

Report of Sector Review of the Education Statistics in the Republic of Moldova

Final Report

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List of Abbreviations

AGA	Adapted Global Assessment
AES	Adult Education Survey
CSA	Central Statistical Authority
CTICE	Centre for Information and Communication Technologies in Education
CVTS	Continuing Vocational Training Survey
EaP	Eastern Partnership
EC	European Commission
EMIS	Education Management Information System (SIME in the Republic of Moldova)
ENP	European Neighbourhood Policy
ESCOP	European Statistics Code of Practice
ESS	European Statistical System
EU	European Union
EUROSTAT	Statistical Office of the European Union (DG of the European Commission)
ICSE	International Classification by Status in Employment
ILO	International Labour Organization
IMF	International Monetary Fund
IRT	International Review Team
ISCED	International Standard Classification of Education
ISIC	International Standard Industrial Classification
LFS	Labour Force Survey
LPR	Light Peer Review
NACE	Statistical Classification of Economic Activities in the European Community
NBS	National Bureau of Statistics of the Republic of Moldova
NSS	National Statistical System
OECD	Organisation for Economic Co-operation and Development
SAQ	Self-Assessment Questionnaire
STEP	Statistics Through Eastern Partnership (EU-funded project)
UOE	UNESCO-OECD-EUROSTAT
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Organization for Education, Science and Culture
UNSD	United Nations Statistics Division

Preface

1. The Sector Review of the education statistics in the Republic of Moldova was undertaken within the framework of the EUROSTAT funded project “*Global assessments, peer reviews and sector reviews for the ENP countries*” to analyse the National Bureau of Statistics’ statistical production processes in education statistics.
2. The review process was initiated by EUROSTAT at the request of the National Bureau of Statistics of the Republic of Moldova (NBS). The company DevStat, Statistical Consulting Services S.L., under the contract with EUROSTAT, was responsible for organising all activities and tasks related to the Sector Review.
3. The assessment aims at raising awareness on the strengths of the NBS’s education statistics production process and on the areas where improvement is still needed to align the sector of education statistics with European Statistical Standards. This is the first sector review in the field of education statistics for the ENP countries.
4. The Sector Review was carried out by two international experts: Dr. Gaetano FERRIERI (leading expert – freelance) and Ms. Irja BLOMQUIST (supporting expert – Statistics Finland). They started the assessment work in June 2020 by preparing the Self-assessment Questionnaire (SAQ).
5. The SAQ was elaborated and structured according to an innovative architecture and an appropriate rationale. The questionnaire is divided into four parts. The first three parts (A, B and C) follow the order of implementation of the relevant Principles of the European Statistics Code of Practice (ESCoP), namely: *Institutional Environment, Statistical Processes, and Statistical Output*. The fourth part (D) is dedicated to the current state of play of Moldova vis-à-vis the EU and other international standards in the field of education statistics.
6. The SAQ was transmitted to the NBS which provided its feedback in early September 2020. Due to the COVID pandemic, the assessment mission was delayed and took place in Chisinau on 22-25 November 2021. A number of institutional experts participated in the meetings, including the NBS Director General Dr. Oleg CARA and the Deputy Director Ms. Aurelia SPATARU, Ms. Larisa CHIRITA and Ms. Natalia ROSCA (Education, Science and Culture Statistics Section), Ms. Elena MALERU and Mr. Igor MOCANU (Statistical Coordination and International Cooperation Division); some representatives of other relevant NBS divisions also participated in the meetings - please see **Annex 2: List of participants to meetings**.
7. The meetings were very cooperative and fruitful. The NBS provided the experts with useful feedback, relevant documents (e.g., questionnaires on the Survey on Education, tables of correspondence between national and international classifications in the field of education, presentations on key topics in the field of education statistics in Moldova), and discussions with the representatives of other administrative bodies (Ministry of Education and Research, CTICE).
8. The experts are very grateful to the NBS representatives for their excellent cooperation, professionalism and feedback.

Executive Summary

9. The National Bureau of Statistics of the Republic of Moldova (NBS) has the status of Central Statistical Authority (CSA), being an institutionally and professionally independent administrative authority, established by the Government for the coordination of the national statistical system (NSS) and the development and production of official statistics. The legal framework for the NBS is composed of the Law on Official Statistics¹, other legislative and normative acts², and NBS management decisions and orders.
10. The current legislation does not foresee a specific mandate for the NBS with regard to the production of education statistics other than the Annual Plan of Statistical Works (*Programului lucrărilor statistice (PLS)*³) approved through a Government Decision on annual basis. As agreed with the Ministry of Education and Research, the NBS collects on an exclusive basis – as from 2009 – data and statistics for all levels of formal education through several annual statistical surveys administered to all educational institutions in the country. The list of education institutions is provided by the Ministry of Education and Research.
11. The NBS also makes some estimates on expenditure by education level using the data provided by the Ministry of Finance, while data on enrolment planning and support to study (scholarships) are provided by the (Central) Moldovan Government.
12. The NBS is fully committed to ensuring the highest quality of data in general terms, including in the field of education statistics. Data provided by respondents are duly checked and errors or inconsistencies when detected are promptly corrected.
13. The main education statistics published by the NBS relate to all educational levels from early education until doctoral studies. The NBS produces on a regular basis a number of specific outputs⁴ related to education statistics (e.g., *Statistical publication on Education in the Republic of Moldova*) and other general statistical reports (e.g., *Statistical Yearbook, thematic press-releases on specific topics such as statistics on children, on disability, etc.*). A comprehensive and updated database is available on the Internet. A release calendar is published in advance for all outputs.
14. Metadata are managed throughout the statistical processes and regularly disseminated. The following items (related to statistical surveys) are disseminated on an annual basis: concepts and definitions, unit of measure, computation formula, used classifications, statistical population, geographical coverage, disaggregation level, dissemination frequency, data source, characteristics of the statistical survey / administrative sources, processing and compilation of data, comparability and coherence, institutional mandate (normative-legal basis), confidentiality, access to information and dissemination format.
15. Time series for education statistics are available as from 1997, at least for the main indicators (e.g., students enrolled and institutions by level of education). In general, a timeframe for the NBS survey data is available as from 2000. Breaks in time series for some education indicators based on population

¹ https://statistica.gov.md/public/files/despre/legi_hotariri/Law_on_official_statistics_2017.pdf, available in English

² <https://statistica.gov.md/pageview.php?l=en&idc=323&>

³ <https://statistica.gov.md/pageview.php?l=ro&idc=323>, available in Romanian

⁴ <https://statistica.gov.md/pageview.php?l=en&idc=350>

as denominator (e.g., enrolment ratios) are due to changes in the reference population (in particularly the usually resident population) adopted with the last population census (2014).

16. The education statistics on formal education and training comply quite well with EU and other international standards, but some constraints can be found. The main constraints are due to shortcomings in some necessary educational variables and classifications in the administrative data produced by the Ministry of Education and Research and the Ministry of Finance.
17. Some education indicators, such as survival rate, are not calculated nationally; these are normally calculated by UNESCO. Enrolment ratios (both net and gross) are affected by some inconsistencies due to the denominator represented by the census population data, although the latter data have been corrected following the census post-enumeration survey and seem to be underestimated.
18. The available resources in the NBS are judged as inadequate in both magnitude and quality to match the future needs related to the production of education statistics, especially if the objective is to follow EU standards and regulations on the education statistics domain.
19. The NBS refers to two international providers of technical assistance: UN and the EU. In particular, the ongoing EU-funded project “Technical Assistance to the National Bureau of Statistics the Republic of Moldova” (which is to be completed by the end of July 2022) is focussed on: (1) assessment of data collection instruments in order to calibrate interventions on identified needs and priorities; and (2) revision of data collection instruments, definitions and concepts.
20. There are two parallel data collections conducted by the NBS and by the Ministry of Education and Research with the duplication of almost the same data content (e.g., number of students per institution, education personnel), for a certain number of education levels, as also expressed by the NBS experts. The issue must be thoroughly explored in the near future as to how it would be possible to get all necessary information from administrative data sources in order to explore the possibility to have one data collection for the purpose of official statistics.

Key Recommendations

21. The Law on Official Statistics regulates the coordination with the existing administrative sources and the access by the NBS to this kind of information for statistical purposes. Based on its knowledge and experience and its role as coordinator of the NSS, the NBS is invited to identify on a regular basis which education indicators are needed in the country by mostly referring to the EU Education Monitor and other international references (e.g., UNESCO-UOE) and involve – where possible – other relevant members of the NSS in its work on related concepts, techniques and methodologies in order to improve the coordination between partners and the harmonisation of the indicators.
22. The NBS is invited to increase the staff directly employed in the Education, Science and Culture Section in order to match any ordinary or extraordinary task in due time (e.g., request for non-published data; calculation of further indicators beyond the ones normally calculated and disseminated, assessment of administrative data sources identified as relevant for the purpose of official statistics, thorough methodological revisions, implementation of new surveys).
23. The NBS is invited to also increase cooperation with the national scientific community to increase recognition of its expertise, to get new ideas for developing statistical procedures, to get more data users for statistics and create pathways for recruiting new employees into the statistician profession.

24. The NBS should exploit the current and future international opportunities for technical assistance to identify its internal capacities to review some existing indicators (e.g., enrolment ratios) as well as relevant new indicators (e.g., survival rate). In the following stage, the NBS is invited to adopt and harmonise – through the interinstitutional groups with the ministries concerned – the good practices acquired in the field of education statistics.
25. It is highly recommended that NBS increase internal cooperation between different statistical domains so that the same operational applications of the same statistical concepts in education are used. Also, new technologies for data collection, such as the use of web-based questionnaires, as well as using more administrative data sources, should reduce the need for direct collection. Making cost-effective improvements to the methods for data collection can also help in overcoming the NBS's shortage of resources.

1. Assessment Results

1.1 Part A – Institutional Environment

1.1.1 Principle 2 – Mandate for Data Collection and Access to Data

Mandate for data collection

26. The National Bureau of Statistics of the Republic of Moldova (NBS) has the status of Central Statistical Authority (CSA), being an institutionally and professionally independent administrative authority, established by the Government.
27. The legal framework for the NBS is composed of Law on Official Statistics No. 93 of 26.05.2017 (hereinafter “the Law”), other legislative and normative acts, and NBS management decisions and orders. The Law is comprehensive of all key aspects and principles relating to the system of official statistics, by foreseeing “*the general principles for collecting, processing, centralising, diminishing, and stocking statistical information*” (Art.1). The Law also sets out all the internationally recognised principles (e.g., “*impartiality, objectiveness, relevance, transparency, confidentiality, and cost-efficiency*”) for the production of the statistical information (See Art. 5). Based on Article 7 of the Law, the NBS represents an administrative authority under the Government. (...): “*Being the central statistical body, the National Bureau of Statistics is an administrative authority created under the Government for leading and coordinating the activity in the statistics area.*”
28. The NBS functions under its institutional mandate are regulated by Government Decision No. 935 of 24.09.2018 and correspond to the tasks of the modern central statistical bodies, such as coordination of the national statistical system, elaboration and implementation of the statistical programmes, harmonisation of national statistical indicators, methods and methodologies with the international requirements and standards; and promotion of the statistical culture in the society.
29. The NBS is responsible for recommendation of definitions, concepts and methodologies in the field of official statistics, including education.
30. The current legislation does not foresee a specific mandate for the NBS with regard to the production of education statistics. As agreed with the Ministry of Education and Research, the NBS collects on an exclusive basis – as from 2009 – data and statistics for all levels of education through an annual statistical survey administered to all education institutions in the county.
31. The survey questionnaires and related instructions are annually revised by the NBS commission and approved through NBS Orders (last revision of education surveys approved by NBS Order N.63 of 24.09.2018). In case of minor changes, the forms are not submitted to the commission and the order number remains unchanged compared to the previous year.
32. The NBS may compel a response to its statistical surveys. However, there are often delays between the query (at the time of the survey’s launch) and the (data) feedback provided because the available administrative tools (in particular Law no.93/2017 and the Administrative Code) are insufficiently effective to oblige the respondents in providing the data in due time .

Access to administrative and other data

33. The Law regulates the coordination with the holders of administrative data and the access by NBS to this kind of information for statistical purposes (Art. 16). However, one of the key constraints relates

to how the data is presented by one of the main holders of administrative data, namely the Ministry of Finance. As reported by the NBS, data on expenditure on education are presented “*by type of institution, not by ISCED level*”; what makes data linkage and processing difficult.

34. The NBS is not regularly involved in any stage relating to design, development and discontinuation of administrative records, and it is normally called only ex post to express its opinion on specific products or in the course of the public consultation on the draft documents. Even though the Law foresees that the “*Administrative data source owners shall be invited to use the definitions, classifications and concepts established by the central statistical authority; and in the case of creation of new sources, their use is mandatory*” (Art. 10), the review showed that these practices are not regularly observed, notably by the Ministry of Education and Research. The role of the NBS as coordinator of the National Statistical System (NSS) appear not to be sufficiently recognised in practice, despite the provisions of the Law.
35. The access to other data, although legally allowed, is hampered by practical constraints mostly related to the lack of appropriate technical and technological means within the NBS that would allow data holders to trust in the NBS’s capacities to manage and respect the protocols on personal data.

