



GUVERNUL  
REPUBLICII MOLDOVA



United Nations  
MOLDOVA

# Improved measurement and monitoring of MDGs in Moldova: *targets, indicators, definitions, data sources, progress analysis*

Results of technical support missions  
by specialized statistician experts



**MDG 2:**  
***Achieve universal  
access to general  
compulsory  
education***

**Advisory mission of UNESCO Specialist to review and to improve  
Education indicators in the Republic of Moldova:**

**Millennium Development Goal 2**

**Mission report**

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## INTRODUCTION

Governments are increasingly dependent on a wide range of high quality, policy-relevant statistics on which to base the development of new policies and the monitoring of past and present policies – not least progress towards Millennium Development Goals (MDGs). There is a clear need both for good quality national data and indicators but also for cross-nationally comparable international indicators to benchmark progress towards development goals and evaluate countries in greatest need of support. Once the quality of data is ensured and appropriate indicators used the analysts should present and interpret the data in a way that provides the necessary information to policy makers to support policy development or to advocate for policy change. The Republic of Moldova (henceforth Moldova) is committed to the implementation of the MDGs – agreed targets sets by world’ nations to reduce poverty by 2015. The country established national targets and indicators regarding MDG2 related to achieving universal compulsory education. To date, three national monitoring reports were produced on MDG2, in 2005, in 2007 and 2010.

The main objective of the mission was to provide recommendations on the accuracy and quality of primary and secondary education enrolment, monitoring of lacking indicators on school completion rates and of the quality of education. Advice was also sought on regional disaggregation of MDG 2 indicators. The recommendations are also expected to include specific measures to be undertaken in order to conduct further MDG review, assessment and monitoring. The present report presents the results of the mission which was organized by the UNDP office in Moldova and conducted by Saïd Ould Voffal, from UNESCO Institute for Statistics (UIS), from 21-24 November 2011 in Chisinau. From UNDP Moldova side the mission was organized and coordinated by Ms. Aurelia Spataru.

The main objectives of mission were to discuss and address education data quality issues, to review concepts, definitions, indicators calculation and interpretation. The following tasks were specific tasks were defined in the ToRs of the mission:

- Analyze background documents on MDG 2, including the second Millennium Development Goals Report of Moldova, available methodological notes on monitoring school enrolment and key educational outcomes
- Hold technical consultations with national producers of statistics on education, population and migration (the last one suggested only for the purpose of information on the denominator used to calculate the enrolment rates) (the NBS, Ministry of Education, National Register) and with UNICEF and identify strengths, weaknesses, and needs for filling data gaps and improving its quality
- Advise on the use of net enrolment versus gross enrolment rates and desirability of reporting both
- Advise on monitoring pre-school enrolment and whether the special indicator of 6-7 year olds enrolled in pre-school (as is currently included in the MDG report) is needed
- Advise on Education Finance Statistics: core indicators, source of data, distribution by level of ISCED, how to measure private expenditures for education
- Make recommendations on disaggregating educational enrolment and performance data and indicators by region and urban / rural areas and use the disaggregated data for the analysis in the MDG reports
- Advise on improving data collection on school drop-out and completion rates
- Give an overall evaluation of the situation and formulate conclusions and recommendations for improvement of the indicators and their methodologies
- Give a presentation of the mission’s findings to the project counterparts.

As education data collection, dissemination and international reporting is the responsibility of the National Bureau of Statistics (NBS) the specialist worked almost exclusively with this organization. He had one meeting with the Ministry of Education and one with UNICEF.

## DATA QUALITY AND INDICATOR' REVIEW

Education data are collected each year based on statistical data reported by educational institutions from preschools, primary and secondary schools, gymnasiums, lyceums, secondary vocational institutions, colleges and higher education institutions. These data cover both public and private educational institutions. Data are collected by the NBS in collaboration with the Ministry of Education.

Data are disaggregated by type of institutions (public and private), by gender, by grade, by ages, by programme orientation and by field of education. Table 1 below shows the structure of the Moldovan education system and it's classification into the International Standard Classification of Education (ISCED) 1997 ISCED is used to report and disseminate internationally comparable education data and indicators.

**Table 1: Structure of the Moldovan education system**

Structure of the Moldovan education system						
Name of the education programme	Main diplomas, qualifications or certificates awarded at end of programme	Theoretical entrance age	Theoretical duration (in years)	ISCED97 Level	ISCED97 programme destination	Programme orientation or Position in National Structure
Pre-school education	na	3	3	0	na	na
Compulsory preparation for school education	na	6	1			
Primary education	na	7	4	1	na	na
Gymnasium education	General basic education certificate	11	5	2	A	G
General secondary education	Leaving certificate of general secondary education	16	2	3	A	G
Lyceum education	Diploma of baccalaureate	16	3			
Secondary professional education	Leaving certificate	16	3		B	V
Secondary professional education	Professional certificate	16	0.5-1.5	C		
Compensative course	Diploma of baccalaureate	19	1	4	A	G
Secondary professional education	Professional certificate	18	1		B	V
Secondary special education	Leaving certificate	16	4-5	3	B	V
Higher education (short programmes)	Diploma Licenciat	19	3-4	5	A	First degree
Higher education (long programmes)	Diploma	19	6			
Higher education (Master programmes)	Master degree	22-23	2		B	Second degree
Secondary special education	Diploma	18	2-3	6	na	First qualification
Doctorate	Scientific degree (Doctorate)		3-4			
Post-doctorate	Scientific degree - Dr. Habilitat		2 years and more			

G = General

V = Vocational

P = Pre-vocational

na = not applicable

A, B, C = Destination categories

All the data necessary to calculate the MDGs indicators are collected by and are available at NBS. The quality of these data is very good. Moldova also reports timely and very good quality education data at the international level to the UIS. The major data problem Moldova is faced with is the reliability of the population data estimates due the important migration phenomena. But there is a hope that with the National Population Census planned for 2013 a better estimate will be available. The population data estimates to be used to calculate the education indicators should be the ones corresponding to *present population*.

The main work of Mr. Voffal with NBS colleagues consisted of reviewing the methodology of calculation of several education indicators and in particular those to monitor MDG2 goal and. Mr. Voffal reviewed also carefully the MDG reports produced so far by Moldova.

At NBS Mr. Voffal worked mainly with Ms. Maria Vasiliev, Ms. Larisa Chirita from the Social/Education Statistics Section and also with Ms. Ala Negruta, head of the Division on Social and Living standards Statistics. The indicators and concepts which were reviewed are the following:

- Gross and net enrolment rates by level of education,
- Population data used to defined school-age groups
- Repetition, promotion, survival and drop out rates
- Graduation ratios for gymnasium education
- Estimation of allocation expenditure by level of education and nature of spending
- Private households expenditure

The results of the review of each indicator is presented below.

### **Gross enrolment ratio (GER)**

**Definition:** Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year.

**Purpose:** To show the general level of participation in a given level of education. It indicates the capacity of the education system to enrol students of a particular age group. It can also be a complementary indicator to net enrolment rate (NER) by indicating the extent of over-aged and under-aged enrolment.

**Calculation method:** Divide the number of pupils (or students) enrolled in a given level of education regardless of age by the population of the age group which officially corresponds to the given level of education, and multiply the result by 100.

**Formula:**

$$GER_h^t = \frac{E_h^t}{P_{h,a}^t} * 100$$

Where:

$GER_h^t$  Gross Enrolment Ratio at level of education **h** in school year **t**

$E_h^t$  Enrolment at the level of education **h** in school year **t**

$P_{h,a}^t$  Population in age group **a** which officially corresponds to the level of education **h** in school year **t**

**Data required:** Total enrolment for a given level of education. Population of the age group corresponding to the specified level.

**Data source:** School register, school survey or census for data on enrolment by level of education. Population censuses or estimates for school-age population normally obtained from the central statistical office.

