
5. Amount and distribution of financial support for at-risk children:
 - a. Type of support
 - b. Amount of support
 - c. Change in attendance of children receiving support
6. Number of persons mentored
7. Structure of peer mentoring program
8. Effect of mentoring program on teachers

ESL Outcome 3: Early warning developed systems and consolidating remedial and support programs for students at risk in compulsory education**Program: Project on support for students at risk of early leaving****Interview guide:**

1. Number of children detected early, identified as at-risk students and counseled
2. Number of students at risk disaggregated per Roma, rural, socio economic status;
3. Questions on the repetition, absenteeism, learning outcomes level trend
4. Questions on what was the most effective measures in their view
5. The instruments used to identify and select students at high risk
6. Type and length of the support provided (peer, remedial lessons, financial incentives, extracurricular activities)
7. Evidence of individual education plans that include:
 - a. Counselling support for guidance on schooling and career options
 - b. Integration in school environment
 - c. Remedial classes, if any
8. Other deficiencies, disabilities detected and support provided
9. Number of counselors trained
10. Effectiveness of the training (based on counselor interviews)
11. Ratio of counselors, tutors to students

ESL Outcome 4: Improve the attractiveness, quality, and relevance of IVET**Implementation verification and determination of effectiveness on quality, relevance and attractiveness of IVET****Minimum interview Guide:** The interview is to be administered to employers, students, tutors, and teachers.

1. Are employers receiving incentives to encourage on-the-job training for students?
 - a. How much?
 - b. How many students are enjoying on-the-job training?
 - c. Type of industries, /size of companies
2. How many teachers have received training or mentoring?
 - a. What is the source of training?

- b. Subject?
- c. Are new skills applied in the classroom?
- d. According to teachers: are they applying the training? How useful is the training?
- 3. To what extent is the labor market involved in setting learning outcomes and enhancing the curriculum?
- 4. According to employers: is the curriculum and training of students relevant to the modern work place?
- 5. Number of internships in companies for VET students
 - a. According to students: how useful are the internships?
 - b. According to employers: how knowledgeable are the students? Is their education relevant to the labor market?

Tracer study for VET graduates (web-survey)

A national-level tracer study will track graduates and provide long term outcomes. To keep costs manageable, the questionnaire for the tracer study will be administered online.

Approach and methodology for the tracer study:

1. A list with the email addresses, current phone numbers, and addresses of VET graduates is necessary, and must be collected in 2018 as part of the graduation process for the 2017 graduates.
2. One year after graduation, during the first part of 2019 (November-December), the graduates will be invited to participate in an online survey. The responses are anonymous although the links to the survey are customized (the typical web-survey model, used also in other tracer studies). The survey topics will focus on post-graduation employment, application of learning, and ease of finding work.

Topics to investigate in the tracer study:

1. Professional career history: jobs, duration, income, link with the VET-acquired qualifications
2. Academic pathway followed (if applicable)
3. Family status
4. Migration
5. Life satisfaction
6. Assessment of the VET courses: quality, usefulness
7. Life-long-learning practices

ESL Outcome 5: An adequate supply of Second Chance educational programs

Study on the Second Chance Graduates

Methodology:

1. The experts conducting the study randomly select four units providing SC programs from a list provided by the strategy and monitoring unit of the MoNE.
2. The MoNE M&E Experts will visit the four units and identify a list of last cohort of SC graduates.
3. The M&E Experts will visit and discuss with as many students on the list as possible. The information needed from the graduate is linked to the post-graduation professional path and to being aware of the support measures in view of employment.
4. For the graduates who have a job, an interview will be organized with the first employer right after graduation (either with the HR Department representative or with the person that

hired the graduate). The interview will tackle the topics mentioned below. There will be at least 3 interviews with the employers for each school.

5. The report generated will refer to:
 - a. length and stability of post-graduation employment;
 - b. employer and employee satisfaction;
 - c. knowledge of the employment stimulation measures; and
 - d. their role in the employment decision (from the employee's and the employer's perspective); and
 - e. The number of graduates interviewed, based on gender, age, status, and pre- and post-SC graduation professional path will also be mentioned.
6. For students continuing their education, the question will refer to future pathways and plans.
7. For all students the questions need to focus on their experience of the second change program, what they liked and what they didn't, and what they learned.

TER: Strategy for Tertiary Education

TER Outcome 1: Committing the Sector to Improved Attainment in all Areas

Student survey to document the young people's perception of and experience with the counseling they receive and the effect of merit-based fee waivers and scholarships.

An interview with students will be necessary to record information related to experience and satisfaction of students. The questionnaire should reveal answers to the following questions:

1. How many times did the student receive counseling?
2. Was the counselor knowledgeable?
3. Was employment information provided?
 - a. Did it include information about employers?
 - b. Salary expectations?
4. Was the student considering dropping out?
 - a. Did the counseling help change direction?
5. Were alternative academic programs offered to reach similar career options?
6. Were alternative careers suggested for the student's chosen program of study?
7. Whether or not a merit based fee waiver is granted (value)
8. Whether or not a scholarship is granted (value)
9. Would tertiary education be an option without fee waiver or scholarship?
10. Program of study
11. Is the student receiving counseling on an academic program?
12. Duration of the guidance session
13. Knowledge of the guidance provider
14. Utility of the guidance, and
Effect of the guidance on academic decision
15. Did the guidance include information on employment?

TER- Outcome 2: Promoting the Establishment of High Quality, Adaptive Academic Programs
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Curriculum in Universities Study

The methodology requires several interviews to be conducted in 2018 and 2019:

- 2 specialty committees of ARACIS will be selected
- 4 interviews will be conducted at ARACIS. For every specialty committee selected, the president (or vice-president) and one of the faculty members will be interviewed.
- 4 departments, from different HEIs will be selected, two for each specialty commission so that the departments selected do not include the people interviewed as members of the ARACIS commissions. Two representatives and the head of the department will be interviewed for every department selected.
- The specialty commissions and the departments will be selected randomly.
- A report will be delivered with conclusions on how the quality of higher education has improved. The report will also present how the university curriculum correlated to labor market needs, in view of optimizing study programs and building the necessary competences.

Summary: 11 interviews will be conducted:

- 9 interviews in the university departments (3 different departments X 3 interviews each).
- 2 interviews in a specialty commission at ARACIS.

Interview guide (minimum): Curriculum.

1. Provide a brief presentation of the people interviewed: professional experience and other characteristics.
2. **For ARACIS:** When and why it is updated and what are the curriculum evaluation standards. Who is responsible? Who is in charge? Description of the discussions and consultations.
3. Criteria for the university curricula revision. **Only for ARACIS:** Describe the mechanisms designed to ensure compatibility between the CNATDCU and ARACIS fields. Main difficulties encountered.
4. **For faculty:** Describe the curriculum development process at faculty and departmental level. When and why it is updated and what the curriculum evaluation standards are. Who has the initiative? How has the discussion taken place? What has the managers' role been in this process? What are the ways to integrate cross-cutting competencies? Are they really necessary?
5. Ways of developing competency forecasting mechanisms when designing the university curricula.
6. Curriculum design methods, to develop cross-cutting and entrepreneurial competences. Are there incentives for institutions that developed new syllabuses for cross-cutting and entrepreneurial competences?
7. Status of innovation development and ITC improvement in the study programs. What type of ITC components have been considered? Are there pilot programs?
8. Employer involvement in designing and providing programs. Regulations on internships, dedicated programs and partnerships aimed at developing the practical experience.
9. **For Students:** perception of the new curriculum, relevance and instructor's capability in delivering it.

Interview guide (minimum): Effectiveness of teacher training in the classroom as a result of training.

For teaching staff:

1. How long was the training?
2. What was the subject matter?
3. How were you selected to participate (did you request or were you assigned)?
4. Was the trainer knowledgeable?

5. Was the training useful?
6. Are you employing the newly acquired skills in the classroom?
7. Have you noticed an improvement in the classroom as a result of the new skills?

For students:

8. Are you aware that your instructor has undertaken training?
9. Have you noticed a difference? Has classroom instruction improved?

TER- Outcome 3: Promoting Strategic Engagement with Industry

Interview guide (minimum):

- 1) Number of times an instructor from the labor market lectured?
- 2) Was the material useful?
- 3) Was the lecturer well prepared?
- 4) Compare academic staff teaching with employer teaching.

The site visit should include a review of the labor market contact point office and produce the following data:

- 1) Number of staff
- 2) Average number of meetings with industry per month
- 3) Mandate of office

LLL: Strategy for Lifelong Learning

LLL - Outcome 1: Recognizing prior learning, including competences acquired abroad

Web-survey with the providers of LLL

The study intends to document the effectiveness of training provision to develop entrepreneurial skills. The instrument used is a questionnaire administered to providers as derived from the following list: <http://asfromania.ro/supraveghere/supraveghere-asigurari/formare-profesionala/registrul-furnizorilor-de-programe>. The investigation will be quantitative and will be carried out through an online survey. There may be follow-up communication to ensure that sufficient respondents participate.

Topics to address:

- 1) Provider code
- 2) Single identification code
- 3) Total number of qualification and training courses organized during the previous year
- 4) Total number of people registered for the qualification and training courses organized during the previous year
 - Participants' profile
- 5) Total number of people that received a certificate after participating in the qualification and training courses organized during the previous year
- 6) If they have information on the career paths of the people that received certification
- 7) If training aimed at developing entrepreneurial skills were delivered
 - Participants' profile
- 8) Links with employers
- 9) Involvement of employers in training design
- 10)

Web-survey with the LLL Graduates

A list of the LLL graduates' email addresses is required. These will be collected as part of the graduation process. 1.5 years after graduation, the graduates will be asked to answer a web survey. The answers are anonymous, although the links to the surveys are personalized (typical web-survey template). The survey topics are presented below.

Topics to address in the survey:

- 1) What qualification training did you attend? (Choose from the list: providers, then training)
- 2) When did you take the training? Start (DD.MM. YYYY) End (DD.MM. YYYY)
- 3) Did you get a qualification certificate after the training? YES/NO
- 4) What was your occupational status before the training? Unemployed/stay-at-home parent/Student/Retired/Independent worker/Employed, without a work contract/Employed, with a work contract/Other.
(for those who had a job before this attending this qualification course)
 - a. Employer's field of activity
 - b. Position held the month before the training
 - c. Net income from that job, in the month prior to the training.
- 5) What was your occupational status one month after completing the training? Unemployed/stay-at-home parent/Student/Retired/Independent worker/Employed, without a work contract/ Employed, with a work contract/Other.?
- 6) What was your occupational status six months after completing the training? Unemployed/stay-at-home parent/Student/Retired/Independent worker/Employed, without a work contract/ Employed, with a work contract/ Other.
(for those who had a job six months after this qualification course)
 - a. Employer's field of activity
 - b. Position held the month before the training
 - 7) Net income from that job, in the month prior to the training
- 8) What is your occupational status now? Unemployed stay-at-home parent/Student/Retired/Independent worker/Employed, without a work contract/ Employed, with a work contract/ Other.
(for those currently employed)
 - a. Employer's field of activity
 - b. Position held the month before the training
 - c. Net income from that job, in the month prior to the training.
(for those that had a job before the training and 6 months after graduating it)
- 9) You stated that you had a job before attending this training and 6 months after graduating from it. Is it the same employer, or a different one?
- 10) Socio-demographic data:
- 11) Gender (M/F)/ Age (years)/ Level of formal education (max. Primary education/lower secondary/10 grades/vocational/high-school/post-secondary/bachelor studies/Masters' studies).
- 12) Living environment (urban/rural)/County

Study "Certify qualifications acquired abroad"

A qualitative study that includes interviews with a minimum of 20 people who have requested certification of their qualifications. The aim of this exercise is to inform the Implementation Unit about possible ways of increasing the efficiency of the support provided.

A list of people that acquired qualifications abroad is provided by the Ministry of Labor and ANC (National Agency for Qualifications). The target group comprises people with a low and higher

education level, including people that received the certification but also those whose certification was rejected from at least two counties. Respondent selection criteria follow:

Age and education level:

- people aged 21-29, with higher education achieved abroad (ISCED 5-6): young people who received the certification and those who were rejected.
- people aged over 30, with a poor qualification level (ISCED 2-3): people who received the certification and those who were rejected. Region - The interviews will be conducted in at least 2 county capitals:
- North-East region respondents include people with
 - ISCED 5-6, some with certification rejected
 - ISCED 2-3, some with certification rejected
- South-East region
 - ISCED 5-6, some with certification rejected
 - ISCED 2-3, some with certification rejected

Interview guide:

- a. Short description of the respondent: age, level of education, level of training/qualification for which the certification was requested, profession/occupation, field of activity, current job/last job, country where they received the qualification that they want to certify
- b. Sources of information on the qualification certification process.
- c. Brief presentation of the process of submitting a request for certification. Main difficulties encountered, main advantages, and duration.
- d. How do they intend to use the certification? How does it help them?
- e. Do they want to stay in this country? If yes, for how long?