1.1.1 Principle 3 – Adequacy of Resources

Adequacy of resources vis-à-vis statistical needs

36. Human and technical resources are moderately adequate in terms of both magnitude and quality to match the current statistical needs related to the production of education statistics. The financial resources are moderately adequate.
37. The available resources are judged as rather inadequate in both magnitude and quality with regard to the future needs related to the production of education statistics.
38. The NBS has a total of 705 (approved) positions in 2021, of which 242 positions are at the headquarters and 463 at the local level (regional offices). Out of these, 184 are filled at the central level and 420 at the regional level. All of them are on a full-time basis. The number of employees has increased at both levels compared to 2019 (when 176 were working at the central level and 402 at the regional level).
39. Only four positions are assigned to the Education, Science and Culture Section (under the General Division for Social and Demographic Statistics); out of these, only three people work in this section (as opposed to four until 2019).
40. The total budget of the NBS amounts to 4.920.000 euro in 2021 compared to 4.319.000 euro in 2019.
41. It is difficult to estimate the budget dedicated to the education statistics sector because other divisions which are not related to the same section are involved in some procedures to produce statistics in the field of education.

Education statistics and users’ needs

42. As stated by the NBS and further assessed during the experts’ mission, the scope and level of detail of the education statistics are moderately commensurate with both current and future users’ needs, except for costs that are difficult to estimate.

43. There are adequate procedures with regard to the production of new indicators and the updating of existing ones. Some meetings and consultations are normally held with users of education statistics in order to know their needs and to analyse the human and financial resources necessary to this end.
44. Future needs are addressed in cooperation with relevant other institutions through the Annual Statistical Work Programme. The major constraints relate to the specific education indicators that are effectively needed; the current evaluation of such needs appears to be more formal than concrete.

1.1.2 Principle 6 – Impartiality and Objectivity

45. The compilation of education statistics is based on statistical considerations given that the NBS internal rules and regulations adequately define access to data and statistical confidentiality, data protection for statistical purposes, commitment to quality and measures to assure quality.
46. The choice of data sources and decisions for dissemination of education statistics are based on statistical considerations. The two sources for education data are the exhaustive statistical surveys carried out by NBS and the administrative data held by the Ministry of Education and Research. No sample surveys have been planned.
47. Most education statistics are disseminated according to the deadlines of the Statistical Work Programme and the press release calendar. Further information is not normally published and – when required by users – is available for a fee covering the costs of data extrapolation and elaboration from the existing database or free of charge (this depends on the users' status).
48. Errors due to respondents are measured and mostly corrected based on previous answers. The procedure is simple: in case of doubtful answers, respondents are invited to verify and provide clarifications; and errors are accordingly fixed and corrected.
49. Errors in published education statistics are corrected as soon as they are detected. Corrections are published on the NBS website (Statistical Databank) with a short notice to users including the date and the reference link of the same corrections.
50. When the survey is administered to respondents by the NBS internal staff without external interviewers, errors due to the interviewers are not captured.
51. Major changes in statistical questionnaires are communicated in advance to the Territorial Statistics Division. Moreover, ad-hoc training activities are held in order to prepare the representatives of the same departments to these changes/adjustments. The trained staff are supposed to transfer or share their knowledge with the related (respondent) education institutions.
52. The software platforms used for data processing allow detecting and automatically correcting any eventual error in this phase.
53. The Annual Statistical Work Programme includes NBS proposals on the activities and outputs in the field of education statistics. The NBS website also contains a section dedicated to transparency in decision-making.⁵

⁵ <https://statistica.gov.md/pageview.php?l=ro&idc=456&>

54. Objectivity and impartiality of statistical releases and statements are regulated by the Law on Official Statistics (Art 5.f).

1.2 Part B – Statistical Processes

1.2.1 Principle 7 – Sound Methodology

Compliance of education statistics with EU and international standards

55. The education statistics partly comply with EU and other international standards. The main difficulty lies with the administrative data produced by the Ministry of Education and Research on Technical Vocation Education (based on the National Code of Education) that do not fully comply with the NBS classification (based on ISCED 2011) in what regards specifically the post-secondary non-tertiary education (ISCED 2011, level 4) and tertiary education levels (ISCED 2011, levels 5-7). Amendments to the Code of Education would be required to ensure compliance with ISCED.
56. The data on expenditure in education from the Ministry of Finance are disaggregated by type of institution and not level of education. Data on expenditure are not specifically provided for teachers. Data on newly admitted students in tertiary education are not collected.
57. Some education indicators, such as survival rate, are not calculated internally because they are too difficult to calculate; these are normally calculated by UNESCO. Enrolment ratios (both net and gross) are affected by some inconsistencies due to the denominator based on the census population data. Although these latter data have been corrected following the census post-enumeration survey, they continue to be underestimated. As a result, net enrolment ratios in some cases are over the (natural) maximum value of 100%.
58. The NBS refers to two international providers of technical assistance: UNESCO and the EU. In particular, the ongoing EU-funded project “Technical Assistance to the National Bureau of Statistics of the Republic of Moldova”⁶ provided assistance on: (1) assessment of data collection instruments in order to calibrate interventions on identified needs and priorities; and (2) revision of data collection instruments, definitions and concepts.
59. The standard international concepts, definitions, classification and methodologies are applied by the NBS to its current education statistics and Indicators (disseminated nationally but also reported to international organisations like UNESCO), based on ISCED 2011, ISCED 2013-F, and UNESCO-OECD-EUROSTAT (UOE) Joint Data Collection Methodology.
60. Registers and frames are updated based on relevant needs.
61. The NBS currently applies the Classification ISCED 2011 for formal education. There are differences compared to the classification used by the Ministry of Education and Research in relation to vocational education programmes.
62. As from 2013, the National Classification of Economic Activities in Moldova (CAEM Rev. 2) is applied and harmonised with NACE Rev. 2.
63. The other ad-hoc nomenclatures and classifications in the field of education statistics are applied with specific reference to Government decrees (GD) or laws. Some are compliant with ISCED-F 2013 and

⁶ <https://parstat.md/>

ISCED 2011, others not yet. The nomenclatures used in the field of education statistics are the following:

- *Nomenclature of fields of professional training, trades / professions (GD No. 425 of 3.07.2015)*
- *Nomenclature of professional training fields, specialties and qualifications (GD No. 853 of 14.12.2015)*
- *Nomenclature of professional training fields and specialties (Law No. 482 from 28.06.2017)*

64. The above-mentioned nomenclatures are adjusted to ISCED-F 2013, while the Nomenclature of scientific specialties (GD No. 199 of 13.03.2013) is not adjusted.

Qualifications and training of the NBS Staff

65. 705 people currently work at the NBS. Only three people are assigned to the Education, Science and Culture Section: all of them have academic degrees.

66. No staff members have a specific degree in statistics because this existing specialisation is normally not chosen by university students.

67. The NBS staff regularly participate in training activities held in the country and abroad, within technical assistance projects and international meetings (seminars, workshops).

68. Some international initiatives implemented by the European Training Foundation are ongoing. This is the case of the Torino Process that relates to the development of VET system and policies; and the Bologna Process that relates to the development of the higher education system.

69. The NBS did not participate in any international workshop with a specific focus on improvement of methodologies and tools in education statistics in the last three years, with the exception of an on-line training course on Education Statistics – UOE Data Collection - organised by EUROSTAT on 9-10 November 2021. However, technical assistance and training on this matter would be needed under the current international projects or new or more specific project lines (e.g., improvement of education indicators).

1.2.2 Principle 8 – Appropriate Statistical Procedures

Main sources of education data

70. The main official source of education statistics is a general annual survey, administered by the NBS to all education institutions, by levels.⁷

⁷ As based on the detailed information received by the NBS, the statistical questionnaires used by the same are the following:

Statistical Report N.85-edu “Activity of early education institutions”

Statistical Report N. 1-IE-edu “Activity of the extra-schooling institutions”

Statistical Report N. 1-edu “Activity of primary and secondary general education institutions”

Statistical Report N. 83-edu “The staff in primary and secondary general education institutions”

Statistical Report N. 2-edu “Activity of secondary vocational education institutions”

Statistical Report N. 3-edu “Activity of postsecondary vocational education institutions”

71. The list of education institutions is provided by the Ministry of Education and Research.
72. The financial education data are provided by the Ministry of Finance (expenditure on education from the national public budget), while data on enrolment planning and support to study (scholarships) are provided by the Moldovan Government. The NBS also makes some estimates on expenditure by education level by using the data provided by the Ministry of Finance.
73. The administrative data source used by NBS for its education data is the EMIS platform owned and managed by the Ministry of Education and Research.
74. The main differences between the data sources relate to definitions of some variables such as pedagogical staff, children with disabilities and computers used for pedagogical purposes.
75. External experts are not called to assess and evaluate the questionnaires before administration of the statistical surveys: they are not needed in the light of the existing internal capacities.
76. Normally a pilot test is held; a new research study is planned before the survey is launched. This pilot aims at detecting any eventual gaps, shortcomings and errors.

Revision of data and management of metadata

77. Regarding statistical surveys, data are subject to all ordinary quality checks in both the contextual and temporal perspectives (e.g., correlation between data and answers from various chapters, elimination of outliers).
78. Administrative data are also reviewed by using consistency checks with data from the same sources.
79. Metadata are managed throughout the statistical processes and regularly updated and disseminated.⁸
80. The following items (related to statistical surveys) are disseminated on an annual basis: concepts and definitions, unit of measure, computation formula, classifications used, statistical population, geographical coverage, disaggregation level, dissemination frequency, data source, characteristics of the statistical survey / administrative sources, processing and compilation of data, comparability and coherence, institutional mandate (legal basis), confidentiality, access to information and dissemination format.
81. Previous data are reported to be recalculated retrospectively in case of changes in the legislation. Data are also revised in case of changes in classifications, as confirmed after reviewing statistical publications (e.g., *Report on Education in the Republic of Moldova*).

Agreements with holders of administrative data and other data sources

82. The Statistical Work Programme developed by the NBS is the key document in deciding which kind of information is required for the administrative data holders and should be provided to the NBS. This document also indicates the time schedule for delivery.
83. The main holder of education finance data used by the NBS is the Ministry of Finance.⁹ Data quality is to be ensured through regular cooperation between the two institutions.

Statistical Report N. 4-edu "Activity of higher education institutions"

⁸ See also the link on the NBS website: https://statistica.gov.md/public/files/Metadate/en/Educatia_en.pdf

⁹ Expenditure on educational institutions is requested by the Ministry of Finance on the basis of the standard UNESCO

Table 1: Assessment of the education statistics vis-à-vis the EU requirements in terms of appropriate statistical procedures (Principle 8)

Key procedures	Current implementation in the country	Envisaged implementation in the short term	Envisaged implementation in the medium term
Collection of education data	An exhaustive traditional survey to education institutions No web-based collection tools; no full exploitation of administrative sources		The NBS is recommended to increase use of new technologies for data collection, such as web-based questionnaires, as well as use more administrative data in order to reduce the need for direct data collection
Good approximation of definitions and concepts of administrative data sources with those required for statistical purposes	Partly. Differences in definitions of some variables (pedagogical staff, children with disabilities, computers used for pedagogical purposes) between the NBS and administrative sources		The Ministry of Education and Research is recommended to reconcile the main differences in the definitions of some specified variables compared to the ones used by the NBS and make the necessary legal amendments
Independent authority recommending concepts, definitions and methodologies	Yes, the NBS		
Set of statistical procedures normally applied to validate data prior to data entry	Yes, the NBS ensures all ordinary quality checks on its survey data. Some quality checks on data coming from administrative sources are also ensured by the same NBS, mostly in terms of temporal consistency		
Complete set of	Yes, the NBS manages,		

questionnaire: “Educational expenditure (ISCED 0-8)” and is estimated by the NBS staff by education levels

Key procedures	Current implementation in the country	Envisaged implementation in the short term	Envisaged implementation in the medium term
metadata managed throughout the statistical processes and regularly disseminated	updates and disseminates on an annual basis a full set of metadata (mostly relating to its own survey)		

1.2.3 Principle 9 – Non-excessive Burden on Respondents

Demand for education statistics and commitment to reduce response burden

84. The NBS is only committed to produce and deliver information that is considered as necessary, since there are no financial and human means to produce more statistics.
85. The main education statistics published by the NBS relate to all education levels from early education until doctoral studies.
86. The NBS is committed to reduce the response burden to respondents by excluding all information that is considered unnecessary or outdated.
87. The cooperation with other data producers (administrative data holders) is important to avoid duplication of information. In this regard, for example, the NBS does make use of data on the infrastructure of educational institutions (SDG 4.a) provided by the Ministry of Education and Research.

Cooperation with other data providers

88. Some administrative data sources are used by the NBS in order to avoid duplicating requests for education data. This is the case for extracurricular education (source: Ministry of Education and Research)¹⁰.
89. In order to minimise the burden on respondents, data are shared and integrated by respecting data confidentiality and data protection requirements.¹¹
90. The cooperation with the administrative data producers and specifically the Ministry of Education and Research is operational; it mainly consists of an interinstitutional dialogue (and related agreements) to validate the data collected and to consult the updates in the statistical questionnaires.