**Types of disaggregation:** By gender, geographical location (region, urban/rural) and by level of education.

**Interpretation:** A high GER generally indicates a high degree of participation, whether the pupils belong to the official age group or not. A GER value approaching or exceeding 100% indicates that a country is, in principle, able to accommodate all of its school-age population, but it does not indicate the proportion already enrolled. The achievement of a GER of 100% is therefore a necessary but not sufficient condition for enrolling all eligible children in school. When the GER exceeds 90% for a particular level of education, the aggregate number of places for pupils is approaching the number required for universal access of the official age group. However, this is a meaningful interpretation only if one can expect the under-aged and over-aged enrolments to decline in the future to free places for pupils from the expected age group.

**Quality standards:** GER at each level of education should be based on total enrolment in all types of schools and education institutions, including public, private and all other institutions that provide organized educational programmes.

**Limitations:** GER can exceed 100% due to the inclusion of over-aged and under-aged pupils/students because of early or late entrants, and grade repetition. In this case, a rigorous interpretation of GER needs additional information to assess the extent of repetition, late entrants, etc.

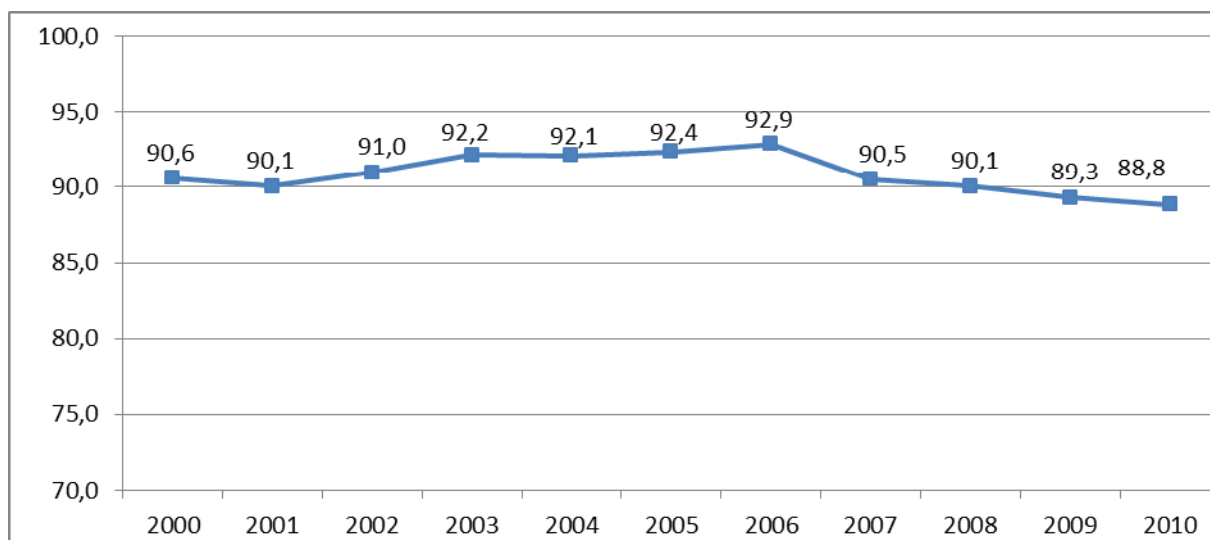
**Examples:**

1. For primary education the entrance age is 7 years with duration is 4 years then the school-population is the age group 7-10. GER for primary is calculated by expressing total enrolment in primary education regardless of ages as a percentage of population 7-10.

2. For Gymnasium education the entrance age is 11 years with duration is 5 years then the school-population is the age group 11-15. GER for gymnasium is calculated by expressing total enrolment in gymnasium duration regardless of ages as a percentage of population 11-15.

The population data should be using the present population. This indicator is produced each year by NBS and published in the annual statistical publication in the statistical table labelled: *Enrolment rate by level of education*. It is computed for pre-primary education, primary education and gymnasium education (or lower secondary education). It is disaggregated by gender and by geographical location (Urban/Rural). A whole time series between 2000-2010 was available. Figure 1 illustrates the evolution of participation in gymnasium in Moldova during the last decade.

**Figure. 1 :** How participation in gymnasium has evolved during the last decade? *Evolution of GER in gymnasium from 2000-2010.*



Source: UNESCO Institute for Statistics. Based on data reported by Moldova.

## Net enrolment rate (NER)

**Definition:** Enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population.

**Purpose:** To show the extent of coverage in a given level of education of children and youths belonging to the official age group corresponding to the given level of education.

**Calculation method:** Divide the number of pupils (or students) enrolled who are of the official age group for a given level of education by the population for the same age group and multiply the result by 100.

**Formula:**

$$NER_h^t = \frac{E_{h,a}^t}{P_{h,a}^t} * 100$$

Where:

$NER_h^t$  Net Enrolment Rate at level of education **h** in school year **t**

$E_{h,a}^t$  Enrolment of the population of age group **a** at level of education **h** in school year **t**

$P_{h,a}^t$  Population in a  
ge group **a** which officially corresponds to level of education **h** in school year **t**

**Data required:** Enrolment by single years of age for a given level of education. Population of the age group corresponding to the given level of education.

**Data source:** School register, school survey or census for data on enrolment by age; population censuses or estimates for school-age population normally obtained from the central statistical office.

**Types of disaggregation:** By gender, geographical location (region, urban/rural) and by level of education.

**Interpretation:** A high NER denotes a high degree of coverage for the official school-age population. The theoretical maximum value is 100%. Increasing trends can be considered as reflecting improving coverage at the specified level of education. When the NER is compared with the GER, the difference between the two highlights the incidence of under-aged and over-aged enrolment. If the NER is below 100%, then the complement, i.e. the difference with 100%, provides a measure of the proportion of children not enrolled at the specified level of education. However, since some of these children/youth could be enrolled at other levels of education, this difference should in no way be considered as indicating the percentage of students not enrolled. To measure universal primary education, for example, adjusted primary NER is calculated on the basis of the percentage of children in the official primary school age range who are enrolled in either primary or secondary education. A more precise complementary indicator is the age-specific enrolment ratio (**ASER**) which shows the participation in education of the population of each particular age, regardless of the level of education.

**Quality standards:** NER at each level of education should be based on enrolment of the relevant age group in all types of schools and education institutions, including public, private and all other institutions that provide organized educational programmes.

**Limitations:** For tertiary education, this indicator is not pertinent because of the difficulties in determining an appropriate age group due to the wide variations in the duration of programmes at this level of education. As regards primary and secondary education, difficulties may arise when calculating an NER that approaches 100% if:

1. the reference date for entry to primary education does not coincide with the birth dates of all of the cohort eligible to enrol at this level of education;
2. a significant portion of the population starts primary school earlier than the prescribed age and consequently finishes earlier as well;



3. There is an increase in the entrance age to primary education but the duration remains unchanged.

**Example:**

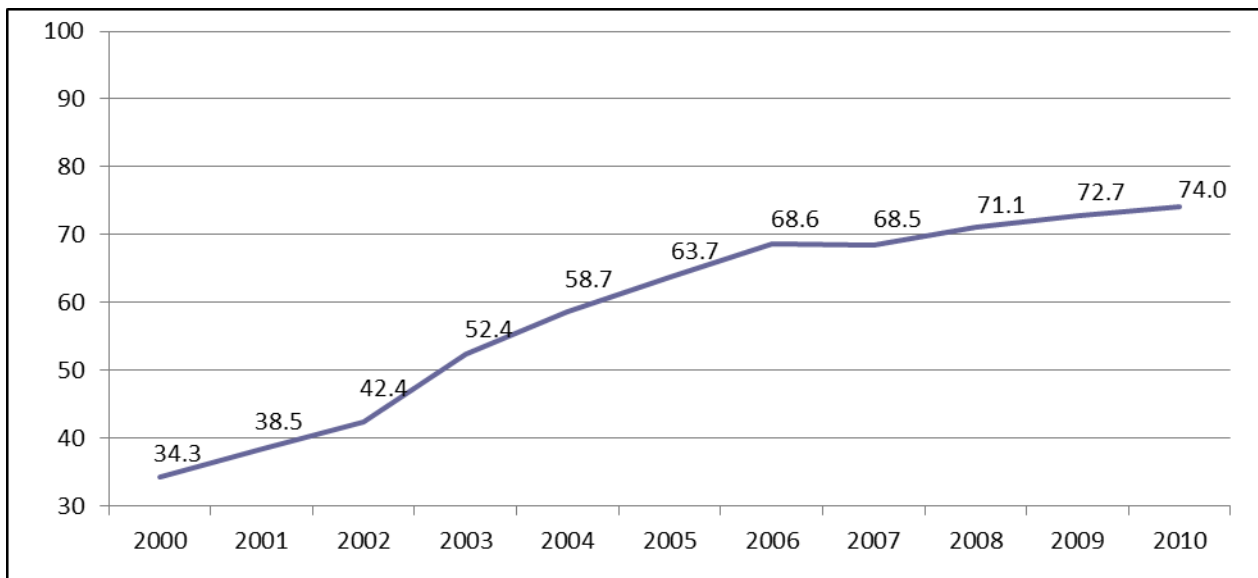
1. For pre-primary education, the NER is calculated by expressing the enrolment in in the age group 3-6 as a percentage of the population of the age group 3-6;

