

# ETF KEY INDICATORS 2010

## TECHNICAL ANNEX



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# 1. INTRODUCTION

This document should be seen as an extension to the working paper 'ETF Key Indicators 2010 – Overview and analysis', which analysed selected indicators for all the ETF partner countries. The intention with this document is to provide a more comprehensive overview of the methodological issues relating to the ETF key indicators, and also to act as a guide in the future to those interested in the reliability of indicators for these countries.

A short overview of general methodological issues that arise is followed by a detailed overview of the compliance and coverage of the ETF key indicators, region by region. The short discussion of general methodological issues serves to outline the most common problems faced when attempting to compare indicators on the labour market and education and training across a range of countries. It can thus also function as a guide to understanding these indicators and provide assistance on how indicators that differ in their definitions can nonetheless be interpreted and used.

## 2. GENERAL METHODOLOGICAL ISSUES

Before embarking on a description and analysis of key indicators for each region, the main methodological issues that are relevant for all the regions will be discussed.

Each of the ETF 29 partner countries have been classified as belonging to a region based on European Union (EU) instruments. Countries in the Western Balkans and Turkey are grouped together under the Instrument for Pre-Accession Assistance (IPA). Central Asian countries are grouped under the Development and Cooperation Instrument (DCI). Remaining countries have been split into two groups, East and South, based on geography and history, under the title European Neighbourhood and Partnership Instrument (ENPI). The Russian Federation is not formally part of the ENPI, but it is grouped with its geographical neighbours for convenience. **TABLE 2.1** below summarises the four regions covered by this document.

**TABLE 2.1 ETF PARTNER COUNTRIES BY REGION**

Region	Countries
Central Asia – DCI	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
Southern and eastern Mediterranean – ENPI South	Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, occupied Palestinian territory, Syria and Tunisia
Eastern Europe – ENPI East	Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova <sup>1</sup> , Russian Federation and Ukraine
Western Balkans and Turkey – IPA	Albania, Bosnia and Herzegovina, Croatia, former Yugoslav Republic of Macedonia, Kosovo <sup>2</sup> , Montenegro, Serbia and Turkey

### 2.1 MAIN METHODOLOGICAL ISSUES

Several methodological issues that have an impact on the comparability of the indicators arise in all the regions. They range from differences in definitions to substantial variation in what is covered, owing to fundamental differences in how the education and training systems are organised.

At the most basic level there may be differences within the data available from a given country based on the context in which the data is used. Population data can include refugees or other special groups in one context and not in another. For example, enrolment data may include recent arrivals from Iraq, but the population data will not include this group, thus leading to an overestimation of the enrolment ratios. To give another example, people of Palestinian origin are not always included in the data from neighbouring countries. Unfortunately, the treatment of such groups is rarely systematic, so it is essential that care is taken when calculating ratios to ensure that both the denominator and the numerator treat the population in the same manner. Exclusions of certain groups from an indicator should obviously always be clearly marked in a footnote.

A special case of the population problem arises when different age groups are used. One example is that of the ages range used for labour market indicators. Countries typically use either the range 15–64 as the basis for their working-age population, or the age group 15+, i.e. 15 years and older. The effect of using these two different age groups depends on the indicator in question. For employment rates, a country will appear to have a relatively low employment rate if the age group 15+ is used, as labour market activity generally declines rapidly after the age of 64. Similarly, since few people are likely to be unemployed and looking for gainful employment

<sup>1</sup> Hereinafter 'Moldova'.

<sup>2</sup> Under UNSCR 1244/1999, hereinafter 'Kosovo'.

in the upper age ranges, unemployment rates are also likely to be relatively lower for countries using the age group 15+.

In many countries it is possible to obtain two sets of data on unemployment, one based on registered unemployment from public records, and another from labour force surveys (LFSs). The ETF key indicators are, as a matter of principle, based on LFS data, which means that the data rely on samples. Registered unemployment data often deviate significantly from the LFS data, although in other cases the two data sets display similar trends. The main issue relating to registered unemployment is that individuals often have secondary motives for registering as unemployed. In some countries unemployed persons are eligible to receive certain social benefits, such as health insurance or subsidised heating, thus increasing the attractiveness of being registered. In other countries there are neither direct nor indirect benefits to being registered as unemployed, so an individual may simply not find it worthwhile to register. Since the numbers of registered unemployed people are often dependent on other variables, the trend in the numbers may not even mirror the unemployment trends shown in LFS data.