¹⁰ See for example: https://statistica.gov.md/public/files/publicatii_electronice/Copiii_Moldovei/Copiii_Moldovei_editia_2020.pdf pag.99, Table 4.4: *Sport schools for children and youth, pupils and trained sportsmen by level of sport qualification;*

Music and art schools for children from Table 4.5

¹¹ As stated by the NBS: “Confidential data held by the NBS may not be delivered to physical or legal persons. NBS may deliver to other producers of official statistics individual data on statistical units under the following conditions:

a) data are used exclusively for the purpose of producing official statistics

b) data do not allow the identification of physical or legal persons.”

On the other hand, the NBS is allowed to access and use, free of charge, administrative data sources, including individual data, by respecting the existing confidentiality rules.

91. It is also worth noting the data sharing between the NBS and other official institutions. For example, the Organization for Investment and Export Promotion (under the umbrella of the Ministry of Economy) normally ask for data on graduates (post-secondary) by field of specialisation, age and programme of study. In the future, the Investment Agency of Moldova will also be allowed to make specific requests to the NBS.

1.2.4 Principle 10 – Cost Effectiveness

Monitoring measures and use of ICT

92. The activities of the NBS are continuously monitored through different means (e.g., phone calls, letters). The performance of staff in districts are internally monitored and assessed on a quarterly basis.
93. Information and communication technologies are used and updated on a permanent basis, notably for primary data processing and reporting. However, the phase of data collection is not yet supported by the use of modern ICT tools (e.g., web-based questionnaires).
94. For some surveys directly managed at the district level (83-edu, 85-edu, 1-edu), data input is done manually before electronic transfer to the NBS headquarters.

Potential use of administrative and other data sources

95. The basic administrative source currently used is EMIS (the concept for the information System on the Education Management, has been approved by Government Decision No. 601 of 12.08.2020)¹².
96. EMIS is essential because it gathers and stores all information on pupils, educational institutions, employees of the educational institutions; it is envisaged to become the only source of data on education in Moldova.¹³
97. If agreement with the Ministry of Education and Research is achieved on the use of EMIS data for the statistical purpose, then NBS is to consume data at the individual level (personal data) from this Register through the Government interoperability platform (approved by Law 211/2019¹⁴) – being the only way allowed for data exchange between public and other institutions who have information systems in place. This would require dedicated efforts from the NBS to enable its information system for connection to MConnect.
98. On its pathway to optimize the data collection through avoiding the parallel data collection by NBS and the Ministry of Education and Research, the NBS staff have undertaken comparative analyzes of data from the two sources (administrative data from EMIS and statistical data of the NBS). This should be presented to the Ministry and a Roadmap on data collection should be developed and agreed between these two institutions.

¹² Website: <https://sime.md/>

¹³ As underlined by the same NBS, the exact text from the Concept is as follows: “*EMIS will become the only source of truthful data regarding the education system*”. No reference to official education statistics is mentioned.

Statistics on education from EMIS could become official (as part of the official statistics according to the Law 93 on official statistics) only when the Ministry of Education and Research will be recognized as ONA (other producer of official statistics – activity which is to take place in the future)

¹⁴ https://www.legis.md/cautare/getResults?doc_id=113642&lang=ro

Data processing and access to data

99. The ICT solutions applied by the NBS to data processing are constantly optimised, including the software platforms used for data processing: CIS for primary data and ORACLE for 4-edu.
100. In order to make more effective and efficient data processing, access and dissemination – including education statistics – the NBS has built and regularly manages the *Statistical Data Bank* using the PC-Axis platform. This platform is user-friendly and allows a quick access to data and enables to extract tables in Excel or view graphical presentations.

1.3 Part C – Statistical Output

1.3.1 Principle 11 – Relevance

101. The NBS puts in place measures to interact with users of education statistics based on the annual Statistical Work Programme. All relevant proposals coming from official producers are integrated in this Programme. Inputs from data users are considered in the course of ad-hoc workshops with the main goal to update the existing education indicators or build some new ones.
102. Priority needs are being met in the Statistical Work Programme. In this regard, the NBS regularly produces and releases some key education statistics, in forms including press releases, statistical reports and an online databank.
103. A user satisfaction survey is carried out regularly (2009, 2013, 2016, and 2021). Furthermore, a “Feedback section” on the NBS website is dedicated to expression of comments from users. Some social media (Facebook, Twitter) are also used to collect feedback from data users.

1.3.2 Principle 12 – Accuracy and Reliability

104. Education statistics are revised on an annual basis with the Statistical Work Programme. During this phase, all official proposals are collected in order to improve the statistical tools and some workshops are held in order to capture the feedback from data users on statistical indicators.

1.3.3 Principle 13 – Timeliness and Punctuality

105. Education statistics are released in compliance with EU and international standards. Specifically, the NBS produces press releases, statistical bulletins, statistical yearbooks and other outputs (e.g., an online databank).
106. The NBS regularly publishes any reference for releases (press releases, publications and databank) in an annual release calendar available on its website.¹⁵
107. A release calendar is published in advance for all outputs relating to the survey on education as indicated (statistical bulletins, yearbooks, tables).¹⁶
108. The periodicity of education statistics releases reflects the users’ requirements. The main users are Government institutions, mass-media, and international agencies.

¹⁵ <https://statistica.gov.md/pageview.php?l=ro&idc=213&id=5861>

¹⁶ <https://statistica.gov.md/pageview.php?l=ro&idc=213&id=6899>

109. Delays or changes compared to the planned time schedule for the release of the education statistics are published in advance on the NBS website, including the reasons explaining the same.
110. Preliminary results for education statistics are not delivered because final results are directly provided through press releases.

1.3.4 Principle 14 – Coherence and Comparability

Timeframe, compilation and harmonisation of education statistics

111. Time series for education statistics are available from 1997, at least for the main indicators (e.g., students enrolled and institutions by level of education). In general, a timeframe for the survey data is available from 2000.
112. Due to some changes in the population census 2014 that adopted the concept of “usually resident population” instead of “legally resident population”, time series for some education indicators based on population as denominator (e.g., enrolment rates) are characterised by breaks; therefore, historical data are comparable until the academic year 2013/14 and as from 2014/15 onwards.
113. Education statistics are coherent and consistent, for both statistical survey and administrative statistics.
114. Education statistics are comparable over a reasonable period of time (i.e., five years).
115. Education statistics are compiled on the basis of common standards (scopes, definitions, units, classifications) with the exception of the ones coming from administrative sources with regard to definitions (methodologies and/or metadata partially available).
116. The main constraint in terms of harmonisation with the common standards (i.e., scopes, definitions, units and classifications adopted by the NBS) is related to some methodological issues relating to the data from the Ministry of Education and Research; notably differences in definitions.

Comparability of education statistics

117. Education statistics coming from different national sources are not compared and reconciled.
118. There are no problems for comparability of education statistics when changes do affect concepts and definitions, coverage, legislation and geographical boundaries. When there are numerous changes in classifications, education statistics are revised backwards.
119. There are some issues in relation to concepts and definitions for Survey 83-EDU (Personnel employed in primary and secondary general education institutions) and to the classification of education levels in the national Legislation (Education Code) compared with levels used by NBS (for example Survey 3-EDU - Activity of post-secondary technical vocational education institutions). The main problems affect the administrative statistics, with regard to coverage (list of accredited education institutions from the Ministry of Education and Research) and classifications (educational expenditure from the Ministry of Finance by budgetary classifications on the full range of programs and activities, but not per education levels).
120. The national education statistics are partly comparable with the EU standards (more detailed information is provided in Section D).

International Cooperation

121. The NBS cooperates in the regular joint collection of education data, an initiative between UNESCO (UIS), OECD and EUROSTAT (UOE), by applying the recommended international classifications and methodologies, and filling in the required questionnaires for data collection.¹⁷
122. The NBS benefits from the EU technical assistance within the framework of the Association Agreement between the European Union and the Member States and Republic of Moldova (specifically Chapter 6, Art. 41-46). In this framework, it is worth noting the ongoing EU-funded project “*Technical Assistance to Support the National Bureau of Statistics of the Republic of Moldova*”. This project also includes some training sessions to the NBS staff “*to further align Moldova’s education statistics to the international standard ISCED 2011 and to standardise data collection between the NBS and the Ministry of Education and Research*”.¹⁸
123. Another relevant international cooperation initiative involving more recently the Republic of Moldova – and notably its NBS – is STEP (*Statistics through Eastern Partnership*) an EU-funded regional cooperation programme for the Eastern Partnership (EaP) region from January 2019 to July 2022. The STEP programme also includes the improvement of the quality of social statistics.¹⁹

Table 2: Assessment of the education statistics vis-à-vis the EU requirements in terms of coherence and comparability (Principle 14)

Key items	Current implementation in the country	Envisaged implementation in the short term	Envisaged implementation in the medium term
Internal coherence and consistency of education statistics	Partly: enrolment ratios are affected by some critical issues mostly relating to the denominator (population)		Enrolment ratios should be corrected by applying ad-hoc procedures and methods of normalisation

¹⁷ The NBS regularly fills in the following UIS questionnaires:

UIS_ED_A: “*Students and Teachers (ISCED 0-4)*”

UIS_ED_B: “*Educational Expenditure (ISCED 0-8)*”

UIS_ED_C: “*Students and Teachers (ISCED 5-8)*”

UIS_ED_ISC11: “*National Education Systems*”

UIS_RD: “*Research and Experimental Development Survey*”

UIS_CLT_F: “*Questionnaire on Feature Film Statistics*”

¹⁸ <https://parstat.md/2022/02/09/the-5th-steering-committee-meeting-of-the-eu-funded-project-technical-assistance-to-support-the-national-bureau-of-statistics-of-the-republic-of-moldova-took-place-on-25th-january-20/>

¹⁹ “*STEP aims at strengthening the statistical evidence base through more and better quality official statistics. These statistics, produced by the National Statistical Systems (NSS) of the EaP countries, will follow the European Statistics Code of Practice and the goals of the Eastern Partnership*” [https://ec.europa.eu/eurostat/web/european-neighbourhood-policy/enp-east/step#:~:text=Statistics%20through%20Eastern%20Partnership%20\(STEP\)%20is%20an%20EU%2Dfunded,%2C%20Moldova%2C%20and%20the%20Ukraine.](https://ec.europa.eu/eurostat/web/european-neighbourhood-policy/enp-east/step#:~:text=Statistics%20through%20Eastern%20Partnership%20(STEP)%20is%20an%20EU%2Dfunded,%2C%20Moldova%2C%20and%20the%20Ukraine.)

Key items	Current implementation in the country	Envisaged implementation in the short term	Envisaged implementation in the medium term
Compliance of education statistics with international standards	<p>Education statistics produced by the NBS are generally compliant with international standards</p> <p>Partly for administrative data: definitions related to students in post-secondary technical and vocational education and postsecondary non-tertiary technical and vocational are not fully compliant with ISCED 2011 while there are no problems with students in higher education in terms of alignment with the same ISCED 2011</p>		The Ministry of Education and Research is recommended to harmonise (with the support of the NBS) definitions of relevant items to ISCED 2011 and make the necessary amendments in the legislation (Education Code)
Comparability of education statistics due to changes in classifications	<p>Partly:</p> <p>No specific availability of the up-to-date list of accredited institutions by principal and subordinate institutions.²⁰</p> <p>No data on expenditure by education level (ISCED 2011)</p>		<p>The Ministry of Education and Research is recommended to ensure a detailed and updated coverage of institutions.</p> <p>The Ministry of Finance is recommended to ensure a strict harmonisation of data on educational expenditure (expenditure by education level)</p>

²⁰ The lists of institutions by levels are available on the website of the Ministry, but they are very old. <https://mecc.gov.md/ro/content/reteaua-institutiilor-de-invatamint-general>.

Since the starting of the EMIS functioning, no updates are made in the lists on the website

1.3.5 Principle 15 – Accessibility and Clarity

Publication of education statistics

124. All relevant information, including data, indicators, metadata, processes, is available to the public through the NBS website, including press releases dedicated to education statistics, education statistical publication, info-graphs, etc.
125. Education statistics (e.g., students and graduates by types of institution) are published and updated in the Statistical Databank as from 2000/01 (last available year: 2020/21).
126. The terms for the elaboration of any relevant information, including reference metadata and databank, are contained in the Statistical Work Programme that is done on an annual basis.
127. Education metadata are published on the NBS website.²¹ The latest update refers to 2 March 2021.
128. The NBS publishes a broad (although not exhaustive) set of education statistics on its institutional website (e.g., students by type of educational institution, enrolment rates by level of education and sex, graduates by type of institution). Statbank (<http://statbank.statistica.md>) is the official database that allows tables and indicators to be visualised and extracted. This is open and free, based on PX-Web technology and generating APIs for automated data upload. GenderPulse.md is another platform – managed by the NBS in partnership with the United Nations – that does allow, still for free, gender comparisons for a number of statistics, including education (e.g., enrolment by education level, teaching staff). The NBS is also active on social platforms such as Twitter, Facebook and Telegram. It is envisaged to publish the SDG indicators on another free platform (Open SDG). It is evident that the NBS makes use of the most advanced ICT tools to present its education statistics.
129. Custom designed analyses are developed on request, mainly in the framework of technical assistance projects as it is dependent on human resources available. The NBS – as creator and owner of statistical registers containing data about statistical surveys and administrative sources – “*shall, at the request of natural and legal persons, provide information on the data contained in statistical registers and relating to such persons*” (Law on Official Statistics: Art 27. [3]). A few examples of analytical outputs, developed on the basis of education statistics include: Education in ICT²², *Profiles of women from Moldova*²³.
130. Access to microdata is allowed for research purposes provided that the identity of respondents be protected, in compliance with the existing rules on data confidentiality. Individual data can neither be published nor communicated to other users.