**Figure 2.** shows the trend in NER in pre-primary education from 2000-21010. The evolution shows that the participation of the age 3-6 in pre-primary education has more the doubled during the last decade. There is a big increase in the participation from 2002 to 2003 by 12 points of percentage. This indicators was extensively discussed during the mission as advice was sought on which indicator to use in the monitoring pre-school participation in the MDG. The discussion was mainly related on whether an NER based on the age group 6-7 should also be used or not. The conclusions of the discussion were that it would be good to use in MDG2 monitoring the NER for age specific 3-6 corresponding to early childhood age group and not include age 7 because this is part of primary education. The rationale of having an indicator on participation to pre-primary education is justified by the fact that many studies have proven the benefit of participation into early childhood education later in learning learning achievement.

Another complementary indicator to use on early childhood education development is: *Percentage of new entrants to grade 1 of primary education with early childhood education experience.*

This indicator is reported in the annex (Devinfo) of Moldova 2010 MDG report under **R16**( web link: [http://www.undp.md/presscentre/2010/MDG%20Report%20II/MDG2\\_RM.pdf](http://www.undp.md/presscentre/2010/MDG%20Report%20II/MDG2_RM.pdf))

**Figure 2:** Evolution of the Net enrolment rate in pre-primary education in Moldova during the last decade.



Source: UNESCO Institute for Statistics. Based on data reported annually by Moldova.

**Flow indicators: Promotion rates, survival rates and drop out rates**

There were extensive discussions during the mission on these indicators and in particular on how drop out rates should be calculated in the context of Moldova. These indicators measure the internal efficiency of an education system. They can be considered as performance indicators. They can be disaggregated at urban/rural and analyzed in MDGs reports. Especially drop out which seems to be considered an issue in Moldova.

**Promotion rate by grade (PR)**

**Definition:** Proportion of pupils from a cohort enrolled in a given grade at a given school year who study in the next grade in the following school year.

**Purpose:** To measure the performance of the education system in promoting pupils from a cohort from grade to grade, and its effect on the internal efficiency of educational systems. It is also a key indicator for analysing and projecting pupil flows from grade to grade within the educational cycle.

**Calculation method:** Divide the number of new enrolments in a given grade in school year **t+1** by the number of pupils from the same cohort enrolled in the preceding grade in the previous school year **t**.

**Formula:**

$$PR_i^t = \frac{NE_{i+1}^{t+1}}{E_i^t}$$

Where:

$PR_i^t$  Promotion Rate at grade **i** in school year **t**

$NE_{i+1}^{t+1}$  New entrants to grade **i+1**, in school year **t+1**

$E_i^t$  Number of pupils enrolled in grade **i**, in school year **t**

**Data required:** Enrolment by grade for school year **t** and enrolment and number of repeaters by grade for year **t+1**.

**Data source:** School register, school survey or census for data on enrolment and repeaters by grade.

**Type of disaggregation:** By grade, gender, geographical location (regions, urban/rural) and type of institution (public/private).

**Interpretation:** Ideally, the rate should approach 100%; a high rate reflects high internal efficiency of the educational system. When compared across grades, the patterns can indicate specific grades for which there is low promotion.

**Quality standard:** Like other pupil-flow rates (repetition and dropout rates), the promotion rate is derived by analysing data on enrolment and repeaters by grade for two consecutive years. One should therefore ensure that such data are consistent in terms of coverage over time and across grades. These flow-rates can be biased by: over-reporting enrolment/repeaters (particularly in grade one); incorrect distinction between new entrants and repeaters; pupil transfers between schools (at sub-national level).

**Limitations:** Automatic promotion can in some cases be determined by the educational authorities with the aim of coping with limited grade capacity and increasing the **internal efficiency** and flow of pupils (or students). Care should be taken in interpreting this indicator, especially when comparing education systems.

### **Survival rate by grade (SR)**

**Definition:** Percentage of a cohort of pupils (or students) enrolled in the first grade of a given level or cycle of education in a given school year who are expected to reach successive grades.

**Purpose:** To measure the retention capacity and **internal efficiency** of an education system. It illustrates the situation regarding retention of pupils (or students) from grade to grade in schools, and conversely the magnitude of dropout by grade.

**Calculation method:** Divide the total number of pupils belonging to a school-cohort who reached each successive grade of the specified level of education by the number of pupils in the school-cohort i.e. those originally enrolled in the first grade of primary education, and multiply the result by 100. The survival rate is calculated on the basis of the reconstructed cohort method, which uses data on enrolment and repeaters for two consecutive years.

**Formula:**

$$SR_{g,i}^k = \frac{\sum_{t=1}^m P_{g,i}^t}{E_g^k} * 100$$

$$\text{Where: } P_{g,i}^t = E_{g,i+1}^{t+1} - R_{g,i+1}^{t+1}$$

**i** grade (1, 2, 3,...,n)

**t** year (1, 2, 3, ...,m)

**g** pupil-cohort

$SR_{g,i}^k$  Survival Rate of pupil-cohort **g** at grade **i** for a reference year **k**

$E_g^k$  Total number of pupils belonging to a cohort **g** at a reference year **k**

$P_{g,i}^t$  Promotees from  $E_g^k$  who would join successive grades **i** throughout successive years **t**

$R_i^t$  Number of pupils repeating grade **i** in school year **t**

**Data required:** Enrolment by grade for two consecutive years (years t and t+1); number of repeaters by grade for year t+1.

**Data source:** School register, school survey or census.

**Type of disaggregation:** By gender, geographical location (region, urban/rural) and by type of institution (private/public). Survival rates can also be disaggregated with or without grade repetition.

**Interpretation:** Rates approaching 100% indicate a high level of retention and low incidence of dropout. The distinction between survival rate with and without repetition is necessary to compare the extent of wastage due to dropout and repetition. Survival rate to the last grade of primary education is of particular interest for monitoring universal primary education, a central objective for Education for All and the Millennium Development Goals.

**Quality standards:** Since the calculation of this indicator is based on pupil-flow rates, the reliability of the Survival Rate depends on the consistency of data on enrolment and repeaters in term of coverage over time and across grades.

**Limitations:** Given that this indicator is usually estimated using **cohort analysis** models that are based on a number of assumptions (i.e. the observed flow rates will remain unchanged throughout the cohort life), care should be taken in using of the results in comparisons. Care should also be taken in calculating the indicator at sub-national level because of possible pupils' transfers between localities.

An Excel template for the calculation of survival rate was provided to Ms. Maria Vasiliev and Ms. Larisa Chirita.

### Dropout rate by grade (DR)

**Definition:** Proportion of pupils from a cohort enrolled in a given grade at a given school year who are no longer enrolled in the following school year.

**Purpose:** To measure the phenomenon of pupils from a cohort leaving school without completion, and its effect on the internal efficiency of educational systems. In addition, it is one of the key indicators for analysing and projecting pupil flows from grade to grade within the educational cycle.

**Calculation method:** Dropout rate by grade is calculated by subtracting the sum of promotion rate and repetition rate from 100 in the given school year. For cumulative dropout rate in primary education, it is calculated by subtracting the survival rate from 100 at a given grade (see survival rate).