However, one important concern regarding LFS data is its regularity. In many countries LFSs are conducted only once a year, and if the timing of such annual surveys is not regular, any differences from one year to the next may simply be caused by seasonality and not by real changes in the conditions on the local labour markets. In the particular case of the ETF key indicators it has been assumed that no such seasonalities exist.

Changes in methodology also occur occasionally, and these have a potential impact on data reliability. In recent years several important international classifications have been updated. The International Standard Classification of Occupations (ISCO) and the International Standard Industrial Classification of all Economic Activities (ISIC in UN parlance, similar to NACE in Europe) were both revised in 2008, which means that not all countries will be using the same classification. In general, however, these revisions are not expected to lead to dramatic changes in interpretation of the data.

However, many countries do not use international classifications when publishing data at the national level. There is therefore a natural tension between the indicators obtained from international sources and those found in national sources, which follow national classifications that can differ widely from international classifications. For example, when reporting to international organisations such as the UNESCO Institute for Statistics (UIS), countries with similar education systems do not always represent these national systems in the same way. Such differences in implementation may therefore provoke misleading interpretations.

The coverage of indicators is another crucial aspect. There may be complete agreement between two countries (or groups of countries) on definitions, populations, age ranges, the regularity of surveys and the classifications, and yet no genuine comparability if the coverage does not reflect the realities of the systems that are being measured. Non-formal education and training is typically not covered by official data collections, and this leads to serious underestimations of the extent to which education and training is being provided in countries with large non-formal sectors. Several of the ETF partner countries have large numbers of young people enrolled in non-formal apprenticeships, and if these students are not counted, it may appear as if the country in question has a negligible VET sector.

Compliance with international standards and definitions is essential for comparing ETF partner countries with countries in the EU. However, non-compliance does not exclude comparison per se. As long as countries follow similar definitions it is possible to compare them. As will be demonstrated, there are several examples of countries that have chosen to follow a definition that differs from the international standards, but that is in agreement with those in other countries. Data from a particular country that are otherwise not comparable owing to non-compliance with international standards can still be used in a comparative manner if the indicator is consistently calculated over time, as it should then be a faithful reflection of underlying trends.

## 2.2 ETF KEY INDICATORS IN 2010

Following consultation with thematic experts within the ETF, a list of indicators was drawn up to cover all the possible needs that the experts might face in their analytical work. A number of main areas relating to the work of the ETF were identified: labour market, public employment services (PESs), and education and training (for which there are naturally a large number of indicators covering attainment and enrolment, completion, teachers and expenditure). The education and training indicators were sub-divided into two groups to facilitate the overview. However, none of these indicators can be understood in isolation. A further set of indicators to cover the broader socioeconomic context was therefore included. The chosen indicators cover economic and human development, as well as the demographic structure of the national populations.

This list was the foundation for the data-gathering exercise in early 2010, which took place through an initial consultation of national websites and reports and a subsequent request for additional indicators from national authorities. During the writing of country reports for the Torino process assessing VET systems in the ETF partner countries and its four regional papers, it became apparent that a number of additional indicators would be useful, so these were also collected. Two examples are the World Bank's Index on the Ease of Doing Business and the World Economic Forum's Competitiveness Index, which were both added to the socioeconomic background section. Data from the Programme for International Student Assessment (PISA) conducted by the Organisation for Economic Cooperation and Development (OECD) were included in this section, despite the fact that they relate to educational outcomes; this was done for practical reasons, as the indicators in this section share one common trait: they are all collected and calculated by international organisations, and the ETF has carried out no further work on the data, nor asked countries to provide missing information.

The following are the ETF key indicators collected in 2010, grouped thematically.

### Labour market indicators

- Activity rates by education level, age and gender
- Employment by economic sector
- Employment rates by education level and gender
- Employment rates of older workers (55–64) by gender
- Employment by economic status (wage employment, self-employment, employer) and gender
- Unemployment rates (15+) by education level and gender
- Youth unemployment rates (15–24 and 25–34) by education level and gender

### Education and training indicators – attainment and enrolment

- Education attainment of population by age by gender and (if possible) by income groups and urban/rural
- Illiteracy rates by gender
- Percentage of 25–64-year-olds having participated in lifelong learning by gender
- Percentage of 25–34-year-olds having participated in lifelong learning by gender
- Participation in lifelong learning by education level and gender
- Gross enrolment rates by education level, programme (VET and general) and gender
- Total number of pupils/students enrolled by education level, programme (VET and general) and gender
- Private education as % of total by education level and type (VET/general)
- Participation in VET (%) by field of study
- Percentage of apprentices in the VET system by gender and education level
- Drop-out rates in upper secondary, general and VET by gender
- Gross completion rate in VET and general by education level