Management and dissemination of metadata

131. Metadata relating to the outputs in the field of education statistics are managed and disseminated according to the EU standards; the related link on the institutional website is suitably provided.²⁴

²¹ https://statistica.gov.md/public/files/Metadate/en/Educatia_en.pdf

²² https://statistica.gov.md/public/files/publicatii_electronice/Femei_barbati_TIC/1_Educatia_TIC.pdf

²³ <https://statistica.gov.md/pageview.php?l=en&id=5294&idc=350>

²⁴ <https://statistica.gov.md/public/files/Metadate/Educatia.pdf>

132. Users are informed about the methodologies adopted in the phase of processing of education statistics and also on the use of other sources (e.g., administrative sources). This is done through the metadata webpage.
133. Users are informed about the quality of the education statistics published on the NBS website, including their compliance with the EU quality requirements through the metadata section. Some short explanatory notes on education indicators are provided at the end of related tables within the relevant publications (e.g., Report on Education in the Republic of Moldova). No specific quality report is produced.

1.4 Part D – Current State of Education Statistics vis-à-vis EU and Other International Standards

134. The main source of data on international and EU education statistics is a joint **UNESCO/OECD/Eurostat (UOE) questionnaire on education systems**, and this is the basis for the core components of the education statistics section in the **Eurostat database**. Eurostat also collects data on regional enrolments, foreign language learning and learning mobility for EU Member States.
135. Data on educational attainment and adult learning are principally provided through household surveys, in particular the EU labour force survey (EU-LFS), which is complemented by an adult education survey (AES) and the continuing vocational training survey (CVTS). These are all based on EU Regulations.
136. There were altogether **more than 70 Education and Training Statistics / Indicators** that were sent as a part of the **Self-assessment Questionnaire (SAQ)** to the NBS for experimental trial to explore which indicators are calculated by the NBS, for which reference date are they calculated, which source is used and to assess if the measurement of the indicator is in line with international definitions and methodology. As a rationale and for definitions of the indicators the reference documents were also linked to the questionnaire. In addition, the NBS was asked to give explanations if the indicator is not calculated or does not match the EU and international requirements. Also, the NBS was asked to inform if and which kind of plans they have to implement the presented indicators or to harmonise the existing indicators to match EU indicators in future.
137. The indicators were classified according to different categories describing level/type of education or other relevant groups as follows:
- Teachers and teaching
 - Early childhood education and care
 - Primary education
 - Lower secondary, Upper secondary and post-secondary non-tertiary education
 - Tertiary education
 - All education levels
 - Early leavers from education and training
 - Tertiary educational attainment
 - Underachievement in reading, mathematics and science
 - Transition from education to labour market

- Adult learning
- Learning mobility
- Other education and training indicators (incl. class size, foreign language studied, expenditure)

138. The NBS had tried to investigate all presented indicators and had divided the work with the experts on different domains, like experts working with Labour Force Survey and Wage Statistics, from which the latter provides data for indicators on the continuing vocational training in enterprises.

139. The experiment was cumbersome and laborious for the NBS experts and they had worked hard especially on those cases where the indicator was not usually produced by NBS for national or the UIS purposes. It came up also that UIS definitions did not match completely with the definitions explained in UOE data collection questionnaires.

140. On indicators of teachers, the NBS has difficulties to classify teachers by level of education (ISCED) and employment status (full-time / part-time).²⁵ The issue could be taken into discussions with the Ministry of Education and Research, assess its relevance also in the national context and possibly include the variable with proper ISCED classification into the EMIS database.

141. For early childhood education and care and for primary and secondary education, the NBS has a long time series, and the data are openly disseminated on the website and are available from year 2000 and in paper form even earlier. For pupils enrolled in technical and vocational education, there are problems to provide the indicator according to Programme orientation for integrated programmes (general and vocational), otherwise enrolment ratio is calculated according to suggested classification by sex and age and field of education.²⁶ Currently it is not foreseen to make any significant changes to data collection questionnaires before the possibilities to use the EMIS database in statistical production are thoroughly explored, discussed and agreed.

142. The indicator “*Expected school years of pupils and students by education level*” is not calculated²⁷

143. Tertiary education indicators are produced according to UOE methodology and disseminated on the NBS website. For national purposes, the NBS does not publish the indicator on students in tertiary education as a % of 20–24 years old in the population, but as a % of 19–23 years old in the population.

144. Indicators on tertiary educational attainment graduate rates are not produced.²⁸

²⁵ The NBS collects data on education level of the teaching staff – and disseminates such data (Ex. https://statistica.gov.md/public/files/publicatii_electronice/Educatia/Educatia_editia_2021.pdf page 45, Table 3.17.C). Nevertheless, in the previously completed questionnaire (SAQ), the NBS noted the impossibility of dividing teachers by levels of education, e.g., in general secondary education by educational levels (ISCED2 and ISCED 3), as well as levels ISCED 6, 7 and 8

²⁶ In the Education Code, the name of some programs and the ISCED level assigned to them do not coincide with the ISCED 2011 standard: e.g., post-secondary technical and vocational training programs (ISCED level 4); post-secondary non-tertiary technical and vocational training programs (ISCED level 5)

²⁷ The indicator “*School Life Expectancy*” is calculated as the sum of the age specific enrollment rates for the levels of education specified. This indicator has stopped being calculated since problems with net enrolment rates greater than 100%, In previous years it was calculated; see for example General section, pag.22: https://statistica.md/public/files/publicatii_electronice/Educatia/Educatie_RM_2018.pdf

²⁸ It is not calculated because technical and vocational education, as well as higher education, offers several programs of different duration. The NBS calculates the ratio of graduates per 10 000 inhabitants.

145. Indicators on the education domain of the Labour Force Survey use the classification of level of education attained developed together with education statistics experts so that it matches completely the ISCED level classification. The NBS LFS experts have also explored thoroughly that the methodology is in line with EU standards. At present, the LFS questionnaire does not include a question on the country of birth of the respondent and it is not able to form the degree of urbanisation. Also, the year when the highest level of education was successfully completed is missing from the questionnaire. These will, however, be taken into consideration and included when the LFS questionnaires are reviewed. The LFS questionnaires are planned to be revised in the next two-three years.
146. On adult learning, LFS does not include variables on adult participation in learning²⁹ and the NBS has no adult education survey that is equivalent with EU-AES. There are no special plans for now and the NBS has not received any explicit national need to produce data on adult learning which would follow the European standards on LFS and AES. Statistics on continuing vocational training (CVT) in enterprises are collected through the annual sample survey to enterprises "*Continuing vocational training of employees*", which covers units with 10 and more employees and includes all economic activities according to NACE (from A to S). The survey methodology was developed considering the provision of the Regulation (EC) No. 1552/2005 on statistics relating to vocational training in enterprises, but only quantitative data are collected regarding: number of course participants (employees), of whom internal and external, by sex; number of participants at other forms of vocational training, by sex; number of employees, by sex; number of hours, by each kind of CVT; enterprise costs of CVT. The survey is partially harmonized with the EU Regulations on CVTS, in particular those regarding the definitions used for collecting data and the coverage. The collected data allow the compiling the *Rate of participation for employees from all enterprises* and *Global rate of participation for employees from all enterprises to continuing vocational training courses*, by economic activities and sex.
147. Indicators on mobile students are not produced.
148. Educational expenditure indicators are not produced even if they could be produced at least partly. Expenditure data are obtained from the Ministry of Finance and variables shall be formed on the basis of this information.

Table 3: Assessment of the education statistics vis-à-vis EU and other international standards

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
Teachers and Teaching			
<i>Classroom teachers and academic staff by education level, programme orientation, sex and age</i>	UNESCO-OECD-EUROSTAT; UOE	It is not possible to divide by education level (ISCED 2-3 and 6–8)	The NBS should ask education institutions to submit information on teachers by detailed ISCED-level.

²⁹ LFS includes two variables on participation of persons aged 15 years and above in education and training in the last four weeks: a) Type of (formal) education followed, and b) Participation in (non-formal) education (attendance of courses, seminars, conferences, training during working hours or during your free time; taking the private lessons or other forms of training)

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
<i>Classroom teachers and academic staff by education level, programme orientation, sex, type of institution and employment status</i>	UNESCO-OECD-EUROSTAT; UOE	Yes, exception by education level and by employment status	The NBS should ask education institutions to submit information on teachers' employment status (full-time, part-time). There is a problem with data collection on teachers working overtime (above full time –which is allowed by the law) - these people are reported as full-time. And this issue does not allow the NBS to estimate correctly the equivalent full-time (now it would be underestimated). That is why the NBS does not disseminate data by full-part-time
<i>Classroom teachers working full-time and part-time in primary, lower-secondary and upper-secondary education – as % of total active population</i>	UNESCO-OECD-EUROSTAT; UOE	No	The NBS should ask education institutions to submit information on teachers' employment status (full-time, part-time).
<i>Ratio of pupils and students to teachers and academic staff, by education level and Programme orientation</i>	UNESCO-OECD-EUROSTAT; UOE	Partly. It is not possible to divide by education level (ISCED 2-3 and 6-8).	The NBS should ask education institutions to submit information on teachers by the detailed ISCED-level.
<i>Distribution of teachers at education level and programme orientation by age groups Distribution of academic staff at education level by age groups</i>	UNESCO-OECD-EUROSTAT; UOE	No	The NBS could explore which of these variables are possible to produce at the level of education institutions in order to calculate this indicator.
<i>Female teachers – as % of all teachers, by education level</i>	UNESCO-OECD-EUROSTAT; UOE	Partly. It is not possible to divide by education level (ISCED 2-3 and 6-8).	The NBS should ask education institutions to submit information on teachers by the detailed ISCED-level.

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
<i>Female school-management personnel – as % of total school-management personnel, by education level</i>	UNESCO-OECD-EUROSTAT; UOE	Partly. It is not possible to divide by education level.	The NBS should ask education institutions to submit information on by the detailed ISCED-level.
<i>Teachers working part-time – as % of all teachers, by education level</i>	UNESCO-OECD-EUROSTAT; UOE	Partly. It is not possible to divide by education level.	The NBS should ask education institutions to submit information on teachers by the detailed ISCED-level.
Early Childhood Education and Care			
<i>Pupils enrolled in early childhood education by sex, type of institution and intensity of participation (full-time, part-time)</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 Children of Moldova, 2016 Territorial statistics, 2020 Statistical Yearbook of the Republic of Moldova, 2020 https://statistica.gov.md/pageview.php?l=ro&id=2819&idc=350 StatBank http://statbank.statistica.md UIS database	
<i>Pupils enrolled in early childhood education by sex and age</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 Children of Moldova, 2016 Territorial statistics, 2020 Statistical Yearbook of the Republic of Moldova, 2020 UNESCO database StatBank http://statbank.statistica.md https://statistica.gov.md/pageview.php?l=ro&id=2819&idc=350 UIS database	
<i>Pupils in early childhood education and age – as % of corresponding age population</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 Children of Moldova, 2016 Territorial statistics, 2020 Statistical Yearbook of the	

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
		Republic of Moldova, 2020 StatBank http://statbank.statistica.md https://statistica.gov.md/pageview.php?l=ro&id=2819&idc=350 UIS database	
Primary Education			
<i>Pupils enrolled in primary education by sex, type of institution and intensity of participation (full-time, part-time)</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 Children of Moldova, 2016 Territorial statistics, 2020 Statistical Yearbook of the Republic of Moldova, 2020 StatBank http://statbank.statistica.md https://statistica.gov.md/pageview.php?l=ro&id=2819&idc=350 UIS database	
<i>Pupils enrolled in primary education by sex and age</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 Children of Moldova, 2016 Territorial statistics, 2020 Statistical Yearbook of the Republic of Moldova, 2020 StatBank http://statbank.statistica.md https://statistica.gov.md/pageview.php?l=ro&id=2819&idc=350 UIS database	
<i>Pupils in primary education by education level and age – as % of corresponding age population</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 Children of Moldova, 2016 Territorial statistics, 2020 Statistical Yearbook of the Republic of Moldova, 2020 StatBank http://statbank.statistica.md https://statistica.gov.md/pageview.php?l=ro&id=2819&idc=350	