**Formula:**

$$DR_i^t = 100 - (PR_i^t + RR_i^t)$$

Where:

$DR_i^t$  Dropout Rate at grade **i** in school year **t**

$PR_i^t$  Promotion Rate at grade **i** in school year **t**

$RR_i^t$  Repetition Rate at grade **i** in school year **t**

**Data required:** Enrolment by grade for school year t and enrolment and number of repeaters by grade for year t+1.

**Data source:** School register, school survey or census for data on enrolment and repeaters by grade.

**Type of disaggregation:** By grade, gender, geographical location (regions, urban/rural) and type of institution (public/private).

**Interpretation:** Ideally, the rate should approach 0%; a high dropout rate reveals problems in the internal efficiency of the educational system. By comparing rates across grades, it is possible to identify those which require greater policy emphasis.

**Quality standard:** Like other pupil-flow rates (promotion and repetition rates), the dropout rate is derived by analysing data on enrolment and repeaters by grade for two consecutive years. One should therefore ensure that such data are consistent in terms of coverage over time and across grades. Special attention should also be paid to minimizing some common errors which may bias these flow-rates, such as: Over-reporting enrolment/repeaters (particularly in grade one); incorrect distinction between new entrants and repeaters; transfers of pupils between grades and schools.

**Limitations:** The level and maximum number of grade repetitions allowed can in some cases be determined by the educational authorities with the aim of coping with limited grade capacity and increasing the **internal efficiency** and flow of pupils (or students). Care should be taken in interpreting this indicator, especially when comparing education systems.

In the case of Moldova, given that repetition rate is negligible the formula to calculate drop out rate can be approximately calculated by the following simpler formula:

$$DR_i^t = 100 - PR_i^t$$

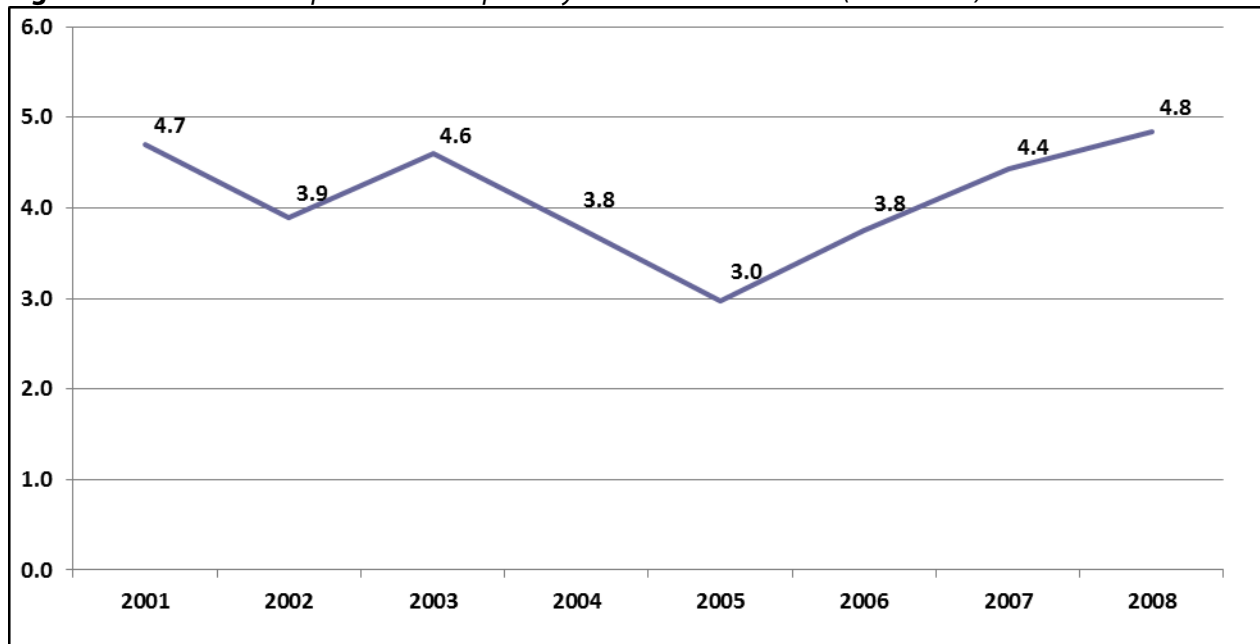
Where:

$DR_i^t$  Dropout Rate at grade **i** in school year **t**

$PR_i^t$  Promotion Rate at grade **i** in school year **t**

Illustration of drop out rate calculation for Moldova. Figure 3 shows the trend in drop out rates from primary education based on the above methodology in the last ten years.

**Figure 3.** Evolution of drop-out rates for primary education in Moldova (2001-2008)



Source: UNESCO Institute for Statistics (UIS). Based on data reported annually to UIS by Moldova.

Drop out from primary education was stable over in the last ten years or so in Moldova: it fluctuated between 3 and slightly less than 5%. It is recommended to use the Excel template provided by Said Voffal to colleagues in NBS to calculate to drop out rate. This template estimates drop out rate for each grade using enrolment by grade for two consecutive school years.

*Informative box:*

NBS has raised the question regarding the modality and possibility/feasibility of drop out calculation taking into account the migration of children with their parents outside the borders of the country.

The issue of collecting data on drop out directly from school is very complex and almost non-feasible unless the country has an individual national identification number (ID) for each student/pupil which seems not to be the case in Moldova. The problem is that when a student leaves a particular school before completing the cycle, the school in general does not know if the student: a) left to enroll in another school; b) migrate with his parents to a foreign country; c) really dropped and remained in the country. Out of these, category c) would be called drop out. In the ideal situation, where each student has a national ID, those who left schools can be easily calculated by comparing those who were enrolled in a school year and those who are enrolled the following year using students' ID numbers. After that we have to find a way of estimating cases / number of students who migrated from the country in order to calculate the number of those who really dropped and remained in the country.

Regarding the question on whether it would be useful to change the current school questionnaires and ask each school to report the number of those students who left the school and the reason, this would be feasible only if each school asks systematically the students (at the end of a school year for example) if they will return to the school next year and, when the answer is "no", what is the reason: transfer to another school, migration or drop out. Even in this case it is doubtful that a student who is planning to drop out or migrate will necessarily inform the school about that.

In conclusion, the expert suggests a better method to propose than using the estimation method — using the cohort method and which is used at the international level by UNESCO Institute for Statistics.

According to some research for national studies on drop out, and compiled below some national studies in USA about collecting data on drop out were compiled in the links: [http://dpi.wi.gov/spr/drop\\_q&a.html](http://dpi.wi.gov/spr/drop_q&a.html), <http://www.ncpublicschools.org/docs/research/dropout/reports/dropoutmanual.pdf>. Also, find attached in annexes two documents on two other studies on drop out which might be useful to NBS specialists.

### Gross gymnasium graduation ratio (GPGR)

**Definition:** Total number of graduates from the last grade of gymnasium education regardless of age, expressed as a percentage of the population at the theoretical graduation age for gymnasium.

**Purpose:** To indicate the general level of gymnasium education graduation. Graduation ratios are proxy measures of gymnasium completion.

**Calculation method:** Divide the number of gymnasium graduates, irrespective of age, by the population of theoretical gymnasium graduation, and multiply the result by 100.

**Formula:**

$$GPGR^t = \frac{G^t}{P_a^t} * 100$$

Where:

$GPGR^t$  Gross gymnasium Graduation Ratio in school year  $t$

$G^t$  Number of gymnasium graduates, in school year  $t$

$P_a^t$  Population of theoretical graduation age **15** in the last grade of gymnasium, in school year  $t$

**Data required:** Number of graduates from last grade of gymnasium education; population of the theoretical graduation age in the last grade of gymnasium (which is age 15).

**Data source:** School register, school survey or census for data on graduates; population census or estimates for population of the theoretical graduation-age in the last grade of gymnasium.

**Type of disaggregation:** By gender and geographical location (region, rural/urban).

**Interpretation:** A high ratio indicates a high degree of current gymnasium education outputs.

**Quality standards:** Data on population used in deriving this indicator should refer strictly to the theoretical graduation age in the last grade of gymnasium.