LLL- Outcome 2: Involving VET schools and higher education institutions in LLL

Interview with instructors and students to determine effectiveness of the training.

Interview guide (minimum):

For teaching staff:

1. How long was the training?
2. What was the subject matter?
3. How were you selected to participate (did you request or were you assigned)?
4. Was the trainer knowledgeable?
5. Was the training useful?
6. Are you employing the newly acquired skills in the classroom?
7. Have you noticed an improvement in the classroom because of the new skills?

For students:

1. Are you aware that your instructor has undertaken training?
2. Have you noticed a difference? Has classroom instruction improved?
- 2) What do you think of the training you are receiving?
- 3) Do you think it will prepare you to join the work-force?
- 4) Are you changing career/profession through this course?

Interview guide (minimum): Effectiveness of training in LLL management

1. How long was the training?
2. What was the subject matter?
3. How were you selected to participate (did you request or were you assigned)?
4. Was the trainer knowledgeable?

5. Was the training useful?
6. Are you employing the newly acquired skills in the management of your institution?
7. Have you noticed an improvement in the performance of your duties because of the new skills?

LLL - Outcome 4: Financing to diversify the supply

Dedicated program of NAQ for Community Permanent Learning Centers (CPLC)

The dedicated program for Community Permanent Learning Centers (CPLC) will collect the following data:

- Number of Community Permanent Learning Centers (CPLCs)
- Number of beneficiaries of training delivered through the CPLCs
- Number of programs delivered

The MoNE M&E expert team will collect qualitative data through site visits with interviews and observations. Respondents will include instructors, local employers, current students, and past students if possible. The focus is on the effect of the CPLC on the students, questions should include as a minimum:

- 1) What do you think of the training you are receiving?
- 2) Do you think it will prepare you for the work you are about to do?
- 3) Have you received training before? In what field.
- 4) Do you think it will prepare you to join the work-force?
- 5) Are you changing career/profession through this course?
- 6) Are you working now? What is your current job? If not,
- 7) Were you working before? What was your job?

VET: Strategy for Vocational Education and Training

VET - Outcome 1: Improve relevance of the vocational training systems for the labor market/

VET- Outcome 4: Improve on-the-job learning in vocational training

Increasing the relevance of IVET Project (CNDIPT))

Survey with tutors in companies who have been trained (web-survey)

The methodology recommends collecting additional data concerning people who have been trained as VET tutors. The purpose is to have a variety of perspectives of the motives, quality, and efficiency of the training. A web-survey will minimize the costs, though it can be structured for a more in-depth study during evaluations.

1. **Sample:** the invitation to take part in the survey is sent to all tutors. This would mean that a database is available which contains information on the tutors trained, including: names, e-mail addresses, field of activity and company address. This database would be maintained under the “relevance” project.
2. Typical **web-survey** steps are taken (including reminders, follow-ups.).
3. Additional specifications will be decided upon by experts who will implement this study (they depend on the available funds and on the details of the topics to be addressed).

Topics to be addressed by the questionnaire:

Data concerning the company (ensure compliance with appropriate legislation)

0. Company name / tax code
1. Address (at least county and \ locality)

2. Field of activity / CAEN (Classification of Activities in the National Economy) Code (4 figures)
3. Type of legal entity
4. Type of ownership
5. Year of establishment
6. Number of employees in the previous year
7. Turnover in the previous year
8. Number of tutors who attended training activities in the previous year
9. Number of students who attended on-the-job training activities in this institution in the previous year
10. Average duration of an on-the-job training stage (number of days + number of hours in a day)

Data concerning the tutor

1. Gender (M/F) / Age (years) / Level of formal education (max. Primary school / lower secondary school / 10 grades / VET school / high school / post-high school / bachelor studies / master studies/ doctoral studies) / Residence (urban / rural) / County
2. Years of service at current job
3. Position held at current workplace
4. Main responsibility of current job
5. Total years of experience (years)
6. Positions held in previous employments (last 3)
7. High school graduated / Field of study
8. Faculty graduated / Bachelor studies
9. Faculty graduated / Master studies/
10. Faculty graduated / Doctoral studies

Data on the training course

0. Name of the training course attended as tutor
1. Name of the institution organizing this training course
2. Name of trainers
3. When did you attend the training course as tutor? Start (DD.MM. YYYY) End (DD.MM. YYYY)
4. How many sessions did this training course include?
5. How many sessions have you attended under this/training course?
6. What was the average duration of a session? (no. of hours)
7. Type of activities conducted under the training courses and their approximate share of the total time
 - Type of activity
 - No. of hours allocated
 - Approximate share of the total
- 8) Skills acquired following the training course
- 9) What is your general assessment of your tutor skills...? (score 0-10)
 - a. before attending this training course
 - b. immediately after attending this training course
 - c. at present
- 10) To what extent has this course helped you learn ...?

Not at all /Very little/Little/ Much / Very much / Extremely

 - a. to interact with students during professional training courses

- b. to come up with adequate activities training courses
- c. to decide the order of activities during training courses
- d. to conduct new activities during training courses
- e. to conduct activities that are useful for trainees during courses
- f. to assess trainees

Data on the experience as tutor

- 1. Number of internships that you have coordinated before attending this training course as tutor
- 2. Number of interns that you have coordinated before attending this training course as tutor
- 3. Number of internships that you have coordinated after attending this training course as tutor
- 4. Number of interns that you have coordinated after attending this training course as tutor

VET - Outcome 2: Increase participation and facilitate access to vocational training programs

VET- Outcome 8: Improve career and qualification guidance and counseling

Study on the Community Permanent Learning Centers (CPLCs)

(A series of interviews with the CPLC managers.)

The list of CPLCs will be provided by CNDIPT and IREA (Romanian Institute for Adult Learning) to the external consultant, who will select 10 centers, which have to be in 4 different regions, 4 different counties, and have at least 5 employees. The MoNE M&E experts will visit the 10 centers and talk to the manager, using the interview guide. Personal, systematic observations will add to the documentation. In the end, a brief report will summarize the findings, including possible difficulties noticed.

Interview guide:

- 1) Short history of the center.
- 2) Main operating difficulties.
- 3) Main advantages.
- 4) How is the center financed?
- 5) How many employees does it have?
- 6) How many trainees does it currently have? How about within 1 year from now?
- 7) What are the criteria for deciding on the training programs? What is the level of center autonomy in this respect?
- 8) Relation/cooperation with the local community, including different types of stakeholders (authorities, local entrepreneurs, parents, NGOs, schools, other centers)
- 9) Level and source of current equipment.
- 10) What type of activities are performed in the center?
- 11) Presence in MoNE and other providers' programs.
- 12) Concerns related to targeting disadvantaged groups.
- 13) Existence of financial incentives tied to the enrollment rate.

Minimum observation guide:

- 1) Building status (inside/outside; furniture; walls; cleanliness...)
- 2) Classrooms/ (technical) equipment (computers, projectors, etc.)
- 3) Toilets
- 4) Interlocutors (calm/fearful; they know what they are talking about/give the impression they are not up-to-date ...)

6.3 SAMPLE FIELD VISIT INSTRUMENTS

Questionnaire for school principals

This survey is part of a set of monitoring tools for the Early-School Leaving Strategy in Romania and is aimed at identifying relevant aspects related to the education services and its stakeholders. Please read carefully every question and answer in line with your opinions and the specific situations. Rest assured that your answers will be processed in full confidentiality and anonymity.

Identification data of the education institution

1. **Name of the education institution:**
2. **Locality:**
3. **County:**
4. **Residential environment:** 1. urban 2. Rural
5. **Location of the education institution in the locality:**
 - a. In the center
 - b. At the outskirts

General information on the school

6. Please provide for 2017/2018 data on:

	Total	Primary education	Lower secondary
Number of students enrolled in the beginning of the school year			
General average reached by students, for the entire school			
Number of students that flunked one/several subjects			
Number of repeat students			
Number of students that dropped out of school			
Number of students that dropped out of school but are still in the community			
Number of students that resumed school after dropping out/interrupting their education			
Number of students with many absences (over 30/semester)			
Number of students at-risk of drop-out, which are still in the education system			
Number of students involved in lucrative activities			
Number of students that don't live with at least one of their parents			
Number of students whose parents are working abroad			
Number of SEN students with a DGASPC file (General Directorate for Social Assistance and Child Protection) or CJRAE certification (County Center for Educational Resources and Assistance)			

7. The following planning documents exist in the school you are managing:

	Yes	No	Is under development/scheduled for the next school year
Institutional development project			
Managerial plan/ Operational plan			

Quality assurance plan			
Desegregation plan			

8. In your school, do you have people occupying the following positions?

	YES	NO
School counselor		
School mediator		
Support teacher (professor de sprijin/professor itinerant)		

Programs and projects

9. The following programs exist in the school you are managing:

a. National programs

	Yes	No	Is under development/scheduled for the next school year	If the answer is "yes", state the number of beneficiaries
The "Second Chance" Program				
The "School after School" Program				
The "Euro200" Program				
Other programs				

b. Regional/local programs

	Yes	No	Is under development/scheduled for the next school year	If the answer is "yes", state the number of beneficiaries
Community and parent programs				a. Students: b. Teachers: c. Parents: d. Other beneficiaries:
Peer mentoring programs				a. Students: b. Teachers: c. Parents: d. Other beneficiaries:

10. Please state the number of programs and projects your school has been involved in in the past 3 years:

Type of project	Number of projects		
	Total	Number of projects with funding, out of the total number	Number of projects coordinated by the school, out of the total number
Local project			
Regional project			
National project			
International project			

School environment

11. Please state how you find the following statements:

	Totally agree	Largely agree	Slightly agree	Barely agree	Not applicable
The school atmosphere is pleasant					
I feel very nice among my colleagues					
Parents take part in the school life					
The local community supports the school activity					
Teachers are interested in their professional development					
Peer learning activities for teachers are carried out in our school					
There is a set of procedures applicable for students at risk of drop-out					
There is a strategy for the students` insertion/reinsertion					
There are remedial programs for children					
Absenteeism has been a major problem for the school in the past 3 years					

12. Please state to what extent the following activities are carried out in the school:

	To a very large extent	To a large extent	To a small extent	To a very small extent/ not at all
Monitor students` attendance				
Check reasons for absences				
Analyze the reasons why students drop-out of school				
Teachers systematically monitor and check students` results				
Teachers follow up on each student`s individual progress and compare the forecasted performance against the real one				
Personalized intervention plans are produced				
Teachers are involved in setting the objectives and next steps of the intervention plan				
Teachers use the school equipment in their didactic activity.				

THANK YOU!

Questionnaire for teachers

This survey is part of a set of monitoring tools for the Early-School Leaving Strategy in Romania and is aimed at identifying relevant aspects related to the education services and its stakeholders. Please read carefully every question and answer in line with your opinions and the specific situations. Rest assured that your answers will be processed in full confidentiality and anonymity.

Identification data of the education institution

1. **Name of the education institution:**
2. **Locality:**
3. **County:**
4. **Residential environment:** 1. urban 2. rural

Socio-demographic data

5. **Your position in school, this school year:**
 - a. Primary teacher (invatator)
 - b. Primary teacher (institutor)
 - c. Primary teacher (profesor pentru învățământul primar)
 - d. Teacher
 - e. School counselor/ school psychologist
 - f. Support teacher
 - g. Principal/ deputy principal
 - h. School inspector
 - i. Methodologist teacher, County School Inspectorate
 - j. Methodologist teacher, CCD
 - k. Other position; which one?
6. **Seniority in this position:** years
7. **Seniority in the education system:**years
8. **Didactic degree:**
 - a. Entry level
 - b. Permanent teacher certification
 - c. Degree 1
 - d. Degree 2
 - e. No degree
9. **Subject(s) taught:**
 - a. Primary education
 - b. Romanian
 - c. Foreign languages
 - d. Latin language and Roman culture
 - e. Math
 - f. Physics
 - g. Chemistry
 - h. Biology

- i. Social education
- j. History
- k. Geography
- l. Religion
- m. Plastic arts
- n. Music
- o. P.E. and sports
- p. Technological education and practical application
- q. ITC
- r. Counseling and personal development
- s. Other subjects: which?

10. **Gender:** 1. M 2. F

11. **Age:**.....years

School and educational services
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12. **How satisfied are you with the school where you teach?**

Very satisfied	Satisfied	Dissatisfied	Extremely dissatisfied

13. **In your opinion, what`s the main role of school?**

- 1. Education
- 2. Disseminate information
- 3. Develop the citizens
- 4. Socializing
- 5. Develop skills
- 6. Other; which?.....