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
		eview.php?l=ro&id=2819&idc=350 UIS database	
Lower Secondary, Upper Secondary and Post-secondary Non-tertiary Education			
<i>Pupils enrolled in lower-secondary education by programme orientation, sex, type of institution and intensity of participation (full-time, part-time)</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes Education in the Republic of Moldova, 2021 Children of Moldova, 2016 Territorial statistics, 2020 Statistical Yearbook of the Republic of Moldova, 2020 StatBank http://statbank.statistica.md https://statistica.gov.md/pag-eview.php?l=ro&id=2819&idc=350 UIS database	
<i>Pupils enrolled in lower-secondary education by programme orientation, sex and age</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 Children of Moldova, 2016 Territorial statistics, 2020 Statistical Yearbook of the Republic of Moldova, 2020 StatBank http://statbank.statistica.md https://statistica.gov.md/pag-eview.php?l=ro&id=2819&idc=350 UIS database	
<i>Pupils enrolled in upper secondary education by programme orientation, sex, type of institution and intensity of participation (full-time, part-time)</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes for <i>Pupils enrolled in upper secondary education by programme orientation, sex</i> Education in the Republic of Moldova, 2021 (chapter 8) https://statistica.gov.md/pag-eview.php?l=ro&id=2819&idc=350 Data for pupils in <i>upper secondary education</i> by type	The main dataset on education statistics being produced by NBS is disseminated according to the national education programmes. National education programmes for three levels (3, 4, 5) do not correspond to the standard ISCED 2011 (3- upper secondary, 4- post-secondary non-tertiary education, 5- short cycle tertiary education). The NBS is disseminating data by ISCED 2011

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
		of institution <i>and intensity of participation</i> is reported only to UNESCO (UIS database).	(including ISCED levels 3, 4, 5) only in one chapter of the education statistics publication and to UNESCO questionnaires, as well as in the Databank (gender statistics (but only rates)). The NBS should disseminate at the national level (in the statistical outputs) data for pupils in <i>upper secondary education</i> according to ISCED 2011.
<i>Pupils enrolled in upper-secondary education by programme orientation, sex and age</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 (chapter 8) Data for pupils in <i>upper secondary education</i> by age is reported only to UNESCO (UIS database).	As above
<i>Pupils enrolled in post-secondary non-tertiary education by programme orientation, sex, type of institution and intensity of participation (full-time, part-time)</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes, except by programme orientation Education in the Republic of Moldova, 2021 (chapter 8). Data for pupils in <i>post-secondary non-tertiary education</i> by type of institution is reported only to UNESCO (UIS database). This indicator cannot be calculated by programme orientation because this level includes only vocational/professional programmes (there is no other type of programme).	As above
<i>Pupils enrolled in post-secondary non-tertiary education by programme</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes, except by programme orientation Education in the Republic of	As above

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
<i>orientation, sex and age</i>		Moldova, 2021 (chapter 8) Data for pupils in <i>post-secondary non-tertiary education</i> by <i>age</i> is reported only to UNESCO (UIS database). This indicator cannot be calculated by programme orientation because this level includes only vocational/professional programmes (there is no other type of programme).	
<i>Pupils enrolled in vocational upper secondary and post-secondary non-tertiary education , sex and field of education</i>	UNESCO-OECD-EUROSTAT; UOE.	Partly. Data for pupils in <i>vocational upper secondary and post-secondary non-tertiary education</i> by <i>sex</i> is reported only to UNESCO (UIS database), by field of education not required.	
Tertiary Education			
<i>Students enrolled in tertiary education by education level, programme orientation, sex, type of institution and intensity of participation (full-time, part-time)</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 (chapter 8) Data for students enrolled in <i>tertiary education</i> by type of institution <i>and intensity of participation</i> is reported only to UNESCO UIS database	
<i>Students enrolled in tertiary education by education level, programme orientation, sex and age</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 (chapter 8) Data for students enrolled in <i>tertiary education</i> by <i>sex and age</i> is reported only to UNESCO UIS database	
<i>Students enrolled in tertiary education by education</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. Education in the Republic of	

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
<i>level, programme orientation, sex and field of education</i>		Moldova, 2021 (chapter 8) Data for students enrolled in <i>tertiary education by field of education</i> is reported only to UNESCO UIS database	
<i>Distribution of students enrolled at tertiary education levels by sex and field of education</i>	UNESCO-OECD- EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 (chapter 8) Data for students enrolled in <i>tertiary education by field of education</i> is reported only to UNESCO UIS database	
<i>Students in tertiary education by age groups – as % of corresponding age population</i>	UNESCO-OECD- EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021 (chapter 8) UIS database	
<i>Students in tertiary education – as % of 20–24 years old in the population</i>	UNESCO-OECD- EUROSTAT; UOE.	Not disseminated, but possible to be calculated.	For Republic of Moldova corresponding age group for tertiary education is 19–23. In order to produce the information according to the EU standards, the NBS is asked to examine the possibility to produce and disseminate the indicator as % of 20–24 years old.
All Education Levels			
<i>Pupils and students in education by age groups – as % of corresponding age population</i>	UNESCO-OECD- EUROSTAT; UOE.	Yes. Education in the Republic of Moldova, 2021	
<i>Expected school years of pupils and students by education level</i>	UNESCO-OECD- EUROSTAT; UOE.	Yes. It is possible to calculate this indicator, but not by ISCED levels.	The NBS should produce this indicator also according to the student's level of education.
<i>Students in post-compulsory education – as % of the corresponding age population</i>	UNESCO-OECD- EUROSTAT; UOE.	Yes. It is possible to calculate this indicator.	

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
<i>Students' participation at the end of compulsory education – as % of the corresponding age population</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. It is possible to calculate this indicator.	
<i>Pupils aged 3/4/5 years old and the starting age of compulsory education, by sex – as % of the population of the corresponding age group</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. It is possible to calculate this indicator.	
<i>New entrants by education level, programme orientation, sex and age</i>	UNESCO-OECD-EUROSTAT; UOE.	Partly. For vocational and higher education, it is difficult to collect this indicator.	New entrants are a frequently used indicator. The NBS is invited to seek means to produce this indicator according to these variables.
<i>New entrants by education level, programme orientation by sex and field of education</i>	UNESCO-OECD-EUROSTAT; UOE.	No	New entrants are a frequently used indicator. The NBS is invited to seek means to produce this indicator according to these variables.
<i>Distribution of new entrants at education level and programme orientation by sex and field of education</i>	UNESCO-OECD-EUROSTAT; UOE.	No	New entrants are a frequently used indicator. The NBS is invited to seek means to produce this indicator according to these variables.
Early Leavers from Education and Training			
<i>Early leavers from education and training by sex and labour status</i>	EUROSTAT. Household statistics – LFS series	Yes: Early school leavers (Source: LFS). The indicator can be calculated by labour status. Yes, the measurement is in line with the methodology internationally applied.	
<i>Early leavers from education and training by sex and citizenship</i>	EUROSTAT. Household statistics – LFS series	Yes, the indicator can be estimated by citizenship, but it is not relevant because 99.9% of respondents are citizens of the Republic of Moldova.	

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
<i>Early leavers from education and training by sex and country of birth</i>	EUROSTAT. Household statistics – LFS series	No, the indicator cannot be calculated by country of birth. In near future, no modification of the LFS questionnaires is planned	During the visit, the NBS LFS experts expressed that they plan to include this variable when LFS questionnaires will be revised (acc.to Regulation EU 1700/2019). This is highly recommended because this variable also belongs to the standardised variables regulated by EU IESS framework ((EU) 2019/1700, (EU) 2019/2181).
<i>Early leavers from formal education by sex and labour status</i>	EUROSTAT. Household statistics – LFS series	Yes	
<i>Early leavers from education and training by sex and degree of urbanisation</i>	EUROSTAT. Household statistics – LFS series	No. In near future, no modification of the LFS questionnaires is planned. Moreover, the NBS does not produce data by degree of urbanisation	During the visit, the NBS LFS experts expressed that they plan to include this variable when the LFS questionnaires will be revised. This is highly recommended because this variable also belongs to the standardised variables regulated by EU IESS framework ((EU) 2019/1700, (EU) 2019/2181).
Tertiary Educational Attainment			
<i>Graduates in tertiary education by age groups – per 1000 of population aged 20–29</i>	UNESCO – OECD – EUROSTAT; UOE.	Yes, the indicator can be calculated.	
<i>Graduates at doctoral level by sex and age groups – per 1000 population aged 25–34</i>	UNESCO – OECD – EUROSTAT; UOE.	Yes, the indicator can be calculated.	
<i>The share of 30–34-year-olds having successfully completed ISCED level 5–8)</i>	UNESCO – OECD – EUROSTAT; UOE.	Yes, the indicator can be calculated.	

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
<i>Average age of graduation from higher education</i>	UNESCO – OECD – EUROSTAT; UOE.	Yes, the indicator can be calculated.	
<i>Change of average age of graduation from higher education (ISCED 5–8)</i>	UNESCO – OECD – EUROSTAT; UOE.	No.	
Underachievement in Reading, Mathematics and Science			
<i>Underachieving 15-year-old students by sex and field – PISA survey (source: OECD)</i>	EUROSTAT. Underachieving 15-year-old students by sex and field – PISA survey (source: OECD)	Yes. PISA 2015.	
Transition from Education to Labour Market			
<i>Participation rate of young people in education and training by sex, age and labour status</i>	EUROSTAT. Population by educational attainment level	Yes, the indicator can be calculated. Source – LFS.	
<i>Participation rate of young people in formal education by sex, age and labour status</i>	EUROSTAT. Population by educational attainment level	Yes, the indicator can be calculated. Source – LFS.	
<i>Young people neither in employment nor in education and training by sex, age and labour status (NEET rates)</i>	EUROSTAT. Population by educational attainment level	Yes: NEET (15–24 years) Source – LFS. The indicator can be calculated by labour status. Yes, the measurement is in line with the methodology internationally applied.	
<i>Young people neither in employment nor in education and training by sex, age and citizenship (NEET rates)</i>	EUROSTAT. Population by educational attainment level	Yes, the indicator can be calculated by sex, age, citizenship. The indicator can be estimated by citizenship, but it is not relevant because 99.9% of respondents are citizens of the Republic of Moldova.	
<i>Young people neither in employment nor in education and training by sex, age and country of birth (NEET rates)</i>	EUROSTAT. Population by educational attainment level	No, the indicator cannot be calculated by country of birth. In near future, no modification of the LFS questionnaires is planned.	During the visit, the NBS LFS experts expressed that they plan to include this variable when the LFS the questionnaires will be revised. This is highly

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
			recommended because this variable also belongs to the standardised variables regulated by EU IESS framework ((EU) 2019/1700, (EU) 2019/2181).
<i>Young people neither in employment nor in education and training by sex, age and educational attainment level (NEET rates)</i>	EUROSTAT. Population by educational attainment level	Yes, the indicator can be calculated by educational attainment.	
<i>Young people neither in employment nor in education and training by sex, age and degree of urbanisation (NEET rates)</i>	EUROSTAT. Population by educational attainment level	No. In the near future, no modification of the LFS questionnaires is planned.	This is highly recommended because this variable also belongs to the standardised variables regulated by EU IESS framework ((EU) 2019/1700, (EU) 2019/2181).
<i>Young people neither in employment nor in education and training by sex, age, country of birth and degree of urbanisation (NEET rates)</i>	EUROSTAT. Population by educational attainment level	No. In the near future, no modification of the LFS questionnaires is planned.	During the visit, the NBS LFS experts expressed that they plan to include this variable when the LFS questionnaires will be revised. This is highly recommended because this variable belongs also to the standardised variables regulated by EU IESS framework ((EU) 2019/1700, (EU) 2019/2181).
<i>Young people neither in employment nor in education and training by sex, age, citizenship and degree of urbanisation (NEET rates)</i>	EUROSTAT. Population by educational attainment level	No. In the near future, no modification of the LFS questionnaires is planned.	During the visit, the NBS LFS experts expressed that they plan to include this variable when the LFS questionnaires will be revised. This is highly recommended because

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
			this variable belongs also to the standardised variables regulated by EU IESS framework ((EU) 2019/1700, (EU) 2019/2181).
<i>Young people aged 15–24 neither in employment nor in education and training (NEET), by sex – quarterly data</i>	EUROSTAT. Population by educational attainment level	Yes	
<i>Employment rates of young people not in education and training by sex, educational attainment level and years since completion of highest level of education</i>	EUROSTAT. Population by educational attainment level	No. In the near future, no modification of the LFS questionnaires is planned.	During the visit, the NBS LFS experts expressed that they plan to include this variable when the LFS questionnaires will be revised. This is highly recommended because this variable belongs also to the standardised variables regulated by EU IESS framework ((EU) 2019/1700, (EU) 2019/2181).
<i>Unemployment rates of young people not in education and training by sex, educational attainment level and years since completion of highest level of education</i>	EUROSTAT. Population by educational attainment level	No. In near future, no modification of the LFS questionnaires is planned.	During the visit, the NBS LFS experts expressed that they plan to include this variable when the LFS questionnaires will be revised. This is highly recommended because this variable belongs also to the standardised variables regulated by EU IESS framework ((EU) 2019/1700, (EU) 2019/2181).
Adult Learning			
<i>Adults' participation in formal and non-formal education and training during the last 4 weeks by</i>	EUROSTAT. Main indicators on adult participation in learning – LFS data	No	The NBS is requested to explore, in cooperation with the relevant national stakeholders, the