- Percentage of VET pupils who continue to higher levels of education
- Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)

### **Education and training indicators – expenditure and teachers**

- Public expenditure on education by education level and programme (VET and general) as % of GDP, public expenditure and total educational expenditure
- Cost per pupil by programme (VET and general) in ISCED 3
- Teacher salaries as % of average wage and teacher salaries
- Share of teachers in teacher training per year by gender
- Student/teacher ratios by education level and programme (VET and general)

### **Indicators for PESs**

- Expenditure on active labour market policies (ALMPs) as % of GDP and public expenditure
- Percentage of registered unemployed population covered by ALMPs
- Number of registered unemployed people, if possible by education level or by age
- Number of staff in the PESs
- Number of vacancies

### **Socioeconomic context**

- GDP by economic sector
- GDP per capita in purchasing power parity (PPP)
- Human Development Index
- Global Competitiveness Index
- Doing Business Index
- Mean score of student performance on the reading scale (PISA data)
- Dependency rates, 0–14 and 64+ as % of working-age population

The ETF has developed a set of process indicators on entrepreneurship learning and these should in principle be seen as an integral part of the ETF key indicators, although the entrepreneurship learning indicators are gathered through a stand-alone independent exercise. More details on these indicators can be found on the ETF website.

# 3. CURRENT AVAILABILITY AND REVISED LIST OF FUTURE KEY INDICATORS

This chapter will evaluate the overall availability of the ETF 2010 key indicators and suggest a revised list of key indicators to be collected in the future. However, the resulting general list must be read in conjunction with the regional conclusions of the following chapters. Definitions will vary slightly between regions for selected indicators if the regional recommendations are accepted. Furthermore, as data availability changes over time, additional indicators may be suggested for some regions. Nonetheless, a minimum set of indicators will be used for all countries, and this will be derived on the basis of overall availability.

Coverage is very good for economic and demographic indicators, and good for most of the labour market indicators. Data for VET indicators are harder to collect in a comparable format, and data on unemployment by education level and information from PESs have also proved difficult to gather. The most important indicators to be collected are listed in **TABLE 3.1**, and a list of secondary indicators is given in **TABLE 3.2**. The principal indicators in Table 3.1 are generally available, as demonstrated in **TABLE 3.3**; the secondary indicators are characterised by being of great importance for monitoring and evaluating VET systems, but are generally not (or only partially) available in ETF partner countries (see **TABLE 3.4**). In subsequent sections, this distinction between principal and secondary indicators refers to their categorisation on the basis of availability. It does not imply that secondary indicators are less important than the principal indicators.

**TABLE 3.1 PRINCIPAL ETF KEY INDICATORS FOR FUTURE DATA COLLECTIONS**

Code	Principal ETF key indicators
<b>ACT</b>	Activity rates by education level and gender (%)
<b>EMP</b>	Employment rates by education level and gender (%)
<b>UNR</b>	Unemployment rates by education level and gender (%)
<b>YUN</b>	Youth unemployment rates (15–24) by education level and gender (%)
<b>ATT</b>	Education attainment of population aged 15+ by age and gender
<b>LIT</b>	Literacy rates by gender (%)
<b>ENR</b>	Total number of pupils/students enrolled by education level, programme (general and VET) and gender
<b>VET</b>	Share of VET enrolment in upper secondary education level (ISCED 3) out of total enrolment in ISCED 3
<b>PRI</b>	Private education as % of total by education level and programme (VET and general)
<b>GER</b>	Gross enrolment rates by education level and gender (%)
<b>EXP</b>	Public expenditure on education as % of GDP
<b>GOV</b>	Public expenditure on education as % of governmental expenditure
<b>STR</b>	Student/teacher ratio by education level
<b>GDP</b>	GDP per economic sector (%)
<b>PPP</b>	GDP per capita (PPP)
<b>POP</b>	Structure of population by age group (0–14,15–64,65+)
<b>HDI</b>	Human Development Index (score/rank)
<b>PIS</b>	Mean score of student performance on the reading scale (PISA)
<b>COM</b>	Global Competitiveness Index (score/rank)
<b>BUS</b>	Doing Business Index (score/rank)