14. **To what extent do you agree with the following statements?**

	To a very large extent	To a large extent	To a small extent	To a very small extent/ Not at all
I am a well-trained teacher				
I am sympathetic to/indulgent with the students				
I manage to get their interest				
I use interactive teaching-learning methods				
I teach as to be understood by all students				
In my appraisal, I am more interested in the student`s progress				
In my appraisal, I am more interested in reaching the standards				
I am a demanding teacher				
I`m constantly in search of new educational resources				
I adjust the information I teach to the students` learning capacity				

15. How often do the following problems arise in the classes where you teach?

	Very often	Often	Rarely	Very rarely/ Never
Students` have difficulties in understanding the content taught				
Teaching difficulties, because the necessary materials are not available				
Students` indiscipline				
No interest for the subject				
Verbal aggressiveness				
Physical aggressiveness				
Conflicts arising from individual appraisals				
Absenteeism				
Parent pressure				

16. For what kind of problems do students seek your help, outside the classroom?

- a. Related to the subject you teach
- b. Related to school, in general
- c. Related to the relation with other teachers
- d. Related to conflicts between students
- e. Related to conflicts between teachers
- f. Related to health
- g. Related to family
- h. Others; which?

17. How happy are you with the material conditions in school, which you need to carry out your activity?

Very satisfied	Satisfied	Dissatisfied	Extremely dissatisfied

SEN students

18. In the classes you teach, do you work with SEN children (with a DGASPC file or a CJRAE certificate)?

- a. Yes
- b. No

If YES, move on to the next question. If NO, move on to question 21.

19. How often do you collaborate with the following stakeholders, to ensure that the SEN children in your class receive a quality education?

	Very often	Often	Rarely	Very rarely/ Never
Support teacher				

Colleagues from the school				
Principal				
Parents of SEN children				
Other parents from the school				
School doctor				
Methodologist teachers				
Resource teacher for special education				
I don't collaborate with anyone				
Other stakeholders. Which?				

20. Which of these categories help you in your classroom activity?

- a.
- b.
- c.
- d.

Collaborating with the management team

21. How satisfied are you of the communication and collaboration with the school staff?

	Very satisfied	Satisfied	Dissatisfied	Extremely dissatisfied
Teachers				
Principal/ deputy principal				
Auxiliary teachers				
Administrative staff				
Maintenance and operational staff				

22. The main topics for discussion with your co-workers are related to:

- a. Conflicts in the classroom/school
- b. Integrating SEN students in mainstream education
- c. Ways of working with the students
- d. Appraisal methods
- e. Extracurricular activities
- f. Personal or professional development aspects
- g. Implementing school projects
- h. Personal/family-related problems
- i. Others.....

23. How satisfied are you with the Board's activity during the past year?

Extremely dissatisfied	Dissatisfied	Satisfied	Very satisfied

24. Were you asked to get involved in the development of the school PDI and PO?

- YES
- NO

25. What are the suggestions you usually receive from the school management?

.....

.....

.....

26. To what extent do they help improve your activity?

To a very large extent	To a large extent	To a small extent	To a very small extent/ not at all

27. Have you made any suggestions to improve the school activity, in this school year?

YES

NO

28. Are the suggestions you make being considered by the management team?

Always	Often	Rarely	Never

29. This school year, in what type of activity did you get involved, apart from the teaching one?

- a. Developing the Institutional Development Plan (PDI)
- b. Developing the managerial plan/ operational plan (PO)
- c. Reviewing the internal regulation
- d. Proposing a CDS
- e. Producing school reports
- f. Promoting the school and its results, in the community
- g. Other activities: which?

Family`s involvement in the school activity
--

30. In your opinion, what would be the parents` role in school?

- a. Finally support some procurements
- b. Take part in activities rolled out by the school
- c. Get involved in organizing some extracurricular activities
- d. Help their kids with homework
- e. Collaborate with the teachers
- f. Send the kids to school
- g. Other

31. What ways have you used to communicate with the parents?

- a. Meetings
- b. Written notes
- c. Lectureship
- d. Individual talks
- e. Others

THANK YOU FOR YOUR ANSWERS!

Questionnaire for students

This survey includes several questions on school and the activity you carry out here There are no right or wrong answers. Through this survey we just want to see your opinion on the school. Your answers are anonymous, so you don't have to state your name.

PAY ATTENTION!

There might be multiple answer questions, and you will have to select the one that is closest to what you believe. Please answer all questions

Identification data of the education institution

5. **Name of the education institution:**
6. **Locality:**
7. **County:**
8. **Residential environment:** 1. urban 2. rural

Socio-demographic data

9. **Age (turned)**
10. **You are:** a. Boy b. Girl
11. **Grade:**
12. **Do you live in the same locality with the school you attend?**
 - a. Yes
 - b. No; in another urban locality
 - c. No; in another rural locality
13. **Your parents' highest level of education:**

MOTHER	FATHER
a. Primary school or below	a. Primary school or below
b. Lower secondary	b. Lower secondary
c. Vocational school	c. Vocational school
d. High school	d. High school
e. Post-secondary or foreman school	e. Post-secondary or foreman school
f. Faculty	f. Faculty
g. MA degree	g. MA degree
h. PhD	h. PhD

School environment

14. **Think about the school you attend and for each statement below select the answer closest to your opinion**

	To a very large extent	To a large extent	To a small extent	To a very small extent/ Not at all
The school conditions, furniture, water, lighting, cleanness are very good				
The school atmosphere is pleasant				
I feel very nice among my colleagues				
At school I feel as in a team				

Teachers respect our opinions				
Teachers are interested in us not skipping school				
Teachers are interested in us having good results in school				
Teachers provide additional support to children who have a hard time learning				
I feel safe at school				
School offers me personal development possibilities				
School offers me leisure possibilities				
What I learn now will help me in the future				
What I learn in class can be put in practice				

15. Think about what drives you to learn and for each example below select the answer closest to your opinion

	To a very large extent	To a large extent	To a small extent	To a very small extent/ Not at all
Teachers` praise				
Teachers` comments				
Grades				
Fear of punishments				
The desire to receive a prize at the end of the school year				
Teachers` praise				
Teachers` comments				
Grades				
Fear of punishments				
The desire to receive a prize at the end of the school year				
The desire to continue my education				
The desire to have a job				
Anything else?				

16. Who are the main people that help you learn better (understand the content, do your homework, etc.)? (Not more than 2 options)

- Classroom teachers
- Other teachers (from or outside from school)
- Colleagues/ friends
- Parents
- Relatives

School activity

17. Think about how the activity is carried out in school and for each example below select the answer closest to your opinion

	To a very large extent	To a large extent	To a small extent	To a very small extent/ Not at all
Teachers ask you to parrot the information they give you				
During the classroom activities, you are encouraged to ask questions to your colleagues				
During the classroom activities, you are asked to give your opinion				
During the lessons, teachers use additional materials (special textbooks, charts, lab equipment) to explain the content				
You know the rules used by teachers to grade you				
Teachers talk to the class about how you should behave				
Teachers talk to the class about how to help and respect others				
Teachers ask students to take part in various school activities (make it more beautiful, services, produce didactic materials, etc.)				
Teachers ask students to take part in various community activities (make it more beautiful, services, etc.)				

18. Do you plan to continue your education?

- a. Yes
- b. No

If YES, move on to next question. If NO, move on to question 18.

19. Up to what education level?

- a. Lower secondary
- b. 10 grades
- c. Vocational school
- d. High school
- e. Post secondary
- f. Higher education
- g. Don't know yet

20. Why do you want to continue your education up to the level you mentioned? (Circle maximum 3 answers)

- 1. I don't really like to learn
- 2. I don't think I am that prepared as to get into the vocational school/high school I want
- 3. My parents don't have money to keep me in high school or vocational school
- 4. I want to be financially independent as soon as possible (earn my own money)
- 5. Because compulsory education is 10 years

6. Staying in school more will help me find a job easier
7. Staying in school more ensures your success in a profession and in life
8. Other reasons; which?

21. **Do you use the following contexts to get information on the possibility of you continuing your education?** (Select the comments closest to your opinion on every source of information):

	To a very large extent	To a large extent	To a small extent	To a very small extent/ Not at all
Homeroom classes				
Career and school guidance				
Talks with school teachers				
Presentations of high schools/vocational school offers				
School boards				
School website				
Internet (not the school website)				
Media				
Educational fairs				
Meetings with school graduates				
Visits in schools we could attend				
Talks with the parents				
Talks with colleagues, friends,				
Other sources Which?				

22. **Are you absent from school?**

Very rarely/ Never	Rarely	Often	Very often

23. **If you are absent, who inquires about you?**

- a. Teachers
- b. Colleagues
- c. Class master
- d. Principal
- e. School counselor
- f. School mediator
- g. Others; who?

Professional path

24. **Have you chosen an occupation you want to have after finishing your education?**

- a. Yes
- b. Yes, but the family is not supporting me
- c. No, because I am still torn between two or several
- d. No

If YES, please answer the following questions.

25. Why have you chosen this occupation?

- a. I can find a job easier
- b. Is well paid
- c. I like it
- d. My parents advised me
- e. My teachers guided me
- f. My friends/colleagues advised me
- g. Other reasons; which?

26. Do you think you have the right skills for it?

- a. Yes
- b. Somehow
- c. No, but I will improve them in school

27. How did you learn you have the skills for it?

- a. I noticed it myself
- b. My parents/relatives told me
- c. Teachers told me
- d. My friends/colleagues told me
- e. I filled out some career guidance tests
- f. Other methods; which?

THANK YOU FOR YOUR PARTICIPATION!

APPENDIX 1: SUMMARY OF THE STRATEGIES

Strategy to Reduce Early School Leaving 2015 - 2020

The objectives of the Strategy are to improve the quality and scope of prevention approaches, especially at early childhood and early primary stages, and progressively scale up intervention and compensation approaches; and to reduce ESL from 17.4% (2013) to 11.3% by 2020.

Short-term objective: to implement an effective system of prevention, intervention and compensation policies and measures to address the major causes of ESL among youth between 11 and 17 years of age.

Medium-term objective: to reduce the share of youth between 18 and 24 years old who have completed lower secondary education, and who are not involved in further education or training, to 11.3% by 2020.

Long-term objective: to contribute to Romania's inclusive smart growth by reducing the number of people at-risk of unemployment, poverty and social exclusion.

PILLAR 1: ENSURE THAT ALL CHILDREN GO TO SCHOOL AND RECEIVE QUALITY EDUCATION

Flagship Program 1.1: Increase Access to Preschool Education and Care

- Strengthen and consolidate Early Childhood Education and Care (ECEC) to enhance effectiveness;
- Recognize the important roles of families (children 0-3 years) by engaging them directly in parental education and awareness Programs and provide financial incentives to support them;
- Reach local authorities, communities, parents, and other stakeholders to ensure appropriate support for enrolment and retention purposes;
- Develop new approaches to ensure the provision of sufficient numbers of qualified teachers (educator puericultor) in all geographical locations and with required language skills, particularly in rural/disadvantaged areas, (including financial incentives).

Flagship Program 1.2: Provide Access to Quality Primary and Lower Secondary Education for All

- Develop and implement plans to provide adequate access to quality education, especially for children from at-risk groups;
- Establish a research group within MESR to study educational reforms (including technology) and challenges specific to Romania;
- Establish a system of continuous professional development for teachers through MESR;
- Support communities and schools to achieve representative population balance in classrooms.

PILLAR 2: ENSURE THAT ALL CHILDREN COMPLETE COMPULSORY EDUCATION

Flagship Program 2.1: Develop Early Warning Systems and Consolidate Remedial and Support Programs for at-Risk Students in Compulsory Education

- Improve conditions and quality of School-after-School (SAS) Programs offered for students from at-risk groups through development and establishment of quality standards for such remedial programs (without impeding innovative approaches);
- Develop early warning and intervention systems to detect children at risk of repetition and dropout;
- Complete and support existing fragmented counseling initiatives for students within and outside of the education system (students who have left the system).

Flagship Program 2.2: Improve the Attractiveness, Inclusiveness, Quality and Relevance of Vocational Education and Training (VET)

- Increase VET attractiveness and relevance by redesigning VET pathways to increase flexibility and permeability, and by expanding quantity and quality of work-based learning opportunities with focus on re-entry of school leavers;
 - Reform and enhance VET System through curriculum reform and training of teaching and management staff; creating stronger linkages with the employment sector.

PILLAR 3: BRING EARLY SCHOOL LEAVERS BACK TO SCHOOL**Flagship Program 3.1: Provide an Adequate Supply of Quality Second Chance (SC) Education Programs**

- Mechanism to widen the reach of the SC Programs to each county school inspectorate and Bucharest municipality; and to improve its quality through improved programming, material, and teacher training (including Second Chance VET Programs).

PILLAR 4: DEVELOPING APPROPRIATE INSTITUTIONAL SUPPORT**Flagship Program 4.1: Strengthen the Capacity of the Government to Implement and Monitor and Evaluate the ESL Reduction Strategy**

- Develop the capacity to analyze existing data and closely monitor the evolution of ESL at national, regional and local levels, creating the foundation for targeted and effective evidence-based policies;
- Establish better financial continuity in strategy implementation to eliminate financing asymmetries and abrupt changes.

The cost estimates range from €651 million to €929 million for the period 2014-2020, based on high and low enrolment and different participation rate scenarios for the various Flagship Programs.