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
<i>age, sex, level of education and labour market status</i>	from 1992 onwards.		possibility of conducting the Adult Education Survey AES on participation in adult education and training. Start possible negotiations well in advance after this data collection wave (2022/23) to be ready for the next data collection in year 2028/29. The preparatory work should be done taking into account the EU-regulations (EU) 2019/1700, (EU) 2021/859, (EU) 2021/861.
<i>Adults' participation in non-formal education and training by age, sex, level of educational, citizenship, country of birth</i>	EUROSTAT. Main indicators on adult participation in learning – LFS data from 1992 onwards.	No	As above
<i>Adults' participation in formal and non-formal education and training during the last 12 months by age, sex, level of education and labour market status</i>	EUROSTAT. Adult Education Survey.	No	As above
<i>Adults' participation in job-related non-formal education and training by type, sex, age, educational attainment level and labour status</i>	EUROSTAT. Adult Education Survey.	No	As above
<i>Adults' participation in informal learning by learning form, sex, age, educational attainment level and labour status</i>	EUROSTAT. Adult Education Survey.	No	As above
<i>Mean instruction hours spent by participant in education and training by</i>	EUROSTAT. Adult Education Survey.	No	As above

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
<i>sex, age, educational attainment and labour status</i>			
<i>Enterprises providing training by type of training and size class – % of all enterprises</i>	EUROSTAT. Continuing vocational training in enterprises	Yes	
<i>Enterprises providing training by type of training and NACE – % of all enterprises</i>	EUROSTAT. Continuing vocational training in enterprises	Yes	
<i>Enterprises providing training by participation intensity, type of training and size class – % of training enterprises</i>	EUROSTAT. Continuing vocational training in enterprises	Yes	
<i>Participants in CVT courses by sex and size class – % of persons employed in all enterprises</i>	EUROSTAT. Continuing vocational training in enterprises	Yes	
<i>Participants in CVT courses by sex and NACE – % of persons employed in all enterprises</i>	EUROSTAT. Continuing vocational training in enterprises	Yes	
<i>Hours spent in CVT courses by size class – hours per 1000 hours worked in all enterprises</i>	EUROSTAT. Continuing vocational training in enterprises	Only hours spent in CVT, not per 1000 hours worked. It could be calculated only for enterprises with 20 and more employees (the survey includes enterprises with 10 and more employees)	The NBS should examine thoroughly what procedures can be implemented in order to produce this indicator to be in line with the EU CVTS (Continuing Vocational Training Survey) legislation (EC No 1552/2005, (EU) No 1153/2014.
<i>Cost of CVT courses by type and size class – % of total labour cost of all enterprises</i>	EUROSTAT. Continuing vocational training in enterprises	Only cost of CVT courses, not % of total labour cost. It could be calculated only for enterprises with 20 or more employees (the survey includes enterprises with 10 or more employees)	The NBS should examine thoroughly what procedures can be implemented in order to produce this indicator to be in line with the EU CVTS (Continuing Vocational Training Survey) legislation (EC No 1552/2005, (EU) No

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
			1153/2014.
<i>Cost of CVT courses by type and NACE - % of total labour cost of all enterprises</i>	EUROSTAT. Continuing vocational training in enterprises	Only cost of CVT courses, not % of total labour cost, It could be calculated only for enterprises with 20 or more employees (the survey includes enterprises with 10 or more employees).	The NBS should examine thoroughly what procedures can be implemented in order to produce this indicator to be in line with the EU CVTS (Continuing Vocational Training Survey) legislation (EC No 1552/2005, (EU) No 1153/2014.
Learning Mobility			
<i>Mobile students from abroad enrolled by education level, sex and field of education</i>	UNESCO-OECD-EUROSTAT; UOE.	No - for mobile students (acc.to UIS definition). The indicator cannot be calculated because data are not collected. The NBS collects data on foreign students by citizenship on all levels except general secondary education.	The NBS is requested to explore the possibility of collecting the missing data.
<i>Mobile students from abroad enrolled by education level, sex and country of origin</i>	UNESCO-OECD-EUROSTAT; UOE.	No - for mobile students (acc.to UIS definition). The indicator cannot be calculated because data are not collected. The NBS collects data on foreign students by citizenship on all levels except general secondary education.	The NBS should consult with the Ministry of Education and Research whether the information on mobile students in EMIS data platform can include all the information asked for UOE data collection also including the country of origin. There is need to point out that most of the foreign students are in the higher education. This level of education is not yet available in EMIS (module not developed)
<i>Share of mobile students from abroad enrolled by education level, sex and country of origin</i>	UNESCO-OECD-EUROSTAT; UOE.	No - for mobile students (acc.to UIS definition). The indicator cannot be calculated because data are	The NBS should consult with the Ministry of Education and Research whether the information

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
		not collected. Yes - for foreign students by citizenship (different from the notion of mobile students according to UIS).	on mobile students in EMIS data platform can include all the information asked for UOE data collection also including the country of origin.
<i>Distribution of mobile students from abroad enrolled at education level by sex and field of education</i>	UNESCO-OECD- EUROSTAT; UOE.	No - for mobile students (acc.to UIS definition). The indicator cannot be calculated because data are not collected. Yes - for foreign students by citizenship (different from the notion of mobile students according to UIS).	
Other Education and Training Indicators			
<i>Average class size by level of education (ISCED 1 and 2) and by type of institution</i>	UNESCO-OECD- EUROSTAT; UOE.	Yes. The indicator can be calculated.	
<i>Pupils by education level and modern foreign language studied – absolute numbers and % of pupils by language studied</i>	UNESCO-OECD- EUROSTAT; UOE.	Yes. The indicator can be calculated for levels 1, 2, 3 general upper-secondary (for other levels data on <i>foreign language studied</i> are not collected by the NBS).	
<i>Total educational expenditure by education level, programme orientation, type of source and expenditure category</i>	UNESCO-OECD- EUROSTAT; UOE.	No	For national and international statistical production, the NBS should consult with the Ministry of Finance in order to include in their data collection and data base information on education level (ISCED), programme orientation, and type of source.
<i>Public educational expenditure by education level, programme orientation, type of source and expenditure category</i>	UNESCO-OECD- EUROSTAT; UOE.	Yes. Ministry of Finance provides data on <i>educational expenditure</i> from the public national budget. NBS estimates data on	

Education Statistics	Reference standards (e.g., UOE, EU Regulations, UNESCO-UIS)	Current state of statistics in the country	Actions envisaged to match reference standards
		educational expenditure by education level, programme orientation, type of source and expenditure category and provides them to the UIS database.	
<i>Private educational expenditure by education level, programme orientation, type of source and expenditure category</i>	UNESCO-OECD-EUROSTAT; UOE.	No	For national and international statistical production, the NBS should consult with the Ministry of Finance in order to include in their data collection and data base information on education level (ISCED), programme orientation, and type of source.
<i>Public expenditure on education by education level and programme orientation – as % of public expenditure or % of GNI</i>	UNESCO-OECD-EUROSTAT; UOE.	Yes. The indicator can be calculated but the source of data is the Ministry of Finance.	

NOTE: As regards the indicators mentioned as the ones that can be calculated, the basic data for these calculations are available. The main reasons for not calculating the indicators are lack of necessary staff and the need of technical assistance in the area.

2. Recommendations

2.1 Short-term recommendations

- A. The NBS is invited to formulate its needs and complaints with regard to delays in receiving data from respondents to the relevant interinstitutional fora. (Ref. SAQ 2.3)
- B. The NBS is invited to identify and verify any specific gap in its internal system on data protection and dedicate ad-hoc human and financial resources to improve the system. The NBS has already started to implement this work. (Ref. SAQ 2.4)
- C. The NBS is invited to expose to the relevant institutional authorities/fora the gaps between available resources and future needs related to the production of education statistics by detailing the specific reasons for closing the same. More internal staff should be trained in software management and solutions, notably some core statistical applications, such as software R. (Ref. SAQ 3.1.2)
- D. The NBS is invited to provide an approximate estimate of the budget needed for the education statistics. (Ref. SAQ 3.1.3)
- E. Based on its knowledge and experience and its role as coordinator of the NSS, the NBS is invited to identify on a regular basis which education indicators are needed in the country by mostly referring to the EU Education Monitor and other international references (e.g., UNESCO-UOE) and involve – where possible – other relevant members of the NSS in its work on related concepts, techniques and methodologies so as to improve the coordination between partners and the harmonisation of the indicators. (Ref. SAQ 3.4)
- F. The NBS is invited to propose its needs for cooperation arrangements with international partners through its annual Statistical Work Programme, by identifying the best practices within EU Member States and EUROSTAT (Ref. SAQ 14.5.3)
- G. It is highly recommended that the NBS increases internal cooperation between different statistical domains so that the same operational applications of the same statistical concepts in education are used, e.g., for the production of the ISCED classification and for other common standardised variables according to the EU legislation. (Ref. SAQ Part D)
- H. The NBS is invited to explore the possibility to get information on teachers’ level of education attained and employment status. (Ref. SAQ Part D)
- I. The NBS is invited to try to find ways to classify pupils’ programme orientation in post-secondary non-tertiary education. (Ref. SAQ Part D)
- J. The NBS is invited to verify the possibility of calculation of the indicator “Expected school years of pupils and students by education level”. (Ref. SAQ Part D)
- K. The NBS is invited to verify the possibility of calculation of indicators on tertiary educational attainment graduate rates. Following this, also producing the indicator on change of average age of graduation from higher education could be explored further. (Ref. SAQ Part D)
- L. The NBS is invited to verify the possibility of calculation of indicators on mobile students. These could be calculated at least partly. It could be further investigated if there is also a national need for this information. (Ref. SAQ Part D)

- M. The NBS is asked to supplement the LFS with the variables on the year when the highest level of education was successfully completed, country of birth and degree of urbanisation. (Ref. SAQ Part D)

2.2 Medium-term recommendations

- N. The NBS is invited to propose its specific needs relating to expenditure by education level (ISCED) within the Annual Statistical Work Programme in order to invite – in compliance with its mandate – the Ministry of Finance to process and provide the NBS with some data directly usable for its statistical purposes (elaboration, presentation etc.). (Ref. SAQ 2.2.1)
- O. The NBS is invited to strengthen its role as coordinator of the NSS. (Ref. SAQ 2.2.2)
- P. The NBS is invited to produce (and disseminate) other relevant and more sophisticated education indicators (e.g., dropout rates; survival rates). (Ref. SAQ 6.4)
- Q. The NBS should exploit the current and future international opportunities in terms of technical assistance to identify its internal capacities in relation to the review of some existing indicators (e.g., enrolment ratios) as well as the calculation of new relevant indicators (e.g., survival rate). In a following stage, the NBS is invited to adopt and harmonise – through the interinstitutional groups with the ministries concerned – the good practices acquired in the field of education statistics. (Ref. SAQ 7.1)
- R. The Ministry of Education and Research is invited to adapt the Nomenclature of scientific specialties to ISCED-F 2013 and the educational programmes in technical vocational education to ISCED 2011. (Ref. SAQ 7.4)
- S. The NBS is invited to increase the staff directly employed in the Education, Science and Culture Unit in order to match any ordinary or extraordinary task in due time (e.g., requests for non-published data; calculation of further indicators beyond the ones normally calculated and disseminated). (Ref. SAQ 7.5)
- T. The NBS is invited to also increase cooperation with the national scientific community to increase recognition of its expertise, to get new ideas for developing statistical procedures, to get more data users for statistics and create pathways for recruiting new employees. (Ref. SAQ 7.7)
- U. The implementation of new technologies for data collection, such as the use of web-based questionnaires, as well as use of more administrative sources, should reduce the need for direct data collection. Making cost-effective improvements to the methods for data collection can also help in overcoming NBS's shortage of resources. (Ref. SAQ 8.1.1)
- V. The Ministry of Education and Research is invited to reconcile the main differences in the definitions of some variables (pedagogical staff, children with disabilities, computers used for pedagogical purposes) between NBS and its administrative sources. (Ref. SAQ 8.1.2)
- W. The Ministry of Education and Research is invited to allow the NBS – given the leading official role of the latter in the National Statistical System – to access the EMIS platform in order to check and validate its own official data. (Ref. SAQ 10.3)
- X. The NBS is invited to deploy more efforts in ensuring coherence and consistency between enrolment data and population data, especially as from the next population census. In the meantime, enrolment ratios should be corrected by applying ad-hoc procedures and/or methods of normalisation. Corrections should be done not only on net enrolment ratios but also on gross enrolment ratios whereas both

indicators are based on the same denominator (i.e., population in the relevant age groups) that is supposed to be underestimated. (Ref. SAQ 14.1.2)

- Y. The Ministry of Education and Research is invited to harmonise the definitions related to students in secondary specialised education and higher education with ISCED 2011. This could be done by using the existing NBS expertise. (Ref. SAQ 14.3.2)
- Z. The Ministry of Education and Research is invited to ensure a detailed and updated coverage of institutions (notably private education). (Ref. SAQ 14.4.3)
- AA. The Ministry of Finance is invited to ensure a strict harmonisation of data on educational expenditure vis-à-vis the NBS requirements. (Ref. SAQ 14.4.3)
- BB. The NBS is requested to explore, in cooperation with the relevant national stakeholders, the possibility of conducting the Adult Education Survey (AES) on participation in adult education and training. (Ref. SAQ Part D)
- CC. The NBS is invited to examine whether the current data collection on the continuing vocational training in enterprises is fully in line with the EU CVTS (Continuing Vocational Training Survey) legislation (EC) No 1552/2005, (EU) No 1153/2014. (Ref. SAQ Part D)

3. Action plan

The following synopsis summarises the actions required to implement the above short-term and medium-term recommendations.