**TABLE 3.2 SECONDARY ETF KEY INDICATORS FOR FUTURE DATA COLLECTIONS**

<b>Code</b>	<b>Secondary indicators</b>
<b>ACE</b>	Activity rates by education level, programme (general and VET) and gender (%)
<b>EME</b>	Employment rates by education level, programme (general and VET) and gender (%)
<b>UNP</b>	Unemployment rates by education level, programme (general and VET) and gender (%)
<b>YUP</b>	Youth unemployment rates (15–24) by education level, programme (general and VET) and gender (%)
<b>GRP</b>	Gross enrolment rates by education level, programme (general and VET) and gender (%)
<b>EXV</b>	Public expenditure on education by education level and programme (general and VET) (% of GDP)
<b>GEX</b>	Public expenditure on education by education level and programme (general and VET) (% of governmental expenditure)
<b>STV</b>	Student/teacher ratios by education level and programme (general and VET)
<b>STU</b>	Participation in VET by field of study (%)
<b>APP</b>	Share of apprentices in VET by gender and education level
<b>DRO</b>	Drop-out rates by programme (general and VET) and gender in ISCED 3 (%)
<b>COS</b>	Cost per student by programme (general and VET) in ISCED 3
<b>SAL</b>	Teacher salaries (% of average wage) by education level
<b>LLL</b>	Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by education level and gender
<b>ALM</b>	Expenditure on active labour market policies (ALMPs) (% of GDP)

**TABLE 3.3** gives an overview of the availability of the key indicators that are most readily available. Only 5 of the 20 indicators cannot be said to be readily available. Youth unemployment, education attainment of the population, public expenditure on education as a share of government expenditure, student/teacher ratios by education level and results from PISA can be obtained in fewer than half of the ETF partner countries. It must be added that the availability of PISA results naturally depends on countries having participated in PISA, and only 12 of the ETF partner countries are currently included. The number of countries participating in PISA continues to increase with each round, so the availability of these data may yet increase. However, it should be borne in mind that obtaining and analysing the results is a lengthy process.

**TABLE 3.3 PRINCIPAL ETF KEY INDICATORS – AVAILABILITY BY REGION**

Code	DCI (5 countries)	ENPI East (7 countries)	ENPI South (9 countries)	IPA (8 countries)	Total (29 countries)	
					Number	%
ACT	1	2	9	6	18	62.1
EMP	1	2	8	7	18	62.1
UNR	2	4	9	7	22	75.9
YUN	0	1	3	4	8	27.6
ATT	1	6	2	3	12	41.4
LIT	5	7	8	7	27	93.1
ENR	4	7	7	6	23	79.3
VET	4	7	7	6	23	79.3
PRI	0	3	7	6	16	55.2
GER	4	7	9	7	27	93.1
EXP	4	7	8	6	25	86.2
GOV	2	7	7	3	12	41.4
STR	3	1	2	6	12	41.4
GDP	5	7	8	8	28	96.6
PPP	5	7	8	7	27	93.1
POP	5	7	9	8	29	100.0
HDI	5	7	9	8	29	100.0
PIS	2	2	3	6	13	44.8
COM	4	6	8	7	25	86.2
BUS	4	7	9	8	28	96.6

*Note: Only exact indicators are counted; no partial or proxy indicators are included.*

The remaining 15 indicators are available for at least half of all the countries, and this coverage is achieved even when the harshest possible method of assessing availability is used, namely strict compliance with the definition. This assessment of availability ignores the time perspective and simply assesses whether the indicator was available at some point in the period covered by the ETF key indicators 2010 collection. This is because if the indicator has been available during a particular year, it can justifiably be expected that it will be possible to collect it in subsequent years, as data surveys do not generally deteriorate over time.

The situation is quite different for the secondary indicators listed in **TABLE 3.4**. These are of great interest to the ETF from the perspective of an analyst, but unfortunately they are not available in more than a third of the countries, at best. The availability does improve when viewed from a regional perspective, though there are a small number of exceptions: the student/teacher ratios by education programme are available in three out of five countries in the Central Asia region and in three out of eight in the Western Balkan and Turkey region; participation in VET by field of study is available in three out of seven countries in the eastern European region; and expenditure on active labour market measures is available in three out of seven countries in the eastern European region, and in four out of eight countries in the Western Balkan and Turkey region.