The implementation of the strategy is expected to benefit approximately 1.2 million people between 2014 and 2020.

Strategy for Increasing Tertiary Education Attainment, Quality, and Efficiency in Romania 2015 - 2020

At the core of this new vision for tertiary education is the ambition for Romania to join the ranks of the advanced economies of Europe by 2030. In accomplishing this goal, in 2020 Romania will have a tertiary education sector that can energize economic growth, contribute to increased productivity, and promote social cohesion, thus serving as the foundation of a knowledge-based economy.

The Higher Education sector will prepare specialists who can develop a competitive society in the global economy; the higher education institutions will be able to catalyse creativity and innovation throughout Romanian society and will assist industry in developing products and services.

Enabling Condition 1: Assuring Adequate and Efficient Funding

- Provide sufficient funding to support high quality, relevant, efficient universities;
- Allocate funding in the context of institutional performance towards policy objectives and desired outcomes.

Enabling Condition 2: Promoting Effective Governance

- Engage stakeholders in the process of identifying and pursuing strategic objectives for the sector;
- Match level of operational autonomy with accountability for performance against well-defined expectations;
- Ensure transparency of the university classification process.

Enabling Condition 3: Utilizing Data M&E for Evidence-Based Policymaking

- Engage stakeholders in the process of identifying and pursuing strategic objectives for the sector;
- Match level of operational autonomy with accountability for performance against well-defined expectations;
- Make relevant student and employer data public to inform selection;
- Provide transparency to key stakeholders on program quality.

Pillar 1: Committing the Sector to Improved Attainment in all Areas

- Establish clear routes from vocational and other secondary education into tertiary education;
- Complement merit-based fee waiver with a program of needs-based grants;
- Implement a student loan program;
- Encourage outreach to students from underrepresented groups and to non-traditional learners, including adults;
- Increase the transparency of information and provide guidance on educational opportunities and outcomes to inform study choices and reduce drop-out.

Pillar 2: Promoting the Establishment of High Quality, Adaptive Academic Programs

- Revise program accreditation regulation;
- Expand capacity for curriculum redesign;
- Develop an ongoing curricular assessment for transversal skills and entrepreneurship;
- Develop a tracer study to monitor graduate performance;
- Enhance the ICT offerings to complement existing offerings;
- Analyze the possibility of extending dual training at the level of technical tertiary education.

Pillar 3: Promoting Strategic Engagement with Economy

- Develop a national Program that promotes dynamic and continued dialogue between the education and business sectors;
- Establish an Industry Liaison function at each institution;
- Involve employers in the design and delivery of Programs, supporting staff exchanges and including practical experience in courses.

Estimated costs: €1.0 billion

Estimated costs: €1.1 billion

It is estimated that the strategy will have an impact on over 625,500 people, including the 58,000 individuals who are needed to increase the cohort of 30–34-year-olds with completed tertiary education to 26.7 % by 2020.

Strategy for Lifelong Learning 2015 - 2020

The vision for lifelong learning in Romania is to provide all individuals, throughout their lives, with opportunities to participate fully in economic, social and civic life and to enable them to fulfill their personal potential. The vision encompasses both social and economic benefits of lifelong learning. Achieving this vision requires the development of partnerships between all relevant stakeholders in the lifelong learning arena.

The goals are to **increase the participation in lifelong learning and improve the relevance of the education and vocational training systems for the labor market.** In line with the European Union goal, Romania's main target for 2020 is **at least 10 percent of the adult population (aged 25-64) participating in lifelong learning activities.**

PILLAR 1: ACCESS AND INCENTIVES FOR PARTICIPATION

- Financing to enhance LLL demand;
- Supporting unemployed and inactive persons, including with financial incentives and counseling;
- Financing to diversify LLL provision;
- Consolidating and ensuring financing to foster the lifelong learning market, including improved counseling services*;
- Supporting participation in European mobility programs;
- Involving Vocational Education and Training and Higher Education Institutions in LLL*;
- Recognizing prior learning, including qualifications obtained abroad.

PILLAR 2: QUALITY AND RELEVANCE

- Improving the quality and availability of information;
- Assessing skill needs and developing a broader skill set;
- Involving Vocational Education and Training and Higher Education Institutions in LLL*;
- Consolidating and ensuring financing to foster the lifelong learning market, including improved counseling services*;
- Improving the National Qualifications Framework and strengthening coordination between stakeholders*;
- Establishing a quality assurance, M&E system for LLL.

PILLAR 3: PARTNERSHIPS FOR BETTER INFORMATION

- Consolidating and ensuring financing to foster the lifelong learning market, including improved counseling services*;
- Improving the National Qualifications Framework and strengthening coordination between stakeholders*.

**Cross-cutting measures, which would contribute to achieving the objective of more than one strategic pillar.*

Implementing the strategy in its entirety is expected to cost approximately €1 billion, between 2014 and 2020.

The implementation of an LLL strategy is expected to benefit approximately 1.6 million people, between 2014 and 2020.

Strategy for Vocational Education and Training in Romania 2015 – 2020²¹

The objectives of the Strategy are to improve the relevance of training systems for the labor market, increase participation and improve access to training programs, improve the quality of training, and develop innovation and national and international cooperation in training.

Strategic objective 1: Improve the relevance of training systems for the labor market

- Update the instruments that describe occupations/ qualifications, curriculum and auxiliary curriculum resources, by qualification levels established in the National Qualifications Framework, for better articulation between sub-systems, to facilitate mobility in VET and to increase relevance for the labor market;
- Develop mechanisms for the anticipation of skill needs in the labor market, define professional profiles to develop/ review qualifications according to the skills and knowledge which are relevant for the labor market needs and update curriculum to labor market needs and trends;
- Conduct tracer studies for training graduates;
- Improve on-the-job learning in training;
- Improve public and private funding mechanisms;
- Foster social partners' involvement in developing the training system.

Strategic objective 2: Increase participation and improve access to training programs

- Develop marketing of training programs and learning outcomes acquired in informal and non-formal context;
- Increase participation of youth and adults in CVET, especially for NEETs (youth aged 15-24 who are not in employment, education and/ or training), persons in transition on the labor market (as well as workers at risk of unemployment and unemployed), disadvantaged groups and persons older than 50 years old;
- Improve career guidance and counseling;
- Strengthen the mechanisms for recognition and validation of learning outcomes achieved in informal and non-formal contexts;
- Facilitate access to training programs in the education system for youth, especially for those coming from rural and disadvantaged areas, and the Roma population.

Strategic objective 3: Improve the quality of training

- Develop a national framework for quality assurance in VET at system level;
- Develop the regulatory and implementation framework for quality assurance in CVET;
- Create quality assurance in certification of learning outcomes;
- Improve the skills of people with responsibilities for providing training programs in IVET and CVET and for those assessing the learning outcomes in formal, informal and non-formal contexts;
- Improve the quality of the initial and continuing training infrastructure;
- Promoting excellence in VET.

Strategic objective 4: Develop innovation and national and international cooperation in training

- Develop innovation, creativity and entrepreneurship in training programs;
- Improve institutional capacity of initial and continuing training providers and of sectorial committees to help access European funds;
- Develop international mobility in training;
- Expand mutual learning and best practices exchange to create the fundamentals for participating in an inclusive European labor market.

Implementing this strategy is expected to cost approximately €240 million for the period 2014-2020.

²¹ This Strategy was prepared separately by the MESR.

APPENDIX 2: GUIDANCE FOR ANNUAL MONITORING REPORT ON PROGRESS OF STRATEGIES

This guidance document contains the templates, formats and content instructions to assist the four WGs in preparing the annual progress report. The principle of the reporting and planning approach is to ensure that all the information related to strategy implementation is recorded. The information is then analyzed and used to make decisions on planning, resource allocation and activity focus; importantly, the approach allows the Ministry of Education (MoNE) to build on and sustain successes while reducing risks. The approach presented in the M&E Methodology places monitoring as a central feature for the effective strategy management. From this perspective, the WG effort is best described as Performance Measurement, and Management that informs resource allocation, policy decisions; and provides overall direction to the strategy execution.

Key features of the M&E Methodology's reporting and planning approach is that:

- It helps identify progress on enabling conditions to achieve strategic national targets.
- It shifts the focus from the final targets to actionable solutions. These can be assessed on their own merit as contributing to the strategic national targets.
- It provides a better understanding and analysis of what must take place to reach the strategic national targets.
- It provides a structured, methodical way of analyzing whether early assumptions regarding solutions were correct.
- It provides evidence of action and progress towards the national strategic targets, dispelling perceptions of inaction.
- It demonstrates a strong and concerted effort on the part of the WGs and the Government in executing the strategies.
- It supports integration of the strategies, which at this point appear to stand somewhat isolated of one another.

Content of the Working Group report:

Section Title	Content
Summary	Narrative summary and summary table of indicator values
Annual Activities report (2017)	Activity status, progress tables
Annual Activity plan (2018)	Work plan table for 2018

Process and Schedule:

1. Data and information Collection and Report Preparation	<p><u>March to October</u> The WGs will meet as needed to Collect data and implementation information from the sources detailed in the M&E Methodology</p> <p><u>November</u> The WG will meet to Prepare progress report:</p> <ul style="list-style-type: none"> • Examine by activity the progress of actions undertaken in the previous year. This will involve analysis of accomplishments, and obstacles to progress. • Each activity or group of activities will be reported on an individual activity-reporting fiche as shown in this Guidance document. • The analysis will include: progress, articulation of obstacles and/or factors effecting implementation, characteristics of output(s) as well as recommendations related to implementation, exclusions, deletions, adjustments in the measure, indicators and/or targets of the strategies. <p><u>December to January</u> Prepare next year's annual activity plan:</p> <ul style="list-style-type: none"> • The new work plan is derived in part from the analysis of the previous year's progress, from the overall strategy, and through an
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	<p>assessment of the timing and conditions that enable or block progress.</p> <ul style="list-style-type: none"> • See the templates in the ensuing sections for detailed instructions.
3. Submission	<p><u>February</u></p> <ul style="list-style-type: none"> • The WGs will submit completed progress report to the Policy Unit of MoNE by mid-February
4. Preparing the Main Report	<p><u>February to March</u></p> <ul style="list-style-type: none"> • The Policy Unit Team will assess, analyze, and extract essential elements of the four WG reports to articulate an overall assessment of the strategies, of the sector and the position of Romania in relation to the EU. The Policy Unit Team will provide decision makers with an analysis of progress and major issues faced by strategy execution and the effect of these issues on the ability to meet targets.
5. Submission	<p><u>March</u></p> <ul style="list-style-type: none"> • The Policy Unit will submit the complete report to the Steering Committee and then release the report following Steering Committee validation.

Executive Summary report

TITLE OF THE STRATEGY BEING REPORTED	
DATE OF THE REPORT	Enter Submission date
REPORTING PERIOD	Enter Start and End periods. Typically, these will be January 1 to December 31
WORKING GROUP MEMBERS	Here insert all the names, titles and institutional affiliation of the members of each working group
<p>EXECUTIVE SUMMARY: <u>Complete this section last after the activity analysis and reporting, and the work plan for next year</u></p> <p>The summary should contain an examination of the major accomplishments of 2017, not in detail but in summary form since the details will be found in each activity fiches.</p> <p><i>Some suggestions:</i></p> <p><u>For the progress report section:</u></p> <ul style="list-style-type: none"> • Focus on items where targets were met or exceeded (the success) • Focus on items that are necessary pre-conditions for executing the major initiatives and whether these have been met or not • Highlight items that are linked most directly to the high level strategic indicators (reduction in ESL, increase in LLL for example) to show how the accomplishment of activities will lead to the ultimate strategic results and targets. • Present major obstacles in a factual, practical manner, avoid editorializing. • Explore integration and complementarity with other strategies <p><u>For the work plan:</u></p> <ul style="list-style-type: none"> • Make a general statement about the character of the plan: for example, are we in a preparatory phase? What are the major conditions needed for success? When do we think these conditions will be met? Have conditions changed in such a way that the conditions for success are no longer viable or relevant? • Highlight risks to execution in a factual manner without editorializing. • Highlight transition from preparatory work to program execution (for example: preparing guidelines and standards is a necessary step to having an effective program later in 2018 or 2019). • Show where you are moving forward even if the financial and regulatory conditions are not yet in place (this shows that the process is not at a standstill but moving forward) 	

Summary indicators tables

This is part of the summary section and as such, should be completed after the Activity Fiches have been completed

All indicators for the four strategies should be covered in these tables. The purpose of this table is twofold:

- (i) To capture all indicators and their respective values in summary form which helps to show progress towards the strategic indicators,
- (ii) To show the position of the national strategic indicators (which are not found in the activities Action Plans).

The summary tables should reflect and be consistent with the contents of the Activity Reporting Sheets. The only exceptions are the national strategic indicators which are impacted by the whole strategy and not by a single activity.