**Limitations:** As this calculation includes all graduates (regardless of age), the ratio can exceed 100%, due to over-aged and under-aged children who enter gymnasium education for the first time early/late or/and repeat a grade.

Gross graduation ratio for gymnasium is a good measure of gymnasium completion which is one the targets considered in MDG by Moldova.

## Education finance data

Two issues were identified during the mission: how to allocate expenditure data by level of education and how to improve the collection of data on private household expenditure on education? The problem with the current methodology is that the expenditure is allocated by level of education using the number students which consists implicitly of assuming that unit costs for some educational level are the same. Other alternatives allocation methods should be considered. For example using salaries and full-time equivalent numbers of teachers to make estimation. These methods should be developed in collaboration with the Ministry of Finance and Ministry of Education who have access to detailed information on number of teachers and their salaries.

Regarding private household expenditure on education it was also noted during the mission that the current data collected cannot allow deriving private household expenditure by level of education and by nature of educational expenditure. It was agreed to review the module of Household Budget Survey (HBS) related to educational expenditure to make this possible. The basket of goods and services which are generally considered for education expenditure in HBS are generally a subset from the list in table 2. The Classification Of Individual Consumption by Purpose (COCIOP) code related to each good or service is specified.

**Table 2: List of educational goods and services for the HBS**

Educational good / service	Explanation	COCIO P class
<b>1. Payments directly to institutions</b>		
Tuition fees	This includes nurseries, kindergartens, school, college, university, and adult education in regular education programmes (ISCED 0 to 6). This refers only to fees paid directly to educational establishments for members of the household.	10,12
Tuition fees of non-household member	Tuition fees paid by a parent directly to an educational institution on behalf of their child in higher education who is not a member of the household.	10
Recreational or leisure lessons	For example: driving, golf, tennis, sewing, music, painting, horse riding, cooking, skiing, photography etc...	9
Extra tutoring	Payments for extra tutoring	10
Textbooks	Payments or contributions directly to the educational establishments for textbooks.	9
Registration fees	Registration fees paid directly to educational establishments.	10
Examination fees	Payments made to an institution to register for an examination	
Food and board while attending school	Food and board up to ISCED 3 (upper secondary education). These expenses are paid directly to the educational establishment.	11
Student dormitories	Payments made directly to educational establishments at the higher education level for accommodation, which may or may not include meals.	11
School refectories	These generally relate to meals, which are paid directly to an educational establishment.	11
School transport	Expenditure on all forms of transport, which is paid directly to the educational institution, for example: buses, trains, trams, etc...	7
Laboratory and library fees	Library fees also includes payments for photocopies.	9
Health and welfare services	Fees for health and welfare services paid directly to educational institutions.	6
Membership fees	This includes fees paid directly to institutions for the following: student union fees, student council membership fee, parent and teacher association membership fee	12
Rental of school equipment	Payments for rental of any form of equipment belonging to the institution	9
School trips / visits	Trips / visits organised by the school / college.	9
Extra-curricula activities	Payments to institutions made for activities, which are normally conducted outside of school hours, and are not part of the school curricular.	9
Other	This includes any other item not included above for which payment is made directly to the institution.	
<b>2. Expenditure on goods and services outside an institution</b>		
Purchase of technical and other equipment;	Items necessary for participation in the classroom. This includes items such as textbooks, laboratory equipment, art supplies, and stationary.	9
School uniform	Includes items of clothing as stated in the school regulations. In some countries this may also include purchase of clothing for sport.	3
Conferences, seminars and workshops	Payments only to be included if the purpose for the participant is to learn or train at the conference, seminar or workshop.	10
Purchase of educational material for self-study	Expenditures on books, CDs, videos for learning at home. For example language learning courses etc.. Personal computers (PCs) are excluded.	9
Gifts to non-household members for educational purposes	Gifts either monetary or purchased items for the expressed purpose of education. (This does not include gifts for the purpose of student maintenance, i.e. food and board).	
Transport	Expenditure on all forms of transport, which is expressly for going to an educational institution from home and returning. Examples of modes of transport include: buses, trains, trams, etc...	7

Source: *Private household spending on education and training, Eurostat 2005*

## REVIEW OF THE NATIONAL MDG REPORTS

Since 2005 three MDG reports (2005, 2007 and 2010) by Moldova in which MDG2 was analyzed were produced. The following table presents a summary of indicators and analyses covered in these reports.

**Table 3: Summary of MDG2 reports (2005, 2007, 2010)**

Year	Goal	Indicators	Quality of the analyses in MDG report	Used indicators and disaggregation	Data source	Baseline (% 2002)	Target (% 2010)	Target (% 2015)
2005	Ensure that all children attend secondary schools	1. Net enrolment ratio in secondary school	1. No explicit definition of the indicator was included. Does secondary schools refer only to basic education (grades 1-9) or does this cover also upper secondary? <sup>^</sup> 2. Analyses were very descriptive with no graphics, no clear focus, no contextual analyses	Net enrolment ratio in secondary school education. No disaggregation by gender, or by geographical location or by wealth, etc...	National Bureau of Statistics	88	93.8	100
		2. Rate of children who graduate from secondary school	3. No explicit definition of the indicator was included; 4. Analyses were very descriptive with no graphics, no clear focus, no contextual analyses.	Rate of children who graduate from secondary school. No disaggregation by gender, or by geographical location or by wealth, etc.	National Bureau of Statistics	90	93	95
		3. Literacy rate of 15 to 24-years old	Almost no analyses	Literacy rate of 15 to 24-years old. No disaggregation by gender, or by geographical location or by wealth, etc.	National Bureau of Statistics	98.7		
		4. Proportion of children in pre-school institutions	Almost no analyses. Also It's inappropriate to include age 7 in the indicators on preschool as the age group is the starting age for primary education.	1. Enrolment rate for the age group 3-5 2. Enrolment rate for the age group 6-7 No disaggregation for both indicators.	National Bureau of Statistics		75 for 3-5 and 100 for 6-7 both by 2007	
2007	Achieve universal access to general secondary education (grades 1-9)	1. Gross enrollment rate for general secondary education.	The analysis includes explanation to the replacement of the net enrollment rate with the gross one. This indicator is not appropriate to measure universal participation to secondary general education. If the objective is to measure universal participation to compulsory education, the appropriate indicator should be : <b>Net enrolment rate</b> for the age group of compulsory education which is: 7-15. The fact that some 7 years are still in pre-primary is not a problem because they will be included as the numerator of the indicator will include all enrolled children of the 7-15 group whatever level of education they are enrolled in. So the 7years-old enrolled in pre-primary will be included.	Gross enrollment rate for general secondary education. No disaggregation by gender or by geographical location was made.	National Bureau of Statistics	94.1	95	98



		2. School drop-out rate.	No definition of this indicator was given and no related analyses were done in the report					
		3. Proportion of children who are enrolled in the first grade and complete the general secondary education cycle	No definition of this indicator was given and no related analyses were done in the report.	No disaggregation.	Ministry of Education			
		4. Degree of children's participation in pre-school institutions.	Like in the 2005 MDG report, the brief analyses done in the report were related to two indicators : enrollment rates for the ages groups 6-7 and 3-5. Same remark on age 7 as for 2005 report.	1. Enrolment rate for the age group 3-5 2. Enrolment rate for the age group 6-7 Some considerations of differences between rural and urban area and between rich and poor were mentioned but no explicit analyses were done.	National Bureau of Statistics	41.3 for age 3-6; 66.5 for 6-7	75 for ages 3-6 and 95 for ages 6-7	78 for ages 3-6 and 98 for ages 6-7
		5. Rate of children enrolled in the first grade with previous participation in pre-school education programs	No definition of this indicator was given and no related analyses were done in the report	No disaggregation				
		6. Youth Literacy rate.	Difference in methodology of the indicator from 2 sources (Census and LFS) is explained. International comparisons of Moldova youth literacy rates were done. This indicator has a very high value for Moldova. MDG related target is already achieved. Target introduced in 2007.	Literacy rate of 15 to 24-years old. No disaggregation by gender, or by geographical location or by wealth.	National Bureau of Statistics	98.7	99.5	99.5
2010	Ensure access to general compulsory education (grades 1-9)	1. Gross enrollment rate into compulsory general education system	This indicator is not appropriate to measure universal participation to secondary general education. If the objective is to measure universal participation to compulsory education the appropriate indicator should be : <b>Net enrolment rate</b> for the age group of compulsory education which is: 7-15. Analysis referred to: decline of the gross rate and causes, enrollment in primary school at early age, enrollment of children with disabilities, HIV/AIDS, regional disparities, economic factor, However these analyses are not supported by data to support evidence etc.	Gross enrollment rate for general secondary education. Some descriptive analyses by geographical areas and by gender are done in the text in the 2010 MDG report but these analyses would be better presented using graphics, especially the disaggregation rural/urban where some differences can be demonstrated.	National Bureau of Statistics	94.1	95	98
		2. Share of children who successfully complete compulsory education	No definition of this indicator was given and no related analyses were done in the report at all.	No disaggregation. No data available since 2000 (in annex to Report and the report (it seems that it was because there were no clearly defined method of calculating this indicator. A solution	Ministry of education			