**TABLE 3.4 SECONDARY ETF KEY INDICATORS – AVAILABILITY BY REGION**

Code	DCI (5 countries)	ENPI East (7 countries)	ENPI South (9 countries)	IPA (8 countries)	Total (29 countries)	
					Number	%
ACE	1	1	2	2	6	20.7
EME	1	2	1	2	6	20.7
UNP	2	2	1	2	7	24.1
YUP	0	1	1	1	3	10.3
GRP	0	2	1	0	3	10.3
EXV	0	2	3	0	5	17.2
GEX	0	1	1	0	2	6.9
STV	3	1	2	3	9	31.0
STU	1	3	2	0	6	20.7
APP	0	0	0	0	0	0.0
DRO	0	1	2	1	4	13.8
COS	0	2	3	0	5	17.2
SAL	0	2	0	0	2	6.9
LLL	0	0	0	2	2	6.9
ALM	0	3	0	4	7	24.1

*Note: Only exact indicators are counted; no partial or proxy indicators are included.*

Several of the indicators on the original list of key indicators for 2010 were found in only a very few countries. The data needed to produce them are generally not available at country level, or, in some cases, come from LFS samples that do not allow a sufficient level of detail to be achieved. The problems mainly concern the limited information available on PESs and their levels of registered unemployment. Data on employment by age groups, economic sectors and status were part of the original key indicators list, but judging from the use of the available data, this kind of data does not merit inclusion in a regular data-collection process. Education data are also problematic. It is extremely difficult to obtain meaningful data on completion rates and on the share of VET graduates who continue to higher levels of education. These kinds of indicators can only be produced by information systems that follow individual students during and after their studies. Tracer studies can partially address this problem, but these are not carried out either systematically or regularly. Gathering data on teachers' income at different points in their careers and on their continuing training also proved to be problematic.

It is therefore recommended that the following indicators should not be included in future ETF key indicator collections:

- employment by economic sector;
- employment rates of older workers (55–64) by gender;
- employment by status (wage employment, self-employment, employer) by gender;
- youth unemployment rates (25–34) by education level and gender;
- education attainment of the population by income group and urban/rural;
- completion rate in VET and general by education level;
- percentage of VET pupils continuing to higher levels of education;
- graduates in mathematics, science and technology as a proportion of total graduates;
- teacher salaries after 15 years and at the end of the career compared to the entry level;
- share of teachers in teacher training per year by gender;
- (registered) unemployed (%) covered by ALMPs;
- number of registered unemployed;
- number of registered unemployed per member of staff in the PESs;
- number of registered unemployed per vacancy.

Based on current availability, future ETF key indicators should in principle be those listed as principal and secondary indicators in Tables 3.1 and 3.2. These indicators can be gathered or requested from partner countries, although their current availability means that only the principal indicators can be expected to be provided for a majority of countries. Nevertheless, the importance of the secondary indicators means that the ETF should work closely with partner countries towards increasing their availability and enhancing the general ability of partner countries to provide robust quantitative evidence.

## 4. KEY INDICATORS BY REGION: COVERAGE AND COMPLIANCE

Each region is discussed separately, so that conclusions can be drawn for each.

Indicators are not always completely in line with the preferred definition. However, in many cases it is possible to list either partial or proxy indicators. Partial indicators are understood as indicators covering only part of the phenomenon. For example, in the case of the indicator on employment rates by education level and gender, a partial indicator covers only one dimension, i.e. either employment rates by education level or employment rates by gender. Proxy indicators are understood as indirect indicators that give an approximation of a phenomenon in the absence of a direct indicator. One example of a proxy indicator is repetition rate instead of drop-out rate. A repeater is not the same as a drop-out; however, drop-out rates are likely to be higher in systems with high repetition rates, as repetition may be seen as an indication that the education system is failing to bring all students successfully to completion. Proxy indicators rely to a greater extent than partial indicators on assumptions of causality. Partial indicators are therefore generally preferable when it is impossible to gather the intended indicator.

In general, differences exist among the countries, mainly with respect to the range of indicators covered, their periodicity and their public availability. The series of tables below presents an overview of the available data by indicators for each region. Each table includes the name of the indicator, including partial and proxy indicators, and the most recent year for which each of them is available. For this and the following tables, shaded cells are those relating to data received directly from the national authorities upon request. Where a country has the ability to provide the exact indicator, it is often also possible to provide one or more of the partial or proxy indicators that are listed in these tables. However, no attempt has been made to include all the possible indicators that a country may be able to provide. The intention in the tables is to indicate the closest possible fit to the preferred indicator for each country. Another set of tables is provided for each region describing the compliance with the preferred definition.

### 4.1 CENTRAL ASIA<sup>3</sup>

Data for the Central Asia (DCI) region were gathered from international sources such as UIS, the World Bank and the International Labour Organisation (ILO) and from the public websites of the statistical offices and relevant ministries. Following this first phase of data collection, missing information was requested from the national authorities. However, only the National Statistical Committee of Kyrgyzstan responded and provided additional data on the indicators targeted.