Instructions

- Do not remove indicators even if the WG recommends deletion. Instead, state in column number 6 that the WG recommends deletion and provide a brief reason (detailed rationale should be found in the Activity Fiches).
- Do not add indicators in column number 2, even if the WG recommends the addition. Instead, type ADDITION in column number 2, complete the relevant columns and insert the new indicator in column number 6 and provide a brief reason (detailed rationale should be found in the Activity Fiches). The reason for this is to avoid confusing existing and additional indicators. When the new indicator is approved it can take its place among the other indicators in the Indicator Definition Table and will be provided with detailed information on methods of calculation, collection and sources of data and information.
- If the WG recommends an adjustment to the wording of the indicator or its final value, provide the recommended change in Column 6 not in columns 2 or 3, this will allow the reader to compare the change and judge the change accordingly (detailed rationale should be found in the activity sheets)
- Each WG is responsible for showing the indicator value for its respective indicators; this will require collecting data from official government sources, reaching out to bodies that are executing activities and programs such as universities, schools, evaluation centers, other WGs etc.
- The WG may need to rely on a sample if the process of collection is not yet in place. Whatever form is used, the basis of calculation, method and assumptions should be shown on the Activity Fiches whereas here only a summary comment is required in the Summary Table.
- Addition instructions found in the table below:

Sample for instructions

1.	2.	3.	4.	5.	6.
label	Ultimate indicator	2020 indicator value	Current year indicator value	Date of collection of indicator value	Comments on progress for the current year (extracted from the Activity Fiches)
This is provided in the strategy tables	This is provided in the strategy document	Insert indicator value as shown in strategy documents	Insert indicator value as collected from the various sources	Insert date of the collection of the data	Comments here are in summary (point-form); they should give the reader a snapshot of the status, such as: <ul style="list-style-type: none"> • Factors impacting execution, • Challenges related to the indicator (is it still appropriate? Do you recommend deletion, change, change in value)? • Important factors related to the progress or lack thereof,

					<p>for example, not seeing improvement in ESL rates is not an indication of failure when the execution is focused on creating the necessary conditions for success.</p> <ul style="list-style-type: none"> • Insert changes to wording of indicator, recommended new values or new indicators here.
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Activities Fiches (for current year)

NOTE: report progress only where there is EVIDENCE not declaratory statements.

General issues: Activity numbering is inconsistent between strategies; we will take the opportunity here to unify this across the four strategies. We will do this by giving a third level number (1.1.1) to each individual activity. For example, if we are looking at measure #1, the activity for 2017 (and of course 2018 etc.) will be 1.1.1 where the first number relates to the Course of Action or Pillar (Highest Level Outcome), the second number to the measure (Outcome) and the third to the activity (Output) associated with that measure.

The example below is extracted from the VET Action Plan:

Course of action	Measure/action	2017 specific actions
1. Updating the instruments for describing occupations and qualifications, the curriculum and teaching methodologies, based on the levels of qualifications set by CNC (National Qualifications Framework)	1.1. Making the National Qualifications Register operational	1.1.1 action 1.1.2 action

However, not all strategies use the same vocabulary thus complicating the attempt at reaching consistency across the four strategies. ESL for example uses Flagship Programs and Measures, and the measures are numbered consecutively from 1 to 16, in addition, the ESL strategy provides indicative actions which are not numbered in the original strategy but were numbered at the second level in the action plan. These actions are indicative prompts because they are not in themselves sufficiently decomposed to achieve progress towards the intended result. The example below from the ESL strategy illustrates the conversion process. (This process will be imbedded in the 2018 Annual Monitoring Report and 2019 Work Plan)

Original numbering structure used in ESL Strategy

Flagship Program	Measure/ Action
1.1: Increase access to Preschool Education and Care	1. Strengthen and consolidate ECEC to enhance effectiveness 1.1 Action (derived from strategy without decomposition) 1.2 Action (derived from strategy without decomposition)

Desired numbering structure for ESL Strategy

Flagship Program	Measure/ Action	Specific Activities for 2017
1: Increase access to Preschool Education and Care	1.1 Strengthen and consolidate ECEC to enhance effectiveness	1.1.1 action derived from analysis and decomposition of measure (what specific activities are required to strengthen and consolidate?) 1.1.2 action derived from analysis and decomposition of measure (what specific activities are required to strengthen and

		consolidate?)
2: Provide access to quality primary and lower secondary education for all	2.1 Develop and implement plans to provide adequate access to quality education, especially for children from at-risk groups	2.1.1 action derived from analysis and decomposition of measure (What specific actions are required to develop and implement plans etc.) 2.1.2 action derived from analysis and decomposition of measure (What specific actions are required to develop and implement plans etc.)

Data collection:

- Data at the activity level can be as simple as Yes or No in terms of whether a legislation, standard, framework, or process is in place or not. Yet merely stating Yes when such an output is in place is not sufficient to indicate complete because the **yes** is not evidence. Evidence comes in the form of ‘date of approval’, ‘official government label’ such as a law or ruling number, in short, any information that can be independently verified.
Follow this principle: if there is no evidence of completion, then it is not completed, and is still in progress.
- It is necessary to reach out to third parties to collect data. These third parties may be associated with the agencies represented on the Working Groups, or may be partners, or even autonomous entities delivering services. Third parties include entities executing activities and programs like universities, schools, evaluation centers, NGOs, the other WGs and their members. Essentially any agency undertaking work related to the execution of the strategies.
- Do not stop at numbers. Quantitative data is not sufficient and does not consider the long perspective. Whenever possible when quantitative data is provided, for example, how many persons were served at Evaluation Centers (from LLL strategy), attempt to get information on the type of service provided, the character of the evaluations undertaken, factors encountered in evaluating, if we know whether this helped the individual. This will not only give substance to numbers but it will help to set the stage for evaluations later.
- If possible (more likely to occur in future years) it would be useful to get information for third parties not associated with the strategies directly but whose work has an impact on national strategies and targets, for example, the Roma Education Fund works in basic education and ECEC, and may have programs not directly related to the strategies but that may have an impact on the performance of the country. This is good complementary data.

This First Annual Monitoring Report relied mostly on progress data available through official records and data gathered through requests to implementing entities such as Authorization Centers, Schools, Districts, Universities etc. This is acceptable since it was the first year of applying the M&E Methodology. However, in the future, it will be necessary for the WGs or others at the MoNE to go into the field and undertake verification monitoring to confirm the information and to gain a better understanding of what is working and what is constrained.

Activity Fiche Template

Each WG is to complete an Activity Fiche for each activity or group of activities within their respective strategy. The activities are found in the Work Plan for the current year under review.

The following pages contain:

- An empty template to copy and use in the construction of the report
- A template with instructions in each of the cells
- Templates showing examples on how to present a single activity or multiple activities under a given measure.

Pillar/strategic goal:
Course action:

Measure:					
Action(s) 2017:				Status: Percentage of Progress:	
Strategic Target		Indicator value 2017		Actual value 2017	
Percentage of Progress towards strategic target					
Responsibility					
Budget 2017 (Total/Lei)			Actual 2017 (Total/Lei)		
Specify Source			Specify Source		
Comments on technical issues					
Comment on financial issues					
Recommendation					

Reporting Template Instructions

Pillar/strategic goal: as it appears in the approved strategies					
Course action: as it appears in the approved strategies (not all strategies have a course of action, in which case, leave blank)					
Measure: as it appears in the approved strategies					
Action(s) for year under review: insert as they appear in the Action Plan of the year under review. It is important that the Work Plan is sufficiently decomposed into individual actions needed to complete the work. If not, then this decomposition must take place here. This may seem banal but it is important to understand what has taken place during the year. As a simple example, if an action is stated as “approve regulation, undertake study of similar international regulations and produce report” under one activity how can progress be measured? <u>If the indicator relates only to the regulation being approved, how do we demonstrate action on the study and report to avoid the perception of inaction?</u>				Status: The three statuses to show here are	
In this case, there are 3 activities that are intricately tied to one another; separating them will make it easier to demonstrate that a study was undertaken, a report was written but approval of the new regulation has not yet been reached. In this way, evidence of progress is shown and at the same time, it highlights what remains to be done and by whom (example 2 below shows how to present multiple related activities in one sheet)				<ul style="list-style-type: none"> • Not started • In progress • Completed 	
Strategic Target	Copy from strategy	Indicator value forecast for the year under review	Copy from action plan of the year under review	Actual value 2017	State actual value based on research and collected data
Percentage of Progress towards strategic target	Where possible, particularly where there are quantitative targets, show percentage of progress in relation to final target , for example, if the target is to build 100 building and thus far we have built 25, state: 25% complete.				
Responsibility	Copy from strategy and action plan, even if a change is necessary do not make the change here, make it in the recommendation and provide rationale				
Budget current year (Total/Lei)	If available insert here		Actual current year (Total/Lei)		If available insert here
Total			Total		

Gov. Budget		Gov. Budget	
POCU, etc.		POCU, etc.	
<p>Comments on technical issues</p> <ul style="list-style-type: none"> • Do not editorialize! • Stick to facts about characteristics of the output(s), for example, <ul style="list-style-type: none"> ○ Its utility as a building block for achieving the national strategic targets ○ Standards used to develop it ○ Obstacles and opportunities in execution ○ Resources allocated to execute; insufficient Human Resources; Material and Informational resources. • Evidence which may include: <ul style="list-style-type: none"> ○ Dates of submission ○ Web links ○ Official government numbers on regulations • Whenever a problem, obstacle or challenge is highlighted you should suggest a possible solution or course of action that could lead to a solution. <p>Comment on financial issues</p> <ul style="list-style-type: none"> • Suitability of financial resources (too much or too little) • Availability of financial resources 			
<p>Recommendation</p> <ul style="list-style-type: none"> • All recommendations should appear here. Recommendations may include: <ul style="list-style-type: none"> ○ Deleting a measure ○ Changing a measure ○ Changing an indicator ○ Changing a strategic target value • Whatever is recommended, it is imperative that a rationale is provided. A rationale includes: <ul style="list-style-type: none"> • Why you are proposing the change (including deletion) • The effect it will have on the overall strategy • If it is a change you are proposing, provide new wording. <p>Work plan recommendations</p> <ul style="list-style-type: none"> • Comment on how this activity will affect the next work plan. Whether it should be suspended, changed, continued, refocused, etc. 			

Examples of Template Presentation

NOTE: These are examples for demonstration purposes only and do not represent the richness of the expected content or the evidence required.

Example of a single activity that is in progress.

Pillar/strategic goal: Improving the relevance ...					
Course action: #1 updating instruments ...					
Measure: #1.5 develop/revise the fundamentals of the ...					
Action(s) 2017: 1.5.1 develop/review of the curriculum for technical program ...					Status: In progress
Target 2020	2000 curricula	Indicator 2017	133 curricula	Actual 2017	200 curricula
Percentage of Progress towards strategic target	10%				
Responsibility	CNDIPT				
Budget 2017	N/A		Actual 2017	N/A	
Specify Source			Specify Source		

<p>Comments on technical issues:</p> <p>The resulting curricula have been shown to be relevant to the labor market through consultation with economic operators. Local schools are involved in developing the curriculum which ensured greater partnership between schools and local economic operation and therefore greater relevance to local labor markets.</p> <p>The curricula cover level 3 EQF and level 4 EQF and cover trades such as auto mechanic, electro-mechanic for industrial machinery, HVAC, among many others.</p> <p>The revisions were conducted based on learning-outcomes-based training standards.</p> <p>Comment on financial issues N/A</p>
<p>Recommendation</p> <p>For the remaining PTS and Curricula: the same mechanism will be followed to ensure relevance to local labor market and adherence to EQF.</p> <p>Recommendation for next work plan Continue based on technical recommendation</p>

Example of multiple integrated activities that are at various stages of progress

The activities shown below from 7.3.1 to 7.3.7 belong to the same measure and are intended to produce a single output, i.e., the campaign to promote VET. The activities can be presented together and their status shown.

Pillar/strategic goal: #2 increasing participation ...					
Course action: #7 develop marketing...					
Measure: 7.3 campaigns to promote VET...					
Action(s) 2017:					Status:
7.3.1 Develop and broadcast 1 audio spot					In progress
7.3.2 Develop and disseminate 2 newsletters					Complete
7.3.3 Develop and disseminate online 2 video testimonials					Not initiated
7.3.4 Develop an interactive module for students at www.alegetidrumul.ro					Complete
7.3.5. Prepare the booklet on admission at county level					Complete
7.3.6. Present the VET offer at county/regional level and examples of good practice and career success within Trade Fair events.					Complete
7.3.7. Campaigns to communicate examples of good practice and to present successful career examples of VET graduates, organized at county and regional level					Complete
Target 2020	50000 students reached	Indicator 2017	30000 students reached	Actual 2017	0 students reached
Percentage of Progress towards strategic target	0% ($0 \div 50000 = 0 \times 100 = 0\%$)				
Responsibility	VET Agency				
Budget 2017	355,000LEI	Actual 2017	155000LEI		
<p>Comment</p> <p>Despite not meeting the target set in 2017, much preparatory work was done which should be helpful in reaching the target audience before 2020.</p> <p>7.3.1 The media spot was produced but not broadcast, the team is planning to broadcast in 2018 when there will be greater impact related to the date of broadcast</p> <p>7.3.2 Rather than develop newsletters, the team opted for fact sheets because they are more easily</p>					

distributed electronically, more easily produced and more easily consumed. Comment on financial issues: 200,000 LEI remain in the budget which should be sufficient to begin outreach and broadcasting.
Recommendation

Example of multiple non-integrated activities under a single measure

In this example, there are two activities under the measure but they are not integrated, therefore there is no need to repeat the pillar, course of action, or measure information. Simply copy the portion of the table ranging from the Action row to the recommendation and append it at the bottom of the first table.