				suggested by the expert would be to use the indicator defined by Gross Gymnasium Completion (defined above in page 11 of this document). Data should be available for this indicator because NBS reports to UIS since 2010).				
		3. School drop-out rate.	No definition of this indicator was given and no related analyses were done in the report.	No disaggregation. No data available since 2000 (in annex to Report and the report.	Ministry of Education			
		4. Gross enrolment rate for pre-school education, children aged 3-6 years	The indicator which was used in the analyses was gross enrolment rate while net enrolment would have been more appropriate. The difficulty to monitor the target has been mentioned due to the change of data source (MoE->NBS) and suggestion on revision of the target or the indicator is done.	Gender perspective was described. Also impact of HIV/AIDS, situation of Roma children, poor children was described but on the basis of data to demonstrate evidence.	National Bureau of Statistics	41.3 for age 3-6; 66.5 for 6-7	75 for ages 3-6 and 95 for ages 6-7	78 for ages 3-6 and 98 for ages 6-7
		5. Gross enrolment rate in preschool education, children aged 6-7	Like in the 2005 MDG report, the brief analyses done in the report were related to two indicators: enrollment rates for the ages groups 6-7 and 3-6. Same remark on age 7 as for 2005 report.	Some considerations of differences between rural and urban area and between rich and poor were mentioned but no explicit analyses were done.	National Bureau of Statistics The change of data source, from MoE to NBS, took place	41.3 for age 3-5; 66.5 for 6-7	75 for ages 3-5 and 95 for ages 6-7	78 for ages 3-5 and 98 for ages 6-7
		6. Share of children enrolled in the first grade with previous participation in pre-school education programs	No definition of this indicator was given and no related analyses were done in the report	No disaggregation by gender, or by geographical location or by wealth. No data are available since 2007.	Ministry of Education	First value ever used for MDG purpose - 66.5% (2002)		
		7. Youth Literacy rate.	Only bar charts graphics showing values equal or above 99.5 % was presented. Some contextual analyses are presented in the section 'General tendencies'.	Literacy rate of 15 to 24-years old. No disaggregation by gender, or by geographical location or by wealth.	National Bureau of Statistics	98.7	99.5	99.5

## Results of the overall review of the three national MDG reports

After a careful review of the parts of MDG reports related to MDG2 the following important issues were noted:

1. The formulation of the MDG goal2 has changed in each of the three reports. So this makes it very difficult to monitor in these circumstances any progress related to these goals. Also the formulation of the goal is not always clear. For example, in the first report done in 2005, the goal formulation was: *Ensure that all children attend secondary schools*. But it's not clear what was meant by this: does this mean all children must attend gymnasium only or upper secondary education as well? Is it only attendance or attendance and completion?
2. The indicators defined to monitor the goals are not clearly defined and their labels are not consistent from one report to the following one. Also despite that several indicators are indicated in each report, only a small subset of them is analysed. For example, in the 2010 report *Rate of school drop out, Share of children who successfully complete compulsory education education, Share of children enrolled in first grade after completing pre-school education* but data were not presented for any year for the two first indicators and no data after 2006 for the third one.
3. The analyses are not disaggregated by geographical location (rural, urban, regions), by economic status or by gender to enable policy makers identifying which groups are most in need for improving their situation.
4. No description of data sources, data quality/coverage, meta data, data limitations or definitions and methodology of calculation of indicators were given.
5. It was not possible from the discussions with National Bureau of Statistics and Ministry of Education during the mission to understand who has the responsibility of producing MDG reports and at which frequency the reports are to be produced.
6. The way the graphics and analyses were presented was not very attractive. As these MDG reports are meant to target a wide range of stakeholders including governmental policy makers, parliamentarians, NGOs, private sector and the civil society the analyses and data presentation would have being done in a more attractive way using colourful graphics, maps, etc
7. One common major issue in the three MDGs reports (2005, 2007 and 2010) is quality, relevance and presentation of analyses. The analyses are often very descriptive and not always based on data or supported by visually attractive charts which can help the reader getting quickly the message. Also data are needed to support analyses of dimensions of exclusion and marginalization (gender, poverty, HIV/AIDS, Rural, Roma).
8. There were no recommendations in the two first reports (2005 and 2007). The recommendations made in the third report (2010) were too general to be practical for educational policy makers. For example, in the 2010 MDG report it was recommended to improve the quality of education. What does that mean? Does that mean train more teachers? Provide more/better textbooks? Review the curriculum? Use more ICTs in education? Develop a system of testing learning achievement?
9. The expert found the two last chapters of the last 2010 MDG report ("Impact of policies on education" and "Conclusions") interesting and useful. He cannot judge if what was said was accurate or not because not everything was supported by verifiable data. However, the expert thinks the first chapter on impact of policies could be better presented by having less text and maybe more graphics showing what these policies consisted of based on key measurable facts.

## NATIONAL MDG GOALS VS. INTERNATIONAL MDG GOALS

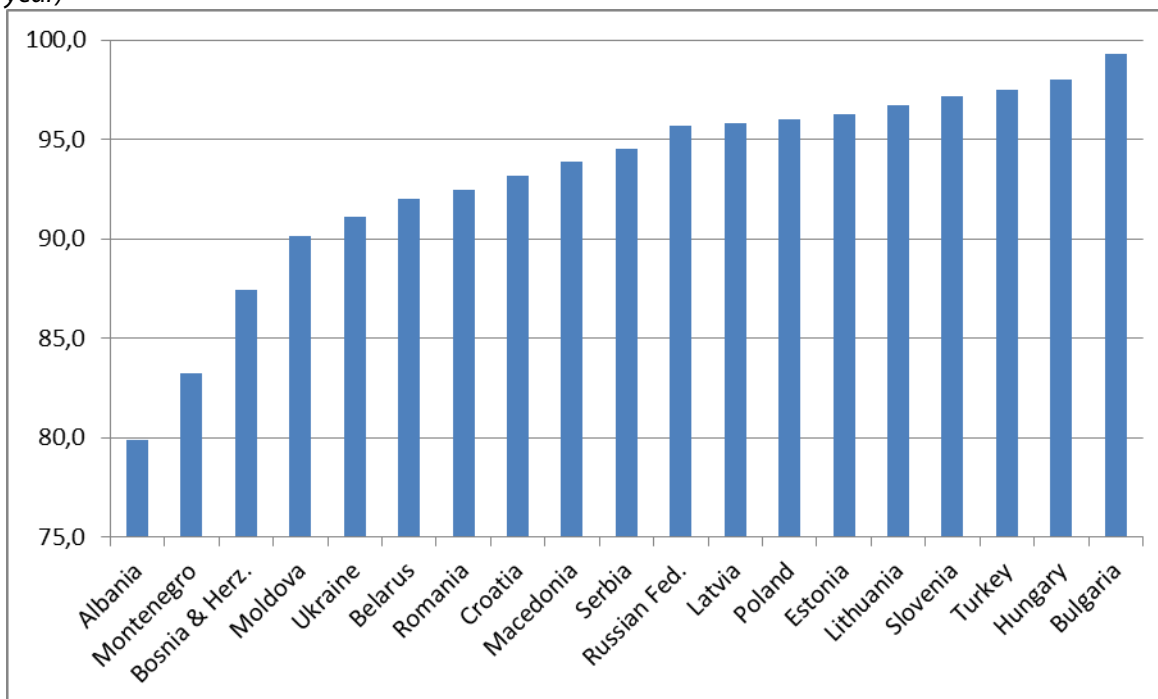
National MDGs targets and the related indicators may be different from the international ones because countries can define their own development priorities which might for example be more ambitious than the common sets defined at global level. But it is useful always for national authorities to evaluate their national goals and targets in relation to the global one. Table 4 compares the MDG2 national targets of Moldova with global MDG2 targets. And **Figure 4** illustrates the comparative situation of Moldova regarding Primary Net enrolment Rate; the main indicator used at the international level to measure the universal participation to primary education. We can see for example that Moldova ranked 16<sup>th</sup> on a total of 19 countries from Central and Eastern Europe for which data were available. Given that the value of the