There are two aspects of how well the collection of key indicators covers any region, namely the data coverage and the compliance of each indicator with the preferred definition. In the following sections these aspects are examined in greater detail. Non-compliance can, of course, be deduced from the mere inclusion here of partial and proxy indicators, as these are not needed where full compliance exists.

<sup>3</sup> Sources (applicable for all tables in this section): ILO Labour Statistics database; ILO KILM database; LFSs; National Statistical Committee of the Kyrgyz Republic; NSC, 'Women and men of the Kyrgyz Republic', Bishkek, 2009; OECD; Samsayev, I.M., 'Legal review and institutional set up of TVET in Kazakhstan', ETF publication, Almaty, 2009; State Committee on Statistics of Tajikistan; Tajikistan Living Standard Survey; The Agency of statistics of the Republic of Kazakhstan; The Agency of statistics of the Republic of Kazakhstan, 'Economic activity of Kazakhstan population 2005–2009', Astana city, 2010; UNDP, 'Education in Uzbekistan: Matching Supply and Demand', Tashkent, 2007/08; UNDP; UIS; World Bank – World Development Indicators; World Economic Forum.

### 4.1.1 Coverage of indicators

The coverage of labour market indicators is satisfactory, except in Uzbekistan and Turkmenistan, where the amount of information available is very limited and often outdated (see **TABLE 4.1**). General indicators referring to activity, employment and unemployment rates are covered. However, more detailed information on the education level, age and gender breakdowns are more difficult to obtain (and, are therefore replaced with several partial indicators). This is particularly the case for youth unemployment data and the education attainment breakdown. The only exception is Kyrgyzstan, where as a result of close collaboration with relevant authorities, most of the missing data have been obtained.

**TABLE 4.1 COVERAGE OF INDICATORS IN CENTRAL ASIA – LABOUR MARKET**

Code	Indicator	KZ	KG	TJ	TM	UZ
ACT.1	Activity rates by education level and gender (%)		08			
	Activity rates by age and gender (%)	08	08	08	08	08
	<i>Proportion of active population by education level and gender (%)</i>	08				
	<i>Activity rates by gender (%)</i>			07		
	<i>Activity rates by education level (%)</i>			07		
EM.1	Employment rates by education level and gender (%)		08			
	<i>Employment rates by education level (%)</i>	09				
	<i>Employment rates by gender (%)</i>	09		08	08	08
EM.2	Employment rates of older workers (55–64) by gender (%)		08			
	<i>Employment rates of older workers (55–64), total (%)</i>	09				
EM.3	Employment by employment status and gender	08	08	04		
EM.4	Employment by economic sector	08	08	08		99
UN.1	Unemployment rates by education level and gender (%)	09	08			
	<i>Unemployment rates by gender (%)</i>			04		
	<i>Unemployment rates, total (%)</i>					05
UN.2	Youth unemployment rates (15–24 and 25–34) by education level and gender (%)					
	<i>Youth unemployment rates (15–24 and 25–34) by education level (%)</i>		08			
	<i>Youth unemployment rates (15–24) by education level (%)</i>	09				
	<i>Youth unemployment rates (15–24) by gender (%)</i>	09				

Notes: Names of indicators in italics indicate proxy or partial indicator. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

With regard to the coverage of educational indicators (see **TABLES 4.2** and **4.3**), it can be concluded that general indicators exist on the education attainment of the population, literacy rates, and numbers of pupils at different education levels and programmes (to a lesser extent in Uzbekistan and Turkmenistan). Nevertheless, there is a lack of available information regarding the more specific indicators in all five countries, in particular indicators relating to VET, such as participation in VET by field of study, number of apprentices or students continuing into higher education. Moreover, there is no information on drop-out rates, and no detailed data on expenditure on education and the quality of education, including, for example, student/teacher ratios and teachers' training and salaries. For these indicators, only some data are available for Kazakhstan, Tajikistan and Kyrgyzstan, and this is mostly based on partial information.