Pillar/strategic goal: #1			
Course action: 5 improving public and private funding			
Measure: 5.1 develop mechanisms for financing PPP			
Action(s) 2017: 5.1.1 develop a project/proposal of funding ...			Status:
Indicator value 2017	1 n doc	Actual 2017	
Percentage of Progress towards strategic target			
Responsibility	NQA		
Budget 2017		Actual 2017	
Comment			
Recommendation			
Action(s) 2017: 5.1.2 develop project/proposal of funding mechanism ...			Status:
Indicator value 2017		Actual 2017	
Percentage of Progress towards strategic target			
Responsibility	CNDIPT		
Budget 2017		Actual 2017	
Comment			
Recommendation			

Annual Activity Plan (2018)

The Annual Monitoring Report is incomplete without a corresponding activity plan for the following year. This subject has been discussed at length in the body of the M&E Methodology. The work plan is derived in part by analyzing the previous year’s performance, which includes the detailed examination of progress for each activity. The examination of performance must consider the appropriateness of the actions vis-à-vis the measures; in other words, is the measure appropriate within the regulatory environment and the context of the sector and are we certain that the activities we are designing will help achieve the results (outcomes) expected in the measures? The activity plan therefore is not a mechanical designation of activities but a design of activities that can help bring us closer to the goals envisioned in the four strategies.

One important note to consider is that there is a need to identify, within the activity plan, areas that require improved coordination, particularly in data sharing. For example, while examining the 2017 activities at the LLL Working Group, it was noted repeatedly that the Authorization Centers do not report and if they do, the reports are inconsistent, making analysis extremely difficult. While a temporary solution was found for the 2017 report, in future years the NQA, which is the main contact

agency for the Authorization Centre, must include an activity related to data collection planning and developing processes and formats for better data sharing. This was only one example; the other strategies face similar challenges which cannot be dismissed and must be addressed. In short, developing an effective information sharing system beyond 2020 is an important factor for success and sustainability of the strategies.

General Notes on the Planning Process and Template

The template presented in this document is similar to the one used by the WGs to develop the 2017 Action Plans. Some minor adjustments were made for use in 2018. Future adjustments may be possible as the WGs become more familiar with the method of Work Breakdown Structure and Results Based Management. A plan is not an exact science. It relies on studied assumptions and reasonable forecasts. The following methodical issue should be followed when planning activities:

- What actions build on the previous year's accomplishments?
- What actions will most likely help achieve the targets of the measures?
- What preconditions are necessary to implement actions?
- What can be done to help develop these preconditions?
- When do we reasonably expect these preconditions to be in place?
- How much time is there to execute activities? If a precondition is a law or availability of funding and the Work Group determines (through consultations with appropriate parties) that the precondition will be in place in June, for example, then the Work Group can only plan for 6 months.
- When faced with preconditions that are outside the authority of the Work Group, do not ignore the measure, investigate what actions can be taken to prepare so that when the precondition is in place the Work Group and the implementing agencies are ready to move ahead.
- Be clear about what the output will be. For example: is it the preparation of a regulation or approval of a regulation? This will help in setting appropriate annual indicators and targets.

Action plan for 2018

NAME OF STRATEGY

Strategic goal/Pillar 1: TITLE OF STRATEGIC GOAL OR PILLAR

Course of action	Measure/action	Strategy indicators	Strategic target	2018 specific actions	Start	End	Indicator value for 2018	Data source for the indicator reached in 2018	Budget for 2017 broken down by financing sources		Inst. Responsible/involvement
									NB ²²	Other sources	
There are different names for this column in each of the strategies: course of action, substantiation; flagship etc. Copy the appropriate text from the strategy into this cell – do not change it	1.1 copy the measure from the strategy here	Copy the indicator from the strategy here – do not change it	Copy the target from the strategy here	1.1.1 action for 2018 Do not merely paste something from the strategy here, but consider specific actions that can be undertaken during the time frame	In this and the next column: Enter the expected end and start dates. These Can be reasoned assumptions.		Clearly state the indicator and its value for 2018. Be careful, you must clearly articulate what you will measure based on what you aim to accomplish. Do not aim beyond what you intend to accomplish	This column is about evidence, where will you get the information to confirm that you have achieved your annual target?			List the responsible entity from the strategy Add any additional entities that must be involved (keep them separate)
				1.1.2 action for 2018 This is for a second action under the							

²² NB = National Budget

				<p>same measure as above; each action should get its own row</p> <p>Add rows if there are more actions under the same measure</p>							
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APPENDIX 3: GUIDANCE ON TERMS OF REFERENCE FOR IMPACT EVALUATION STUDIES

3.1 Conditional Cash Program implementation – “Every Child in Kindergarten”

Purpose: Assessing the effects of the implementation of the Conditional Cash Program – “Every Child in Kindergarten” (*Fiecare copil în grădiniță*) had on its beneficiaries.

Background: The impact analysis is carried as part of the assessment of the implementation of the *Strategy for Reducing Early School Leaving in Romania*; one of the pillars of this program was aiming at supporting access to education for every child. The proposed analysis is based on observing the fundamental right to education guaranteed for every child, but also on the additional policies applied aiming at increasing access and participation in education.

The impact analysis focuses on the following **objectives**:

- The collection of relevant data on interventions at the preschool level in view of increasing children participation in education.
- The analysis of the effect of financing social tickets over direct beneficiaries, children in kindergarten and indirect beneficiaries (families, teaching staff).
- The implementation of the social tickets program and correlation with increasing participation in education.

Target group:

- Direct beneficiaries (children, their families)
- Teaching staff supporting the implementation of the “Every Child in Kindergarten” program (preschool teacher, teaching assistants)

Implementation methodology

The review of the specialized literature in the field of supporting the participation of preschool children in education. Theoretical models, empirical studies, specific intervention models focused on preschool-age children participation in education shall be considered. Attention shall be paid to studies analyzing the costs involved for supporting preschool children participation in education and long-term gain at individual, family, community, and national level.

The review of the literature shall consist of several major phases:

- The collection of relevant information on studies, reports concerning the support of participation of preschool children in education, and their organization in a consistent manner (alphabetical order, chronological order).
- The identification of analyses resulting from simulations or financial allocation to support participation in education, focusing on the preschool education.
- After the inventory of literature in the field, the identification of assessment issues that could further structure the analytical approach. The issues are to be identified following documentation, and they could refer to: the specificity of the groups of children supported by adapted intervention mechanisms, the typology of the families of origin or the communities they are part of, systems for monitoring the education journey of children, potential risks that could impact on the target group etc. (the issues are listed for illustration purpose only). The main data collected can be recorded in documentation sheets and further structured in a comprehensive database, to provide a permanent overall picture of the field subject to analysis. Also, this data base shall demonstrate the use of a comprehensive, integrated picture of the phenomenon subject to analysis. The data base shall contain at least information on: the document, the source, the main ideas.
- Development of a relevant summary for the topic addressed - financial support by means of tickets, to encourage and support the participation of preschool children in education. In addition to qualitative and quantitative information from relevant analyzes and studies,

information on analytical methodologies, presentation of assessment circumstances/backgrounds, relevant conclusions shall also be included.

The development of the methodology for data assessment, analysis and reading is based on the idea that the impact assessment shall have to measure the net effect of the intervention, the effect the intervention had on the target group, by isolating the effects that would have resulted from a ‘natural evolution’ of the target group without implementation of the intervention.

In these circumstances, it is important to choose and define the assessment methods and tools that should be appropriate for:

- The general, fundamental queries of the assessment and background on which the intervention at preschool level was carried (the supply of conditional meal tickets to support participation in preschool education).
- The structure of the existing data and data sources.

To reach relevant outcomes and conclusions, three types of data should be collected:

- Primary data, present at national level, official data managed at the level of the education system in Romania (focus on data from preschool education system) - data obtained from the Integrated Information System of Education in Romania (SIIR), from the National Institute of Statistics (INS).
- Collection of data from different categories of relevant participants for intervention by conditional tickets for preschool children.

After the collection, the data are subject to different filters for:

- identifying omissions and fixing them;
- checking the consistency of the data (the extent to which they are consistent and supported);
- correlating them to perform complex analyzes.

Methods and techniques of data and information collection

To carry out relevant analyzes, it is necessary to collect consistent data using various tools tailored to the populations investigated and to the topics subject to analysis. Quantitative and qualitative data will be collected.

Investigation methods:

- ✓ Analysis of official documents – records documenting the presence of children in preschool, biannual evaluation sheets filled in by preschool teachers, evaluation sheets filled in by the school counselor will be reviewed.
- ✓ Inquiry by interviews – group interviews will be conducted with the participation of teachers having children in their classes who receive conditional tickets; individual interviews with the executive teaching staff; individual interviews with parents of children who benefit from preschool tickets; individual interviews with teaching staff holding executive and control positions (school inspectors); individual interviews with the school mediator (if any).
- ✓ Non-participatory direct examination – carried on the kindergarten activities.
- ✓ Inquiry by questionnaire – teaching staff holding management positions (kindergarten principals, principals of primary schools that include kindergartens in their structure) shall receive questionnaires.
- ✓ Case study – this shall be carried for children for whom the use of preschool tickets has meant much more than financial support for participation in education.

Tools used for data collection:

- ✓ Educational establishment sheet/questionnaire sent to the principal: shall collect data on the number of children enrolled (classified by groups, beneficiaries of conditional tickets), school frequency, information on teachers (qualification, status, position stability, participation in training programs), information on the social and family environment of children (parents education, employment), information on the specificity of the community (ethnic structure,

socio-demographic mobility of the community, economic potential), information about extracurricular activities carried out in kindergartens.

- ✓ Individual interview guides intended for: teachers with executive responsibilities; parents; teaching staff with guidance and control functions; school mediator (these will be different, tailored to each category of staff investigated).
- ✓ Interview guides intended for the teaching staff.
- ✓ Examination sheet intended for children enrolled in kindergartens and who benefitted from social tickets.

Surveyed population

To collect relevant data for the proposed analysis and to draw relevant conclusions, the investigation has targeted different categories of participants in children education, in relation to the provision of social tickets for kindergarten. For each of the population categories investigated, tailored tools will be used to obtain the most relevant and consistent data.

- **Teaching staff** working with children who benefit from preschool social tickets – as they are the professional category directly involved in working with children who receive social tickets, the information provided by this category will cover both the specificities of the direct beneficiaries of tickets and aspects related to the efforts undertaken by the teaching staff to support the participation of these children in education. Categories of issues addressed/discussed with preschool teachers within group discussions on: participation in education of children benefiting from social tickets (enrollment, frequency, motivation, involvement, transition to primary education); involvement of parents in supporting the educational journey of children (interest, guidance, involvement in kindergarten activities); didactic activity (methods and techniques used in didactic activity and their adaptation to the specifics of vulnerable children, steps taken for transforming financial conditionality into intrinsic motivation for participation in education); support for the teaching staff (participation in training programs to develop professional competencies appropriate for working with children from disadvantaged backgrounds, collaboration with the school counselor, collaboration with the school mediator, collaboration with community representatives); success factors and challenges in keeping children who receive social tickets in school.
- From each kindergarten participating in the survey, all members of the teaching staff will be invited to participate in focus group discussions so that to determine aspects generally applicable in the community as well as specific aspects that could bring additional, contextualized knowledge on the effects of social tickets on the participation in education of preschool children from socially and economically disadvantaged backgrounds.
- **Teaching staff holding executive positions** - they will be the main source of information on the number of children in preschool and the frequency of participation in preschool activities as well as on how these children could be identified and on strategies to include and keep them in preschool. This staff category will be responsible, on the one hand, for the provision of data from the questionnaire addressed to the educational unit (preschool) where the children who are beneficiaries of the social tickets are enrolled. On the other hand, the director of the preschool/school where the preschool is functioning will be invited to respond to a semi-structured interview focusing on his opinions regarding: the relevance, for the specificity of the community, of the measure of supporting through social tickets the participation in education of children coming from disadvantaged backgrounds; requests from parents/community regarding enrollment/participation of children in preschool; support from authorities (mayor's office, County School Inspectorate) in view of schooling children receiving social tickets; the collaboration with relevant parties involved to identify and implement the best strategies for keeping children in the educational system (preschool teachers, teaching assistants, school counselor, speech-language pathologist, specialized inspector, methodologist teachers, school mediator, community health assistant).
- The number of respondents in this category will be the same as the number of preschools included in the surveyed sample. For satellite preschools located in small, isolated communities, the information requested through interview will be collected from the satellite

preschool coordinator (and not from the principal of the primary school having legal entity) because the coordinator has better knowledge of the local reality and specificity.