Recommendations	Actions to implement recommendations
Short-term	
<p>The NBS is invited to formulate its needs and complaints with regard to delays in receiving data from respondents to the relevant interinstitutional fora. (Ref. SAQ 2.3)</p>	<ul style="list-style-type: none"> • Define a protocol for respondents (to be preferably submitted and approved on a legal basis) by inserting a specific obligation on NSS members to provide specified and timely feedback in relation to the official queries/inputs from the NBS.
<p>The NBS is invited to identify and verify any gaps in its internal system on data protection and dedicate ad-hoc human and financial resources to improve the system. (Ref. SAQ 2.4)</p>	<ul style="list-style-type: none"> • List constraints and proposed solutions. • Present related improvements in a suitable way (e.g., web communication, technical fora with NSS members and other data holders) in order to further increase the trust in the NBS.
<p>The NBS is invited to expose to the relevant institutional authorities/fora the gaps between available resources and future needs related to the production of education statistics by detailing the specific reasons for closing the same. More internal staff should be trained in software management and solutions, notably some core statistical applications such as software R. (Ref. SAQ 3.1.2)</p>	<ul style="list-style-type: none"> • Note the specific reasons explaining why some (human and financial) resources should be increased to address future needs for education statistics (e.g., checking quality of data in EMIS; producing new education indicators). • Identify trainer(s) and staff to be trained in software management and solutions (e.g., use of software R). • Organise training in related statistical programmes / applications (e.g., use of software R).
<p>The NBS is invited to provide an approximate estimate of the budget needed for the education statistics. (Ref. SAQ 3.1.3)</p>	<ul style="list-style-type: none"> • Estimate the budget needed for the education statistics by excluding other ones not directly related to the core mission or tasks of the Education, Science and Culture Section (e.g., some indicators provided by LFS). This exercise should be done at least for the current expenditure.
<p>Based on its knowledge and experience and its role as coordinator of the NSS, the NBS is invited to identify on a regular basis which education indicators are needed in the country by mostly referring to the EU Education Monitor and other international references (e.g., UNESCO-UOE) and involve – where possible – other relevant members of</p>	<ul style="list-style-type: none"> • List education indicators not currently produced (please make reference to: EU Monitor; UNESCO-UOE). • List harmonised concepts, definitions, techniques and methodologies based on international standards (e.g., ISCED). • Organise intergroup meetings with other institutional

Recommendations	Actions to implement recommendations
the NSS in its work on related concepts, techniques and methodologies so as to improve the coordination between partners and the harmonisation of the indicators. (Ref. SAQ 3.4)	partners (e.g., Ministry of Education and Research) to make them familiar with international standards to be applied.
The NBS is invited to propose its needs for cooperation arrangements with international partners through its yearly Statistical Work Programme, by identifying the best practices within EU Member States and EUROSTAT. (Ref. SAQ 14.5.3)	<ul style="list-style-type: none"> • List specific needs to be addressed through cooperation arrangements with international partners. • Identify the best practices within EU with regard to the specific needs (above). • Explore supply of initiatives and instruments for cooperation • Draft proposal(s) for cooperation arrangements as appropriate
It is highly recommended that NBS increases internal cooperation between different statistical domains so that the same operational applications of the same statistical concepts in education are used, e.g., for the production of the ISCED classification and for other common standardised variables according to the EU legislation. (Ref. SAQ Part D)	<ul style="list-style-type: none"> • Set up projects or working groups with experts on social statistics domains including variables on education and training. • Harmonise the question formulations, respondents' instructions and other data collection procedures on standardised social variables (especially education variables).
The NBS is invited to explore the possibility to get information on teachers' level of education attained and employment status. (Ref. SAQ Part D)	<ul style="list-style-type: none"> • Reference to UOE standards for calculation. • Rephrase the questionnaire and/or search possibilities of administrative data of the Ministry of Education and Research.
The NBS is invited to try to find ways to classify pupils' programme orientation in post-secondary non-tertiary education. (Ref. SAQ Part D)	<ul style="list-style-type: none"> • Reference to UOE standards for calculation. • Rephrase the questionnaire and/or search possibilities of administrative data of the Ministry of Education and Research.
The NBS is invited to verify the possibility of calculation of the indicator "Expected school years of pupils and students by education level". (Ref. SAQ Part D)	<ul style="list-style-type: none"> • Apply the EU methodology by exploiting the existing administrative data.
The NBS is invited to verify the possibility of calculation of indicators on tertiary educational attainment graduate rates. Following this, also producing the indicator on change of average age of graduation from	<ul style="list-style-type: none"> • Reference to Eurostat and UOE standards for calculation.

Recommendations	Actions to implement recommendations
higher education could be explored further. (Ref. SAQ Part D)	
The NBS is invited to verify the possibility of calculation of indicators on mobile students and collect the variable on students' country of origin. These could be calculated at least partly. It could be further investigated if there is also a national need for this information. (Ref. SAQ Part D)	<ul style="list-style-type: none"> • Reference to Eurostat and UOE standards for calculation.
The NBS is asked to supplement the LFS with the variables on the year when the highest level of education was successfully completed, country of birth and degree of urbanisation. (Ref. SAQ Part D)	<ul style="list-style-type: none"> • Rephrase the LFS questionnaire so that these variables can be used to complement the indicators on Early leavers from education and training and Young people Neither in Employment nor in Education and Training (NEET rates) to be in line with the usual review of EU indicators. • These variables also belong to the set of standardised social variables common to several data sets covered by Regulation (EU) 2019/1700.
Medium-term	
The NBS is invited to propose its specific needs relating to expenditure by education level (ISCED) within the Annual Statistical Work Programme in order to invite – in compliance with its mandate – the Ministry of Finance to process and provide the NBS with some data directly usable for its statistical purposes (elaboration, presentation etc.). (Ref. SAQ 2.2.1)	<ul style="list-style-type: none"> • Draft tabulation plan with required expenditure on education by education level. • Delivery of short training support (up to three days) by the NBS to the representatives of the Ministry of Finance in order to make them more familiar with the NBS requirements and the ISCED classification.
The NBS is invited to strengthen its role as coordinator of the NSS. (Ref. SAQ 2.2.2)	<ul style="list-style-type: none"> • Plan and prepare official communications (including needs and complaints) to the related institutional fora (e.g., National Council for Statistics) so that any necessary normative act or initiative can be taken in order to improve the coordination within the NSS
The NBS is invited to produce (and disseminate) other relevant and more sophisticated education indicators (e.g., dropout rates; survival rates). (Ref. SAQ 6.4)	<ul style="list-style-type: none"> • List education indicators not currently produced by the NBS and normally used by EU and UNESCO-UOE. • Request support from the current and/or future external technical assistance to be specified in the Statistical Work Programme.

Recommendations	Actions to implement recommendations
<p>The NBS should exploit the current and future international opportunities in terms of technical assistance to identify its internal capacities in relation to the review of some existing indicators (e.g., enrolment ratios) as well as the calculation of new relevant indicators (e.g., survival rate). In the following stage, the NBS is invited to adopt and harmonise – through the interinstitutional groups with the ministries concerned – the good practices acquired in the field of education statistics. (Ref. SAQ 7.1)</p>	<ul style="list-style-type: none"> • Define new possible lines within the current international projects dedicated to the improvement of the existing education indicators (e.g., revision of enrolment ratios). • Define terms of reference of missions of technical assistance aimed at calculating new education indicators (e.g., survival rate). • Organise training in order to transfer knowledge and practices acquired by the international expertise to other national institutions (e.g., Ministry of Education and Research).
<p>The Ministry of Education and Research is invited to adapt the Nomenclature of scientific specialties to ISCED-F 2013 and the educational programmes in technical vocational education to ISCED 2011. (Ref. SAQ 7.4)</p>	<ul style="list-style-type: none"> • Define table of correspondence between scientific specialties in national codes to ISCED-F 2013 codes. • Define table of correspondence between educational programmes in technical vocational education and ISCED 2011. • Apply tables of correspondence (above specified) to new data production.
<p>The NBS is invited to increase the staff directly employed in the Education, Science and Culture Unit in order to match any ordinary or extraordinary task in due time (e.g., requests for non-published data; calculation of further indicators beyond the ones normally calculated and disseminated). (Ref. SAQ 7.5)</p>	<ul style="list-style-type: none"> • Define terms of reference for new staff (at least one position) in the Education, Science and Culture Section. • Publication of vacancy announcement or detachment of internal personnel.
<p>The NBS is invited to also increase cooperation with the national scientific community to increase respect of its expertise, to get new ideas for developing statistical procedures, to get more data users for statistics and create pathways for recruiting new employees. (Ref. SAQ 7.7)</p>	<ul style="list-style-type: none"> • Increase the participation of the NBS representatives in meetings and workshops with the national scientific community.
<p>The implementation of new technologies for data collection, such as the use of web-based questionnaires as well as use of more administrative sources should reduce the need for direct collection. Making cost-effective improvements to the methods for data</p>	<ul style="list-style-type: none"> • Explore the internal/external resources to use new technologies for data collection (e.g., web-based questionnaires). • Explore which (further) data could be provided by the administrative sources (e.g., Ministry of Education and Research) based on the specific mandate of these latter

Recommendations	Actions to implement recommendations
collection can also help in overcoming NBS's shortage of resources. (Ref. SAQ 8.1.1)	in the NSS.
The Ministry of Education and Research is invited to reconcile the main differences in the definitions of some variables (pedagogical staff, children with disabilities, computers used for pedagogical purposes) between NBS and its administrative sources. (Ref. SAQ 8.1.2)	<ul style="list-style-type: none"> • Compile full list of discrepancies in definitions of variables compared to the NBS. • Apply table of correspondence between different definitions to new data production.
The Ministry of Education and Research is invited to allow the NBS – given the leading official role of the latter in the National Statistical System – to access the EMIS platform in order to check and validate its own official data. (Ref. SAQ 10.3)	<ul style="list-style-type: none"> • Define an official (and operational) agreement with the Ministry of Education and Research – in the framework of the National Strategy for the Development of Statistics – to allow the NBS to access the EMIS platform for checking and validation purposes. • Specify which data (and related micro-data) should be checked and validated by the NBS.
The NBS is invited to deploy more efforts in ensuring coherence and consistency between enrolment data and population data, especially from the next population census. (Ref. SAQ 14.1.2)	<ul style="list-style-type: none"> • More accurate population data are needed with the next population census. • In the meantime, enrolment ratios should be corrected by applying ad-hoc procedures and/or methods of normalisation. Corrections should be done not only on net enrolment ratios but also on gross enrolment ratios whereas both indicators are based on the same denominator (i.e., population in the relevant age groups) that is supposed to be underestimated.
The Ministry of Education and Research is invited to harmonise the definitions related to students in secondary specialised education and higher education with ISCED 2011. This could be done by using the existing NBS expertise (Ref. SAQ 14.3.2)	<ul style="list-style-type: none"> • Define table of correspondence between students in secondary specialised education (code 6) and higher education (7+8) with ISCED 2011 (respectively, levels 4 and 5–7). • Apply table of correspondence (above specified) to new data production.
<p>The Ministry of Education and Research is invited to ensure a detailed and updated coverage of institutions (notably private education).</p> <p>The Ministry of Finance is invited to ensure a strict harmonisation of data on educational expenditure vis-à-vis the NBS requirements.</p>	<ul style="list-style-type: none"> • Ministry of Education and Research: compile detailed and updated list of accredited institutions by identifying principal and subordinate institutions. • Ministry of Finance: preparation and dissemination of data on expenditure by education level (ISCED 2011)

Recommendations	Actions to implement recommendations
(Ref. SAQ 14.4.3)	
<p>The NBS is requested to explore, in cooperation with the relevant national stakeholders, the possibility of conducting the Adult Education Survey (AES) on participation in adult education and training. (Ref. SAQ Part D)</p>	<ul style="list-style-type: none"> • Start possible negotiations well in advance after this data collection wave (2022/23) to be ready for the next data collection on year 2028/29. • The preparatory work should be done taking into account the EU Regulations (EU) 2019/1700, (EU) 2021/859, (EU) 2021/861.
<p>The NBS is invited to examine whether the current data collection on the continuing vocational training in enterprises is fully in line with the EU CVTS (Continuing Vocational Training Survey) legislation (EC No 1552/2005, (EU) No 1153/2014. (Ref. SAQ Part D)</p>	<ul style="list-style-type: none"> • If needed, make the data collection fully equivalent with CVTS (next data collection in year 2026, reference year 2025) also considering the size of the enterprises and the variable of labour costs of the enterprise.