**TABLE 4.2 COVERAGE OF INDICATORS IN CENTRAL ASIA – EDUCATION: ATTAINMENT AND ENROLMENT**

Code	Indicator	KZ	KG	TJ	TM	UZ
ATT.1	Education attainment of population (15+) by age and gender		<b>06</b>			
	<i>Education attainment of population (15+) by age</i>			07		
	<i>Education attainment of population (15+) by gender</i>	08		07		
ATT.2	Education attainment of population (15+) by rural/urban		<b>06</b>	<b>07</b>		
ATT.3	Education attainment of population (15+) by income group			<b>07</b>		
	<i>Education attainment of the heads of households (15+) by income group</i>		06			
ILL.1	Illiteracy/literacy rates by gender (%)	<b>08</b>	<b>08</b>	<b>08</b>	<b>07</b>	<b>00</b>
LLL.1	Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by gender					
LLL.2	Participation in lifelong learning by education level and gender					
ENR.1	Total number of pupils/students enrolled by education level, programme (VET and general) and gender	<b>09</b>	<b>08</b>	<b>08</b>		<b>08</b>
PRI.1	Private education as % of total by education level and programme (VET and general)					
	<i>Private education as % of total in ISCED 0–3</i>	09	08			
	<i>Private education as % of total in ISCED 3 by programme (VET and general)</i>			08		
ENR.2	Gross enrolment rates by education level, programme (VET and general) and gender (%)					
	<i>Gross enrolment rates by education level and gender (%)</i>	09	08	08		08
ENR.3	Participation in VET in % by field of study					<b>06</b>
APP.1	Percentage of apprentices in the VET system by gender and education level					
DRO.1	Drop-out rates in upper secondary (general and VET) by gender (%)					
	<i>Drop-out rates in total TVET (%)</i>	08				
	<i>Repeaters by gender in ISCED 1–3</i>					07
COM.1	Gross completion rate by education level and programme (VET and general) (%)					
	<i>Gross completion rate in ISCED 5A (%)</i>	09	08			06
	<i>Gross completion rate in primary education (%)</i>			08		
CON.1	Percentage of VET pupils who continue to higher levels of education					
GRA.1	Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)		<b>09</b>	<b>08</b>		<b>07</b>

Notes: Names of indicators in italics indicate proxy or partial indicators. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

**TABLE 4.3 COVERAGE OF INDICATORS IN CENTRAL ASIA – EDUCATION: EXPENDITURE AND TEACHERS**

Code	Indicator	KZ	KG	TJ	TM	UZ
EXP.1	Public expenditure on education by education level and programme (VET and general) as % of GDP					
	<i>Public expenditure on education (total) and VET as % of GDP</i>		08			
	<i>Public expenditure on education (total) as % of GDP</i>	08		07		05
	Public expenditure on education by education level and programme (VET and general) as % of public expenditure					
	<i>Public expenditure on education (total) and VET as % of public expenditure</i>		08			
	<i>Public expenditure on education (total) as % of public expenditure</i>			07		
	Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure					
	<i>Public expenditure on pre-primary, post-secondary and tertiary education as % of total educational expenditure</i>			08		
	<i>Public expenditure on VET as % of total educational expenditure</i>		08			
EXP.2	Cost per pupil by programme (VET and general) in ISCED 3					
	<i>Cost per pupil in tertiary education</i>			08		
TEA.1	Student/teacher ratios by education level and programme (VET and general)	09	09	08		
	<i>Student/teacher ratios in ISCED 0–3</i>					07
TEA.2	Share of teachers in teacher training per year by gender (%)					
	<i>Share of teachers in teacher training per year by gender in ISCED 0–3 (%)</i>		08			
	<i>Share of teachers in teacher training per year (%)</i>			08		
TEA.3	Teacher salaries as % of average wage			07		

Notes: Names of indicators in italics indicate proxy or partial indicators. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

The coverage of data in the section relating to PESs is very poor (see **TABLE 4.4**). The only information obtained refers to the number of registered unemployed people (with breakdowns by gender in Kazakhstan, and by education level, gender and age in Kyrgyzstan). Moreover, some additional information on the number of vacancies and active labour market participation are available in Tajikistan.

**TABLE 4.4 COVERAGE OF INDICATORS IN CENTRAL ASIA – PUBLIC EMPLOYMENT SERVICES**

Code	Indicator	KZ	KG	TJ	TM	UZ
PES.1	Expenditure on active labour market policies (ALMPs) as % of GDP					
	Expenditure on active labour market policies (ALMPs) as % of public expenditure					
PES.2	Percentage of registered unemployed population covered by ALMPs			08		
PES.3	Registered unemployed population by education level, age and gender					
	<i>Registered unemployed population by education level and gender</i>		09			
	<i>Registered unemployed population by age and gender</i>		09			
	<i>Registered unemployed population by gender</i>	08				
	<i>Registered unemployed population (total)</i>			07		05
PES.4	Number of staff in public employment services (PESs)					
PES.5	Number of vacancies			07		

Notes: Names of indicators in italics indicate proxy or partial indicators. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

The socioeconomic indicators and indexes selected have a high level of coverage in all five countries, relying mainly on international data sources (see **TABLE 4.5**). Focusing on the indexes covered, it can be seen that Turkmenistan is included only in the calculation of Human Development Index. In addition, the only countries participating in PISA are Kyrgyzstan and Kazakhstan.