indicator for Moldova is 90% only, it would be appropriate in the national MDG2 to disaggregate the indicator on participation to general compulsory education by primary education and gymnasium in order to evaluate separately universal participation in both levels.

**Table 4: Moldova National MDG2 VS. Global MDG2**

Level	Goal	Indicator(s)	Comments
National	Ensure access to general compulsory education (Grades 1-9)	<ol style="list-style-type: none"> <li>Gross enrolment rate into compulsory education</li> <li>Rate of school dropout</li> <li>Share of Children who successfully complete compulsory education</li> <li>Gross enrolment ratio in pre-school education, children aged 3-6</li> <li>Gross enrolment ratio in pre-school education, children aged 7-6</li> <li>Share of children enrolled in first grade after completing pre-school education</li> <li>Youth literacy rate</li> </ol>	Definitions of these indicators need to be clarified. For indicators no.1, 4 & 5, it's more appropriate to use NET rate than GROSS rate (see recommendations below for the justification of this recommendation). Goal at national level is more ambitious than the one at the international level because participation to and completion of education are targeting all compulsory education while at the international level it's only primary education. But it would be useful to disaggregate indicator 1. for grades 1-4 (primary education) and grades 5-9 (gymnasium). This will help policy makers to evaluate where improvement are mostly needed.
International	Achieve universal primary education	<ol style="list-style-type: none"> <li>Net enrolment rate in primary education</li> <li>Proportion of pupils starting grade 1 who reach last grade of primary education</li> <li>Literacy rate of 15-24 year-olds, women and men</li> </ol>	Data and indicators used to monitor the goal at the international level are produced by the UNESCO Institute for Statistics (UIS) based on data annually collected from countries.

**Figure 4: Net enrolment rate for primary education for Central and Eastern Europe (2010 or the most recent year)**



Source: UNESCO Institute for Statistics.

## RECOMMENDATIONS

### 1. MDG2 goal formulation and indicators selection:

#### a. MDG goal 2. Formulation

Goal 2. title should be: *Achieve universal compulsory education (grades I-IX)*. The current title *Ensure access to general compulsory education (grades I-IX)* is not clear. I think ensuring access is not enough because children could have access but drop out before completing. Moreover, the current title does not specify if the access is for all children (universal) or not. If the national goal is that all Moldovan children have universal access and complete compulsory education then the current should be replaced by the title I am suggesting. At the global level, the title of MDG2 is Achieve universal primary education so if we want the same goal but for compulsory education the title should clearly reflect that and use the equivalent of the international indicator which is the Net rate (not the Gross as it is now).. *Access* does not mean completion so it's why it's important that the title of the goal reflects exactly the national objective. I don't think it's too late to change the indicators and formulation of the goal at the national context to reflect what is really the national goals. Anyway the national goal formulation already changed from: *Achieve universal access to secondary education school* in 2005 MDG report to *Ensure access to general compulsory education (grades I-IX)* in the MDG 2010. Off-course at the international MDG2 formulation has not and will not change before 2015.

#### b. Indicators selection

- In order to measure adequately the progress toward universal participation to compulsory education the appropriate indicator should be: *Net enrolment rate for the age group 7-15*. This age group is the official age group for participation to compulsory education. This indicator is calculated by expressing the total number of students of the age group 7-15 enrolled in any education level (including pre-primary) as a percentage of the population of the same age group. The current gross rate used is not a measure of universal participation for this age group; it only measures the capacity of schooling this age group. Differences between both indicators can exist because of early or late entrance and grade repetition. Moreover, as Moldova didn't achieve yet the international goal of universal primary education, it would also be useful to disaggregate the net enrolment rate for compulsory education- at least during analyses- in two sub-indicators: *Net enrolment rate for the age group 7-10* (primary education) and *Net enrolment rate for the age group 11-15* (gymnasium education). By analysing separately these two indicators we can see the gap in reaching universal for each group. If for example we have universal participation for the age group 7-10 but not for 11-15 this is an indication of a drop-out between primary and gymnasium education. The Net enrolment ratio for the age group 7-10 is what is used at the international level to monitor MDG2 for Moldova.
- Maintain the indicator on dropout rate but the correct name of the indicator should be: *Drop-out rate from compulsory education*. This indicator can be calculated as: 100-survival rate to last grade of compulsory education (grade 9). Survival is calculated using the reconstructed cohort method described above in the present document. Mr. Voffal provided Ms. Maria Vasiliev and Ms. Larisa Chirita from NBS with an Excel template which calculates all the flow indicators by grade: *Repetition rate, Promotion rate, Survival rate and drop-out rate*. This template produces these rates by grade for all the 9 grades of compulsory education.
- The indicator *Share of children who successfully complete compulsory education* should be renamed into *Gross graduation ratio for gymnasium education* because what is in fact measured is graduation. The methodology of calculation recommended indicator is provided above in this document in the section on indicators. Gross graduation is a good estimation of completion of compulsory education.
- As most of the 7-years old are generally enrolled in primary education, it's not appropriate to have an indicator on participation to pre-primary education for the age group 6-7. The indicator on enrolment rate (gross or net depending on what is the objective) for age 3-6 is more appropriate to measure participation to pre-primary education.
- The indicator *Share of children enrolled in first grade after completing pre-school education* should be renamed *Percentage of new entrants to grade 1 of primary education with early childhood education experience*. The title currently used in the national MDG report might be misleading because it's not

really clear what pre-primary education completion means. What is important to measure here is the proportion of new entrants to grade 1 of primary education which have had some pre-primary education experience. This includes children who were enrolled in pre-primary education since age 3 but also those who started pre-primary education only at age 4, 5 or 6 or even at 7. Data for this indicator should be available at NBS because they were reported to UIS

- **Issue of population data:** the biggest challenge in term of data quality in the calculation of population-related educational indicators for Moldova is the quality of population data estimates. Due the continuous migration flow it's very difficult to produce stable estimates for population data. The situation will hopefully improve in the future but for the moment, the calculation of indicators should be based on what is called '*present population*'.

## 2. Improving analyses and MDGs report:

### a. Concepts, definitions and footnotes

- MDGs reports should include a glossary on definitions of concepts and the methodology of calculation of the indicators used in the monitoring.  
Keep the consistency of the name of indicators from one report to another. This is not the case now for the reports done so far. For example, in the MDG 2007 report, the indicator on pre-primary education experience is named *Rate of children enrolled in the first grade with previous participation in pre-school education programs* but in the 2010 the same indicator is called *Share of children enrolled in first grade after completing pre-school education*. Also metadata, data sources, data quality/limitations (for example does data covers all the country schools? To what extent the population data issue could affect the indicator? In case of sample survey was the sample large enough to enable calculating an accurate indicator or making comparison, etc...), and estimation methods used should be described in the report as that will help users of the report better interpreting the data;

### b. Correspondence between Indicators and analyses

- All indicators defining national MDG2 goal should be analysed in the MDG report. Currently only a small subset of these indicators are in fact analysed in the reports. For example, in the 2010 MDG2 report, only three indicators out of a set of seven were analysed. Similar situation was observed for 2005 and 2007 reports. It is important to analyse all indicators because each indicator can inform about some dimensions of the national goals.