- **Families of children benefiting from social tickets.** Individual interviews will be carried out with parents of children who benefit from conditional tickets to identify the relevance of this financial support to the children’ educational journey. Consideration shall be given to aspects such as: the credit given to education for social and professional insertion; the availability of investment in education and training; the support given to preschool (e.g. involvement in extracurricular activities); the cultural background of the family.
- **Teaching staff with decision-making and control responsibilities.** Individual interviews will be carried out with school inspectors who are directly involved either in supporting the participation in education of children from disadvantaged communities or in supporting and monitoring the work of teaching staff who teach children benefiting from social tickets. The aspects investigated in this professional category concern issues related to: facilitating children access to resources; facilitating access to information and methodical support for preschool teachers; developing support networks for children to ensure their long-term participation in education.
- **Local community representatives.** Individual interviews will be carried out with representatives of the local community directly involved in identifying vulnerable children (responsible for the population census), in handling applications/files for financial support/social tickets, and in verifying the presence of children in preschool. The following aspects shall be discussed: legislation that supports ticket granting, unexpected effects at community level, restrictions on social tickets granting, support required by local authorities in implementing the social ticket program, collaboration with school and education system authorities, collaboration with families benefiting from preschool social tickets.
- **Children benefiting from social tickets.** Relevant information on the integration and participation in preschool activities can be obtained through direct examination of these children throughout the entire preschool program, rather than during the teaching activity only. The examination will cover aspects such as: physical development, individual health and hygiene; socio-emotional development; learning capacities and attitudes; the development of language and communication; cognitive development and acquirement of knowledge on the world.

Sampling.

To investigate all aspects relevant to the policy of supporting the participation of children from disadvantaged communities in education through the conditional ticket program, a national relevant sample of educational units comprising of children entitled to social tickets will be determined. All data collection tools shall be applied in the preschools included in the sample. Also, tools shall be applied to the County School Inspectorate to whom preschools where the tools are applied are subordinated.

The sampling base shall consist of the educational establishment attended by children benefiting from social tickets, while the sampling criteria will be structured according to the residence environment of the educational establishment and the school network. The sample shall be structured as follows:

- The residence environment of the educational establishment shall constitute the primary selection criterion, and this will further be divided depending on the number of residents in the urban area, and the value of the commune development index for rural area, respectively.

Residence environment	Categories				
	Urban – size of the city	Bucharest	more than 100 thousand residents	50-100 thousand residents	20-50 thousand residents
Rural – commune development index	under 40	41 – 80	81 – 120	121 – 160	over 161

- A selection of the kindergartens in where children benefit from social tickets shall be carried based on the preschool network. Data on institutions that include children benefiting from school tickets will be obtained by querying SIIIR (Integrated Information System of Education in Romania). Considering that the number of children benefiting from preschool tickets varies monthly, all preschools enrolling children benefiting from social tickets will be considered.

The final sample of investigated educational establishments will be determined by reference to the network of institutions that enroll preschool-age children. A similar-profile educational establishment (residence area, number of inhabitants, commune development index) will be selected for each educational establishment included in the sample but where children do not benefit from preschool tickets.

Expected outcomes

- Research report on the impact of granting preschool conditional tickets
- Research tools
- 10 case studies documenting the relevance of the ticket-based preschool participation policy

3.2 The dropout prevention measures effect over students' attainment in higher education

Purpose: The analysis of the measures taken within the higher education system to combat and prevent academic dropout, correlated with measures intended to keep students in the study programs they are enrolled in until studies completion by passing the final examination and graduating.

Background: The student population has had a downward trend in recent years, being also impacted by negative demographic development. According to the data published by the National Institute of Statistics, the resident population in Romania is decreasing for all age groups corresponding to upper education level. In addition, the number of Baccalaureate graduates is decreasing and more adults should be attracted back to acquiring a higher education diploma. Thus, the number students enrolled in the university system in Romania has been decreasing by about 3.6 thousand students. The decrease is more significant in the private university system (where, for example in the 2016/2017 academic year, the number of enrolled students was less than 67,000).

Relevant for our discussion and mainly for the internal efficiency of the higher education system are the data related the average duration of higher education programs attendance (an indicator expressing the average number of higher education years attended by an appropriately aged student: (19-23-year-old). According to the *Report on the status of Romanian higher education system*, the indicator acting as a measure for keeping students in the education system has been reporting variations of 0.1 years between consecutive academic years. For the 2016/2017 academic year, the average higher education attendance was 1.4 years, according to data provided by the National Institute of Statistics (1.5 years - female, and 1.2 years – male, respectively).

Considering all the above, the following question arises: what are the measures, strategies, policies that need to be adopted both within the system and at university level (considering the university self-management) to prevent and combat dropout in higher education. Moreover, the completion of studies by successfully passing a graduation examination is a necessary step to certify competencies and in view of potentially use them in the professional environment.

Target group: Considering that student leaving rates are noted in all three study programs defined by the Bologna system (Bachelor, Master, Ph.D.), the analysis includes students from all these study programs.

To answer the research questions addressed at the level of the university education, the following **objectives** are stated:

- Identification of successful measures to tackle higher education dropout rates, and to support attainment with diploma certification, respectively
- Identification of the risk factors that lead to higher education dropout

- Analysis on the efficiency and effectiveness of intervention measures developed at university level to extend the average duration of higher education attendance

Methodology for assessment implementation

The literature review considers studies and reports relevant to the Romanian university system, focusing on exploiting studies that consider measures and policies to stimulate participation in education and training in higher education. To rely on statistic data, the *Report on the status of Romanian higher education system* as well as OECD, UEFISCDI, WB studies, and reports drawn by institutions and centers with expertise in the higher education field.

To review the literature and to identify the main aspects relevant to the topic under consideration, an analysis checklist will be developed which will register:

- the main systems/intervention measures at higher education level to support students' participation in education and training;
- the categories of beneficiaries and the outcomes they benefit from;
- systems for monitoring and early intervention to students at risk of early school leaving.

The development of the methodology for data assessment, analysis and reading

The methodology for data assessment, analysis and reading aims to identify the measures promoted and implemented within the higher education system or at university center level, to prevent and combat early education leaving, and to support the completion of studies by passing the final examination. For this purpose, several data collection methods and tools will be proposed that will highlight:

- the relevance of the existing measures, in view of preventing early school leaving and supporting studies completion by students;
- the extent to which the existing measures, practices, policies, strategies, are on the one hand, familiar to of the potential beneficiaries, and on the other hand, to the parties responsible for their implementation;
- the accessibility of students to support services in order to continue to attend university studies and to complete them;
- the coherence and internal efficiency of the university system in terms of consistency between the different levels included and the facilitation of the transition from one study program to another.

To investigate all these areas, the development of a complex data collection tool is necessary, by exploiting the contribution of scientific investigation methods. The following will be collected:

- primary data on student population and participation in education in the university education system, on different study programs (data provided by the National Institute of Statistics);
- collection of data from different relevant parties within the university education system.

Various data sources will be used, and different filters shall be used after their collection, in view of:

- identifying omissions;
- checking data consistency;
- correlating in view of complex and contextualized analyses.

Methods and techniques for data collection

The analysis of the outcomes of measures for preventing students early living and supporting the completion of studies will be carried through the following investigation methods:

- Analysis of official documents – carried for educational policy documents issued at the level of the educational system, but also for policy documents supporting the participation in education at the level of the university center (e.g.: programs, projects ran at university level or within university consortia).
- Investigation carried out on the educational actors directly involved in supporting participation in education and training of students – individual interviews will be carried out with: teaching staff (selected so as to include all teaching positions), teaching staff holding executive positions

within the faculties/universities, with staff members of the ‘Career Guidance and Orientation’ department, representatives of student organizations, representatives of the social services.

- Questionnaire-based survey carried among students to identify the risk of early leaving, as well as potential risk factors.
- Case studies involving resilient students.

The tools used for data collection will be:

- A record of the university that will include data on the number of students enrolled and registered at the end of the academic year, listed by study programs, fields and specializations; examples of programs to support participation in education and training in the university system; number of students included in guidance programs; beneficiaries of support programs consisting of scholarships and other facilities for students.
- Guides on individual interviews intended for teaching staff in the university education system; teachers holding executive positions within the faculty/university, counselors/psychologists.
- Questionnaire intended for students.
- Student interview guide, based on which ‘life stories’ will be developed that will highlight the risk factors and their potential to influence/determine the failure in completing university studies, as well as conditions, and opportunities to overcome the obstacles.

Surveyed population

Relevant data for carrying the analysis will be collected from students, teachers and staff members holding or not executive positions, thus facilitating the provision of various services to students (educational, social, counseling services etc.).

- The surveyed **teaching staff members** will be selected using the snowball method, pursuant to the recommendations received from their peers, students, student organizations regarding their status of resource-teachers in supporting students' studies attendance and studies completion. The aspects discussed with them will focus on: the didactic activity, communication and collaboration with students outside the study program (courses and seminars), the initiation of research activities for students by means of which to enhance their interest in the area they study, etc.
- **Teaching staff holding executive positions** within the faculty/university to identify the measures taken to maintain students' attendance to the education system. Surveyed aspects: measures implemented as a result of certain policies recommended at university level, measures initiated at the faculty/university level, facilitation of collaboration between different actors to support the participation of students in education.
- **Councilors/psychologists** involved in students' career counseling and guidance. Aspects related to the journey of enrolled students throughout the university system, the need for specialized support to motivate the students to continue their university studies or to identify the professional development pathways.
- **Students** to participate in the questionnaire survey aiming at investigating the risks, and the factors that could lead to early abandoning university studies. Students who are or have been at risk of abandoning studies and students who are not at risk are targeted. A category of students will consist of those who were previously at risk of abandonment, according to the social, economic, family factors impacting them, but they have managed to keep attending the higher education system. Aspects to be surveyed: educational path, transition from one program to another, resource-people that have supported them.

Sampling.

To investigate the outcomes of the measures taken to prevent drop-out from university studies and increase the proportion of students completing the study programs, it is necessary to have a representative sample at national level. The faculty will represent the sampling basis, given that there are specific actions taken at the faculty level to keep students in the system (through tailored programs, counseling activities carried by teachers, engagement in studies and research, implementation of

activities of interest for the needs for personal and professional development of students).

Characteristics used in selecting the sample are determined by:

- Network characteristics:
 - o Size of the locality (below 50,000 residents; 50,000 – 100,000 residents; 100,000 – 300,000 residents; 300,000 – 500,000 residents; more than 500,000 residents)
 - o Financing source of the institution: public; private
 - o Study program: bachelor's, master's; doctorates; long-term studies (medicine, legal, architecture)
 - o Form of study: full-time; evening classes; part-time; distance learning.
 - o Fields of study
- The faculty is the sampling base. The proposed sampling methodology is two-stage cluster sampling (first stage: selection of universities; the second stage: selection of faculties).
- The surveyed population will be selected in equal shares from each higher education unit.

To correctly cover the fields of study as sampling basis, the faculty network rather than the university network will be chosen. In determining the sample, consideration will be given to the fact that some universities have faculties in different locations; in these circumstances it is relevant to choose the faculty-location pair to consider the institution concerned, but also the locality where its activity is carried.

To apply the tools, a fixed number of surveyed students from each faculty (filling in questionnaires) and 1-2 representatives from the other categories of actors proposed to be interviewed will be established. Based on recommendations from the teachers and colleagues, 10 students shall be identified for in-depth interviews and the recomposing of 'life stories' that will highlight relevant examples of overcoming backgrounds and unfavorable factors to continue university studies. A sheet for subject identification/selection will be used to select them.

Expected outcomes:

- Research report on the outcome of the measures taken for the prevention of school leaving in higher education and the increase of number of students completing their studies.
- Research tools.
- Case studies of students that have continued and have completed their higher education studies, contrary to the existing risk factors for early school leaving.
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3.3 Students' mobility impact over skills improvement

Purpose: Assessing the impact of participation in international mobility on the enhancement of the personal and professional competencies of beneficiaries.

Background: Both the promotion of the Erasmus + Programme among different categories of potential beneficiaries and the example given by the participants in the mobility have increased the interest in the Programme for both personal and professional development. There are impact studies conducted at European level that support the impact of the Erasmus + Programme on the beneficiaries (institutional or individual type). For example, *The Erasmus Impact Study Regional Analysis* (2016) supports the impact of the Programme on two main areas: the internationalization of higher education institutions and the increase of the employability of students. These elements are relevant for the field of Higher education supported by the Erasmus + Programme. In addition to this, the Programme also supports other areas of intervention, for which mobility for students, young people, volunteers, but also for staff working with these categories of beneficiaries (teachers, youth workers) is encouraged. The programme is also intended for vocational education and training (VET) areas where participation in strategic partnership projects for teaching staff and other categories of employees is encouraged in view of developing professional competencies, or Adult education area where the development of personal competencies other than those required by the professional area where the individual works.