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4. Annexes

Annex 1: Agenda

Day 1, Monday 22 November 2021		
9:00 – 10:15	<p>Mandate for Data Collection and Access to Data</p> <p>Discussion on institutional framework related to education statistics: NBS mandate for data collection; NBS access to administrative data and other data sources; NBS involvement in the design and development of administrative records</p> <p>Reference to SAQ: Part A, Principle 2</p>	<p>IRT: questions</p> <p>NBS: presentation Aurelia Spătaru, deputy director Larisa Chirița, main consultant, Education, Science and Culture Statistics Section Natalia Roșca, Olga Sluzova, senior consultants, Education, Science and Culture Statistics Section</p>
10:15 – 10:30	Preliminary conclusions and recommendations	IRT: presentation
10:30 – 11:30	<p>Impartiality and Objectivity</p> <p>Discussion on basis for compilation of education statistics (ES); related data sources, methodologies and dissemination policies; correction of errors in statistical publications; public availability of education data sources, statistical methods and procedures; information on education statistical releases; information on changes in statistical methodologies</p> <p>Reference to SAQ: Part A, Principle 6</p>	<p>IRT: questions</p> <p>NBS: presentation Larisa Chirița, Natalia Roșca, Olga Sluzova, Education, Science and Culture Statistics Section</p>
11:30 – 11:45	Preliminary conclusions and recommendations	IRT: presentation
11:45 – 12:15	<p>Opening and welcome</p> <p>Introduction to the International Review Team (IRT) –Dr. Gaetano FERRIERI and Ms. Irja BLOMQUIST – and the participants from the National Bureau of Statistics (NBS) – e.g., Education, Science and Culture Statistics</p> <p>Introduction to the Review</p>	<p>NBS: Representatives Oleg Cara, General Director Aurelia Spătaru, Deputy Director Nadejda Cojocari, General Division for Social and Demography Statistics Larisa Chirița, Education, Science and Culture Statistics Section</p> <p>IRT: Experts</p>
12:15 – 13:45	<i>Lunch break</i>	
13:45 – 14:45	<p>Adequacy of Resources</p> <p>Discussion on resources available at NBS: adequacy of resources in relation to current and future statistical needs; number of staff and budget; scopes, details and costs; procedures for demand for new education statistics; procedures for assessing statistical needs</p> <p>Reference to SAQ: Part A, Principle 3</p>	<p>IRT: questions</p> <p>NBS: presentation Tatiana Hainițchi, Financial Management Division Ala Caraman, Juridical and Human Resources Section</p>

Day 1, Monday 22 November 2021		
		L.Chirița, N.Roșca, O.Sluzova , Education, Science and Culture Statistics Section (online) Heads of four regional statistical offices (N.Șaragov, V.Sârghi, V.Traista, N.Condrașova)
14:45 – 15:15	Preliminary conclusions and recommendations	IRT: presentation
15:15 – 15:30	<i>Coffee break</i>	
15:30 – 16:30	Methodological Issues Discussion on methodological issues related to the production and dissemination of education statistics: compliance with EU and other international standards, guidelines and good practices; application of international concepts and classifications; adjustment of registers and frames; skills and training policy of staff involved; cooperation with the scientific community Reference to SAQ: Part B, Principle 7; Part D (Brief)	IRT: questions NBS: presentation L.Chirița, N.Roșca, O.Sluzova , Education, Science and Culture Statistics Section
16:30 – 16:45	Preliminary conclusions and recommendations	IRT: presentation

Day 2, Tuesday 23 November 2021		
09:15 – 10:15	Statistical Procedures Discussion on main sources of education data; coherence of concepts and definitions; testing of questionnaires; procedures to validate data; metadata management and dissemination; revision of previous data; agreements and cooperation with other national data providers Reference to SAQ: Part B, Principle 8	IRT: questions NBS: presentation L.Chirița, N.Roșca, O.Sluzova , Education, Science and Culture Statistics Section Natalia Bargan , Population and Migration Statistics Division Valentina Istrati , Census Division
10:15 – 10:30	Preliminary conclusions and recommendations	IRT: presentation
10:30 – 10:45	<i>Coffee break</i>	
10:45 – 11:45	Response Burden Discussion on demand for education statistics (ES); kind of ES normally published and/or used for policy making; minimisation of the response burden; promotion of data sharing and integration; comparison and linkage of different data sources Reference to SAQ: Part B, Principle 9	IRT: questions NBS: presentation L.Chirița, N.Roșca, O.Sluzova , Education, Science and Culture Statistics Section
11:45 – 12:00	Preliminary conclusions and recommendations	IRT: presentation
12:00 – 13:15	<i>Lunch break</i>	

Day 2, Tuesday 23 November 2021		
13:15 – 14:15	<p>Cost Effectiveness</p> <p>Discussion on internal and external measures to monitor the NBS's use of resources in the field of education statistics (ES); optimisation of information and communication technologies; optimisation of the use of other data sources (e.g., administrative data); standardised solutions promoted by NBS to improve the effectiveness and the efficiency of ES</p> <p>Reference to SAQ: Part B, Principle 10</p>	<p>IRT: questions</p> <p>NBS: presentation L.Chirița, N.Roșca, O.Sluzova, Education, Science and Culture Statistics Section Vasile Bujor, Designing of Computer Applications Division Dmitri Calincu, Administrative Data Sources Service</p>
14:15 – 14:30	Preliminary conclusions and recommendations	IRT: presentation
14:30 – 14:45	<i>Coffee break</i>	
14:45 – 15:45	<p>Relevance</p> <p>Discussion on procedures to interact with users of education statistics (ES); regular production and release of key ES; conduction of users' satisfaction surveys or similar tools</p> <p>Reference to SAQ: Part C, Principle 11</p>	<p>IRT: questions</p> <p>NBS: presentation Lilia Racu, Dissemination and Communication Division Larisa Chirița, Natalia Roșca, Education, Science and Culture Statistics Section</p>
15:45 – 16:00	Preliminary conclusions and recommendations	IRT: presentation
16:00 – 17:00	<p>Accuracy and Reliability</p> <p>Discussion on: assessment and validation of source data, integrated data, intermediate results and statistical outputs in the field of education statistics (ES); errors' measurement due to survey coverage, mode, questionnaires, respondents, interviewers, data processing; revision of ES and analysis of ES revisions</p> <p>Reference to SAQ: Part C, Principle 12</p>	<p>IRT: questions</p> <p>NBS: presentation L.Chirița, N.Roșca, O.Sluzova, Education, Science and Culture Statistics Section Lilian Galer, Statistical Methods Division</p>
17:00 – 17:15	Preliminary conclusions and recommendations	

Day 3, Wednesday 24 November 2021		
09:15 – 10:15	<p>Timeliness and Punctuality</p> <p>Discussion on release of education statistics (ES) in compliance with EU and other international release standards; announcement in advance of an ES release calendar; compatibility between periodicity of ES releases and users' requirements; publication of delays/changes compared to previous time schedules</p> <p>Reference to SAQ: Part C, Principle 13</p>	<p>IRT: questions</p> <p>NBS: presentation Lilia Racu, Dissemination and Communication Division L.Chirița, N.Roșca, O.Sluzova, Education, Science and Culture Statistics Section</p>
10:15 – 10:30	Preliminary conclusions and recommendations	IRT: presentation
10:30 – 10:45	<i>Coffee break</i>	

Day 3, Wednesday 24 November 2021		
10:45 – 11:45	<p>Coherence and Comparability</p> <p>Discussion on timeframe of education statistics (ES) by source; coherence and consistency checks; comparability over time; application of common standards; critical issues in terms of comparability; comparability between national ES and the ones from EU countries; periodical exchanges with EU countries and EUROSTAT; cooperation agreements between NBS and EU countries and EUROSTAT</p> <p>Reference to SAQ: Part C, Principle 14</p>	<p>IRT: questions</p> <p>NBS: presentation L.Chirița, N.Roșca, O.Sluzova, Education, Science and Culture Statistics Section Igor Mocanu, Statistical Coordination and International Cooperation Division</p>
11:45 – 12:00	Preliminary conclusions and recommendations	IRT: presentation
12:00 – 13:15 <i>Lunch break</i>		
13:15 – 14:15	<p>Accessibility and Clarity</p> <p>Discussion on presentation of education statistics (ES) and related metadata; use of modern information and communication technologies by NBS; access to microdata; dissemination of metadata according to European standards; information of users about methodologies, statistical processes and statistical outputs based on quality criteria (Ref. SAQ European Statistics)</p> <p>Reference to SAQ: Part C, Principle 15</p>	<p>IRT: questions</p> <p>NBS: presentation Lilia Racu, Dissemination and Communication Division L.Chirița, N.Roșca, O.Sluzova, Education, Science and Culture Statistics Section Vasile Bujor, Designing of Computer Applications Division</p>
14:15 – 14:30	Preliminary conclusions and recommendations	IRT: presentation
14:30 – 14:45 <i>Coffee break</i>		
14:45 – 16:45	<p>Current State of Education Statistics</p> <p>Final discussion on the current state of education statistics (ES) vis-à-vis EU and other international standards and related actions put in place by the Statistical Authority</p> <p>Reference to SAQ: Part D</p>	<p>IRT: questions</p> <p>NBS: presentation Aurelia Spătaru, Deputy Director L.Chirița, N.Roșca, O.Sluzova, Education, Science and Culture Statistics Section Mariana Alerguș, Employment Statistics Division Natalia Kleinknecht, Earnings Statistics Division Ina Emelianova, Living Standards Statistics Division</p>
16:45 – 17:00	Preliminary conclusions and recommendations	IRT: presentation

Day 4, Thursday 25 November 2021		
9:00 – 10:30	Discussion with representatives of the Ministry of Education and Research regarding the Information System on Education Management (SIME)	Ministry of Education and Research: presentation NBS: participation Aurelia Spătaru , Deputy Director L.Chirița, N.Roșca, O.Sluzova , Education, Science and Culture Statistics Section
10:30 – 10:45	<i>Coffee break</i>	
10:45 – 11:30	Debriefing and Agreement on Subsequent Steps Introduction of the conceptual framework related to the education statistics in Moldova Presentation of main conclusions and recommendations on the education statistics assessment and related actions	NBS: presentation Aurelia Spătaru , Deputy Director L.Chirița, N.Roșca, O.Sluzova , Education, Science and Culture Statistics Section IRT: presentation
11:30 – 12:15	Views of the management on the recommendations	NBS: presentation Oleg Cara , General Director Aurelia Spătaru , Deputy Director
12:15 – 12:30	Closing of the Meeting Thanks and Greetings	NBS and IRT
12:30 onwards	Administrative rounding off: afterwards, the International Review Team will meet separately for collecting the list of participants (by day and topic), discussing and defining the following assessment steps, including the subsequent summary report of findings. All collected material (institutional documents, reports, web-links, additional notes and updates, etc.) will be ordered for further in-depth analysis.	IRT

Annex 2: List of participants to meetings

Participants (Name/Surname)	Institution (Division/Unit)
Oleg Cara	NBS/General Director
Aurelia Spătaru	NBS/Deputy Director
Igor Mocanu	NBS/ Statistical Coordination and International Cooperation Division
Elena Maleru	NBS/ Statistical Coordination and International Cooperation Division
Larisa Chirița	NBS/ Education, Science and Culture Statistics Section
Natalia Roșca	NBS/ Education, Science and Culture Statistics Section
Nadejda Cojocari	NBS/ General Division for Social and Demography Statistics
Mariana Alergus	NBS/Labour force Statistics Division
Elena Vatcarau	NBS/ Labour force Statistics Division
Natalia Kleinknecht	NBS/Earnings Statistics Division
Ina Emelianova	NBS/Living Standards Statistics Division
Natalia Bargan	NBS/ Population and Migration Statistics Division
Valentina Istrati	NBS/ Census Division
Vasile Bujor	NBS/ Designing of Computer Applications Division
Lilian Galer	NBS/ Statistical Methods Division
Dmitri Calincu	NBS/ Administrative Data Sources Service
Lilia Racu	NBS/ Dissemination and Communication Division
Natalia Cirlig	NBS/ Juridical and Human Resources Section
Natalia Saragov	NBS/Regional Statistical Offices
Victoria Sârghi	NBS/ Regional Statistical Offices
Corneliu Ciorici	Ministry of Education and Research/Information and Communication Technology Service
Carolina Guitu	Ministry of Education and Research/Technical Vocational Education Department
Doina Usaci	Ministry of Education and Research/Division of Policy in the Field of Higher Education
Angelina Bezu	Ministry of Education and Research/Policy Analysis, Monitoring and Evaluation Division
Rodica Isac	Ministry of Education and Research/Division of the National Qualifications Framework
Arcadie Malearovici	CTICE/Center for Information and Communication Technologies in Education
Olesea Calmicov	CTICE/Center for Information and Communication Technologies in Education
Gaetano Ferrieri	Expert/International Review Team
Irja Blomqvist	Expert/International Review Team