### c. Analyses at sub-national level

- In the current reports analyses are made only at the aggregated national level. But in order for policy makers to be able to better target disadvantaged groups, it would be very important that the analyses (or at least some of them) are made at the sub-national level (rural, urban, by district, etc.). This can be done through colourful maps which make the analyses more attractive especially for non-specialized audience. It would be also useful to provide some analyses by socio-economic status and by gender for the relevant indicators. For all the 7 indicators it is recommend to present analyses by gender in MDG report. This does not mean that every single graphics should have values for male and female presented but at least a statement saying there is or there isn't a gender issue related to the dimension measure by the indicator. For dimensions where gender issues exist more in-depth analyses supported by data and graphics should be presented issues. It is also recommended that when analysing dimension of exclusion and marginalization (rural, Roma, HIV/AIDS, Poverty) data and graphics are used to support those analyses.

### d. Content of the report:

The report should be organized as follow:

- Brief introduction presenting how the report was prepared, with mention of the different actors/national organizations involved in its preparation;
- Overview of the country-specific education system development. This should highlight recent national efforts or constraints in term of investment in education, teacher recruitment/training/deployment, etc. ;

- For each target of Goal 2, analysis of status and progress at least during the last decade. Graphics should be done to visualize the data and indicators in the best and most appropriate and easiest way for the reader. As said before the use of maps and other colourful graphics are desirable. While analysing status and progress in access, participation and completion of compulsory education, quality of education, learning outcomes should be analysed too. Given that there Moldova does not have data on learning achievement, some proxy indicators for education quality can be used in the analyses: recruitment and deployment of teachers, class size, quality of training of teachers, quality and availability of texts books and pedagogical material, use of ICTs in education, performance of students in national examinations, etc..
- The report should conclude by briefly describing the progress realized and the challenges ahead. The report should finish by the key realistic recommendations and their policy implications. The concluding chapter on impact of policies, being considered interesting and useful, could be better presented by having less text and maybe more graphics showing what these policies consisted of based on key measurable facts

## **CONCLUSIONS:**

- The work with NBS and a review of the data published annually by the bureau showed that most of the education statistics data needed to calculate the 7 indicators are available and of good quality. Data are either available at NBS or at the Ministry of Education. Indicators such as drop out rates for which data are not collected can be estimated through the Reconstructed Cohort method for which an Excel template was provided by the expert. This method is used by UIS to calculate to estimate drop out at the international level and is based on the data by grade for two consecutive school years;
- The main issue was around methodology of calculation of certain indicators such as share of children who successfully complete compulsory education and drop out rate but for the two indicators internationally recognized methods which are in the indicators section of this document were proposed by Said Voffal to NBS colleagues;
- The formulation MDG2 goal at the national level needs to be clarified and kept consistent from one MDG report to another;
- The quality of analyses done in MDG report needs to be improved and more data on factors of exclusion and marginalization, more data at sub-national level (rural, urban) need to be compiled and analysed in the MDG reports.

## ANNEX: MISSION AGENDA , 21-24 November 2011

Time	Activities	People involved, Contacts
<b>Saturday, 18 November 2011</b>		
18.05	Arrival from Istanbul Check in Hotel Vila Verde	Vila Verde Hotel e-mail: reception@vila-verde.md Tel: (+373 22) 288 003; 288 004 110 Grenoble str., Chisinau
<b>Monday, 21 November 2011</b>		
09.00-09.30	Discussion with <b>NBS</b> and <b>Statistics Project</b> – objectives, tasks of mission <b>Vitalie Valcov</b> , Vice-Director <b>Ala Negruta</b> , Head of Social and Living Standards Statistics Division <b>Aurelia Spataru</b> , project manager	106 Grenoble Str., 3 <sup>rd</sup> floor, 403142, +373 690 99319 (A. Spataru)
09.30-12.00	Working session/meeting with NBS staff <b>Topic:</b> Revision and discussion of methodology of calculation of enrollment rate for every level of education, specifically for preschool, primary, and secondary education: - school population - reference population - use of net enrolment versus gross enrolment rates and desirability of reporting both - level of disaggregation of indicators for MDG reporting	106 Grenoble Str., 6 <sup>th</sup> floor, office 608 403099, 241652 NBS: <b>Ala Negruta</b> , head of Division on Social and Living standards Division <b>Liuba Stoianov</b> , head of Social Statistics Section <b>Maria Vasiliev</b> , Social/education Statistics Section, <b>Larisa Chirita</b> , Social/education Statistics Section
12.00-13.30	Lunch break	
14.00-15.00	Working session/meeting with staff of Ministry of Education <b>Topic:</b> Calculation and usage of MDG2, including national indicators on MDG: enrollment rate of 6-7 years old children, drop-out, etc.	Ministry of Education: <b>Cojocaru Tudor</b> , Head of Policy Analysis, Monitoring and Evaluation Division, 232680, 692 033145 <b>Ghenciu Nicolae</b> , Head of HR, life-long education Division, 232762
15.30-16.30	Working session/meeting with staff of UNICEF <b>Topic:</b> Calculation and usage of MDG2: availability, constrains and usage.	<b>Elena Laur</b> - Monitoring and Evaluation Officer, UNICEF Moldova <b>Larisa Virtosu</b> - Early Childhood Development Officer, UNICEF Moldova
<b>Tuesday, 22 November 2011</b>		
09.30-12.00	Working session/meeting with NBS staff <b>Topic:</b> Technical support in calculation of the following indicators (definition, method of calculation, primary data sources, interpretation) for every level of education according to ISCED: - Drop-out rate - Completion rate - Transition rate, admission rate, etc	106 Grenoble Str., 6 <sup>th</sup> floor, office 608 403099, 241652 <b>NBS team</b>
12.00-13.30	Lunch break	
14.00-16.30	Working session/meeting with NBS staff <b>Topic: continuation of the previous topic</b>	106 Grenoble Str., 8 <sup>th</sup> floor, conference room <b>NBS team</b>
<b>Wednesday, 23 November 2011</b>		
09.30-12.00	Working session with NBS staff <b>Topic:</b> Education Finance Statistics: core indicators, source of data, distribution by level of ISCED, how to measure private expenditures for education	106 Grenoble Str., 8 <sup>th</sup> floor, conference room <b>NBS team</b>
12.00-13.30	Lunch	
14.00-16.30	Meeting with staff of NBS, Ministry of Finance and Ministry of Education <b>Topic: continuation of the previous topic</b>	106 Grenoble Str., 6 <sup>th</sup> floor, office 608 <b>NBS:</b> NBS, <b>Svetlana Borțoi</b> , Ministry of Finance, Head of Division on Finance in Education, Science and Culture <b>Ion Sobari, Ministry of Education</b> , head, Division on economic policy, patrimony and finance, 233325, 069740778
<b>Thursday, 24 November 2011</b>		
09.00-09.30	Debrief meeting with Statistics Project	Statistics Project Office, A.Spataru



Time	Activities	People involved, Contacts
09.30-12.00	Debrief for the Division of Social and Living Standards Statistics, NBS Final overview and conclusions, recommendations for improvement of the indicators and their methodologies. Presentation of the main findings of the mission	NBS team
12.00-13.00	Lunch	
14.00-16.00	Presentation on the mission preliminary findings and recommendations - round table with the main stakeholders involved in MDG2	<b>Ministry of Education:</b> Tudor Cojocaru, Head of Policy Analysis, Monitoring and Evaluation Division, 232680, 692 033145 <b>Ministry of Economy:</b> Tatiana Besliu, Division on Policy monitoring and evaluation <b>State Chancellery:</b> Dumitru Alaiba, deputy-head of Division on Policies, strategic planning and technical aid Ion Gumene, head of Section on coordination of policies Onorica Banciu – national consultant <b>UNICEF</b>
<i>Friday, 25 November 2011</i>		
06.15	Departure to Bucharest	