Considering the extent of the program and the categories of beneficiaries involved, as well as the rising interest of the institutions in receiving funding for project implementation (aspects proven by the annual reports prepared by ANPCDEFP), an analysis of the correlation between participation in mobility supported by the Erasmus + Programme and the enhancement of personal and professional

competencies becomes a topic of interest in impact assessments on actions taken to stimulate lifelong education and training.

For the proposed analysis, the following **objectives** are considered:

- To identify the personal and professional competencies specific to each field and to each key action developed by the beneficiaries
- To determine the main circumstances in which the competences acquired during the mobility periods have been capitalized
- To analyze the correlation between the competencies developed during the student mobility period and their subsequent professional development

Target groups:

- Beneficiaries of projects financed by Erasmus+ Programme

Implementation methodology

The review of the specialized literature - identification of and reference to studies and reports carried by the National Agency, the European Commission, other stakeholders on the development of personal and professional competencies through mobility activities, with the use of non-formal education methods.

The review of the specialized literature will focus on recent studies and reports, but will also identify relevant studies on the implementation of the Erasmus + Programme and its organizational structure before 2014, when the programme areas had been distinct (Leonardo, Comenius, TiA, etc.).

A relevant summary will be drawn regarding the subject of mobility activities and their contribution to the development of personal and professional competencies, as well as their contribution to the later development of the beneficiaries. The main aspects of the analysis shall be capitalization of the competencies acquired during mobility and their transferability.

The development of the methodology for data assessment, analysis and reading shall focus on the outcomes of the activities supported by the Programme and the competencies developed on the professional development of the beneficiaries. In these circumstances, it is of importance to choose the investigation methods and tools that should be appropriate for:

- Identification of general information, defining the target groups supported by the Programme for each key action and field of intervention
- The structure of the existing data
- Exploring new issues that have not been addressed through the assessments carried out by the National Agency on beneficiaries after the completion of the mobility

To reach relevant conclusions, the following is required:

- collection of master data from the beneficiaries
- analyses on existing data from the National Agency, the Agency monitoring reports, progress reports and completion reports on beneficiaries
- collection of qualitative data as a result of the experience of beneficiaries with different types of mobility activities in the areas supported by the Programme

Considering the significant amount of data already available from the National Agency regarding the participation, and satisfaction, gathered from the beneficiaries during the programme implementation in Romania (20 years), a filtering and selection of data used will be performed by developing and applying an analytical grid. New data-collection tools will also be developed to provide additional information relevant to the proposed analysis – the impact of mobility on competency enhancement and their capitalization throughout the beneficiaries' professional journey.

Methods and techniques for data collection

To carry out relevant analyzes and considering the specificity of the target groups as well as the Programme implementation period, it is necessary to collect and process carefully selected data, corresponding to the objectives of this study. To organize information and develop new data-collection tools, a secondary analysis is required on the data already available at the level of the National Agency regarding the beneficiaries of the mobility and the competences developed by them following their

participation in the various mobility programmes.

Investigation methods:

- **Questionnaire survey** conducted for each of the three categories beneficiaries of the three types of key actions (mobility, strategic partnerships, structured dialogue) and for each area supported by the programme (school education, VET, adult education, youth, higher education).
- **Interview survey** conducted on beneficiaries of higher-education Erasmus mobility programmes. The in-depth analysis of student mobility experiences and the subsequent capitalization of acquired competencies is chosen, because the impact of mobility experiences on the professional journey can be best determined at this level. The target group consists of beneficiaries of mobility at a time of initial training, vocational guidance in view of entering the labor market, when personal and professional experiences in international circumstances can have considerable influence on subsequent professional development. We hereby enunciate the hypothesis that will be tested throughout the study, i.e. the Erasmus programme has been an experience that has positively influenced the entire career journey of all beneficiaries (but mainly for students). In-depth interviews with the beneficiaries of higher-education mobility programmes will be conducted for the proposed analysis, investigating aspects such as: the initial training, the professional journey, facilities obtained as a result of participation in Erasmus mobility, satisfaction, school and professional reorientation as a result of the participation in mobility, possible career scenarios when not participating in mobility, etc.

Tools used for data collection:

- Questionnaires for each of the beneficiary groups of the different key actions and areas supported by the programme. These questionnaires will include common chapters but will also include distinct items, tailored to the specificity of the mobility, and the area of mobility, respectively. Attention will be paid to the beneficiaries' views on acquired competencies and the possibility to subsequently capitalize them, on the impact that mobility participation had at personal and professional level.
- Interview guide intended for higher education (students) mobility beneficiaries in order to analyze the impact of mobility on the subsequent university studies progress and on their careers.

Surveyed population:

The analysis proposes the investigation of the direct beneficiaries' opinions, so that the surveyed population shall be selected from the direct beneficiaries of the Programme. Both beneficiaries of the Programme in the current form (Erasmus+) and beneficiaries of the Programme before the reorganization in 2014, that has included all previously-supported activities within one programme (Comenius, Leonardo etc.) shall be identified and surveyed. Access to beneficiaries shall be enabled by the National Agency, as they hold databases with the mobility beneficiaries and their contact information.

The categories of surveyed beneficiaries will be:

- For mobility projects:
 - Pre-tertiary education teaching staff
 - Adults
 - Young people
 - Volunteers
 - Youth workers
 - Higher-education teaching staff
 - Students
- For strategic partnership projects:
 - Pre-tertiary education teaching staff
 - School students
 - Employees participating in continuing professional development programs
 - Students attending vocational and technical education, participants in internships

- Adults
- Young people
- Higher-education teaching staff
- Students
- For structured dialogue projects:
 - Young people and individuals in charge of youth policies

Sampling.

Taking into consideration the Programme duration, its complexity and the large number of beneficiaries, a selection of respondents will be made from the National Agency database of projects beneficiaries. For each key action and area, a representative sample will be selected to be investigated. Considering that the questionnaires will be sent online and the relatively long period between the participation in mobility and the time of the investigation (at least for some of the beneficiaries), the response rates are expected to be relatively low. Considering this, a second selection of respondents (back-up sample) with the same characteristics will be made, so that the number of cases included in the analysis is relevant and significant.

To choose students to participate in the interview, they will be selected using the snowball method (beneficiaries recommended by other mobility beneficiaries and who have mobility experience and relevant professional experience). The mobility beneficiaries will be identified for whom participation in Erasmus mobility has promoted the development of personal and professional competencies that could not have been developed without the mobility experience but also for which participation in international mobility has represented a clear pathway in their career. The population surveyed will comprise a significant number of investigated cases, until a ‘saturation’ of information obtained from the beneficiaries is reached.

Expected outcomes:

- Research report on the competencies developed by various categories of mobility beneficiaries and the circumstances for their capitalization (career, professional reorientation, personal development, etc.).
- Research report on relevant experiences of higher-education mobility beneficiaries and which have leveraged further professional development.
- Research tools.
- Set of recommendations for the implementation of the Programme at national level, which could be capitalized at the level of the National Agency for defining national priorities and the communication strategy with the beneficiaries.
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3.4 IVET relevance for labor market

Purpose: Assessing the relevance of the educational offer provided by the vocational and technical education for the labor market.

Background: The proposed analysis on the relevance of initial training systems within vocational and technical education is based on two realities in the education system: the increasing importance of vocational education (both for the system through reorganization, inclusion of dual education, and for the beneficiaries by choosing this form education that facilitates faster access to the labor market as compared to high school); the need for qualified workforce in different areas of the economy.

According to the data provided by the National Institute of Statistics, the vocational and technical education has recently benefited from an increase in the number of enrolled students because of the reorganization of vocational education (the gross enrollment rate in vocational education was 13% in the 2016/2017 school year, as compared with 7.8% in the 2010/2011 school year; the schools of arts and crafts have been closed during 2009-2011). There are other studies and reports highlighting the need to develop vocational and technical education, the interest of students and parents in this form of education, and the need to adapt it to the specifics of local economic operations (e.g. *10-year compulsory education: conditions for implementation, results and corrective measures*). Also, for the contextualization of the analysis, the results of the analyzes on the interventions within the ROP

(Regional Operational Programme) will be considered, aiming to furnish the school premises / school workshops with adequate resources for the practical specialized training.

Considering all the above, this study has the following **objectives**:

- To identify the relevance of the vocational and technical education pathway for entering the labor market, in the opinion of the direct beneficiaries and the human resources involved.
- To analyze the conditions for the initial training in vocational and technical education (school offer, material equipment, tailoring to the needs of the economy and the labor market).
- To investigate the needs of the employers for workforce and their willingness to support the initial training of young people in vocational and technical education in order to acquire the workforce to whom training they have participated.

Target group:

- Students attending vocational and technical education
- Teaching staff employed in the vocational and technical education
- Employers

Implementation methodology

The review of the specialized literature will focus on studies and reports aimed at the development of vocational and technical education at national and international level. Examples of good practice in correlating initial training and the labor market will be considered. The review of the specialized literature will be based on a grid that will include: results of surveys aimed at correlating vocational training with the labor market; the relevance of providing tailored and appropriate material resources; students' access to vocational and technical education; the development of educational offers in vocational and technical education and their ability to be permanently correlated with the requirements of the labor market.

The development of the methodology for data assessment, analysis and reading considers the functioning of the education and training system, the attention paid to the direct beneficiary of education, the need to permanently adapt the educational offers to the demands of the labor market. The research related question raised here is: to what extent is vocational and technical education correlated with the needs of the labor market? And derived questions here: Is initial training flexible and open enough to give students the potential for professional mobility on the labor market? Are employers open / available to invest in student training so that they can prepare their workforce in partnership with the education system?

To draw documented and complex answers to these issues, attention is paid to the methods and tools for collecting data and to the categories of actors surveyed.

The analysis carried out requires the following:

- Collection of master data from the education system related to vocational and technical education regarding enrollment, participation, graduation - data available from the National Institute of Statistics, within SIIIR
- Data collection at national level regarding the entering of graduates from vocational and technical education on the labor market
- Collection of data from different categories of actors relevant to the education and training system, but also for entering of graduates on the labor market

Data collection provides an overview of the issues discussed and enables analysis of the relevance of vocational and technical education for the labor market.

Methods and techniques for data collection

To carry out relevant analyzes, consistent, structured data need to be collected for different forms of education and training, as well as for different categories of professional activity on the labor market.

The proposed investigation methods focus on:

- Secondary national data analysis on participation in education and graduation in vocational and technical education, as well as graduates' entering the labor market.
- Group-focused interview surveys – addressed to students attending vocational and technical education, teachers in vocational and technical education, students' parents.
- Survey by interview conducted with employers relevant to the profiles for which initial training is provided in vocational and technical education.

Tools used for data collection:

- Record of educational establishments enrolling students who attend vocational and technical education: data on the training offer, the human and material resources involved, the qualification levels offered, the relevance of the training offer for the local economic circumstances will be collected.
- Interview guides intended for: beneficiary-students attending vocational and technical education, teachers in vocational and technical education, students' parents.
- Interview guides intended for the employers.

Surveyed population

Students attending vocational and technical education – the interviews will cover aspects related to: the form of education and the qualification chosen, plans regarding further development and labor market entering, need for support

- Teachers in vocational and technical education – issues will be discussed related to the training offer and the appropriateness of human resources for quality training, adapted to the labor market, the appropriateness of the existing material resources available in the school at the qualification levels followed, to the quality standards requested on the labor market, support provided to students in entering the labor market, contribution to the development of CDSs (*School-based curriculum*) to support the training and preparation of students in view of entering the labor market
- Parents – issues will be discussed related to local training offer, the possibility of choosing vocational training according to the needs and interests of the students, in accordance with the local labor market offer, the support provided to students throughout their educational journey, in view of entering the labor market, domains of activity on the labor market of interest to the local community
- Employers – issues will be discussed related to the willingness to hire graduates from the local vocational and technical education system, partnerships agreed with educational establishments, enabling the practical training of students in the employer's organization, the availability of investment in economy areas for which initial local training is provided, the development of training programs and projects to enhance professional competencies of students

Sampling. A representative national sample will be drawn up, and sampling will be based on the educational establishment. Vocational schools and technological high schools will be included in view of collecting quantitative information. A selection will be made of the educational establishments where the qualitative data collection tools will be applied. The selection will be based on criteria related to: the alignment between the training offer and the local job offer; significant number of students who get employed locally; the training offering relevant to priority areas of the national economy.

Expected outcomes:

- Research report regarding the correlation of the training offer with the requirements of the labor market, and their relevance for areas of the national economy
- Research tools
- Set of recommendations for policies relevant for the vocational and technical education system