**TABLE 4.5 COVERAGE OF INDICATORS IN CENTRAL ASIA – SOCIOECONOMIC CONTEXT**

Code	Indicator	KZ	KG	TJ	TM	UZ
ADD.1	GDP by economic sector (%)	08	08	08	08	08
ADD.2	GDP per capita in PPP	08	08	08	08	08
ADD.3	Dependency rates (%)	08	08	08	08	08
ADD.4	Mean score of student performance on the reading scale (PISA)	09	09			
ADD.5	Human Development Index	10	10	10	10	10
ADD.6	Global Competitiveness Index	10	10	10		10
ADD.7	Doing Business Index	09	09	09		09

*Note: Figures indicate the most recent year for which an indicator is available.*

Overall, it can be concluded that the availability of information in the Central Asia region is rather limited. The main general indicators are covered. However, a search for more specific and detailed information reveals a lack of indicators, especially those covering VET. The situation is particularly weak in Uzbekistan and Turkmenistan, where the public availability of statistical information is not as extensive as in the other countries of this region.

#### 4.1.2 Indicator compliance

The second aspect that needs to be analysed is the extent of compliance of the indicators with the standard definitions; this influences their cross-country comparability. The main issues here are the reference population used, the classifications employed and other problems relating to missing data, age groups etc. Again, five tables are presented, referring to the labour market, education (two tables), PESs and socioeconomic indicators.

Three main issues should be highlighted in relation to assessing the compliance of selected labour market indicators (see **TABLE 4.6**). First, when taking education attainment into account, comparability becomes very difficult owing to the absence of references to ISCED. A similar problem – a different classification used and a consequent difficulty with respect to comparability – can be found in the case of the employment rate by employment status in Tajikistan. Second, reference populations differ. In the Central Asian countries, the population aged 15+ is mostly used when calculating employment, unemployment and activity rates. The exception is Tajikistan: here, based on the available data, the reference population is limited to 14–64 years of age for activity rates, and 15–70 years of age for unemployment rates, which prevents meaningful comparisons between all the Central Asian countries. In addition, some groups are left out of the reference population entirely, such as members of the armed forces and conscripts in the case of Kazakhstan. Third, when providing figures for specific age groups, the age ranges often differ, as in the case of employment rate for older workers (Kazakhstan and Kyrgyzstan) and youth unemployment rate (Kyrgyzstan).

TABLE 4.6 COMPLIANCE OF INDICATORS IN CENTRAL ASIA – LABOUR MARKET

Code	Indicator	KZ	KG	TJ	TM	UZ
ACT.1	Activity rates by education level and gender (%)		15+ ISCED			
	<i>Proportion of active population by education level and gender (%)</i>	15+ POP				
	<i>Activity rates by gender (%)</i>			14-64		
	<i>Activity rates by education level (%)</i>			14-64 ISCED		
	Activity rates by age and gender (%)	15+ POP	15+	15+	15+	15+
EM.1	Employment rates by education level and gender (%)		15+ ISCED			
	<i>Employment rates by education level (%)</i>	15+ ISCED POP				
	<i>Employment rates by gender (%)</i>	15+ POP		15+	15+	15+
EM.2	Employment rates of older workers (55–64) by gender (%)		AGE			
	<i>Employment rates of older workers (55–64), total (%)</i>	AGE POP				
EM.3	Employment by employment status and gender	15+ POP	15+	15+ CLAS		
EM.4	Employment by economic sector	15+ POP ISIC, rev.3	15+ m.d. GCO	15+ SICNE		15+ ISIC, rev.2
UN.1	Unemployment rates by education level and gender (%)	ISCED	ISCED			
	<i>Unemployment rates by gender (%)</i>			15-70		
	<i>Unemployment rates, total (%)</i>					
UN.2	Youth unemployment rates (15–24 and 25–34) by education level and gender (%)					
	<i>Youth unemployment rates (15–24 and 25–34) by education level (%)</i>		AGE ISCED			
	<i>Youth unemployment rates (15–24) by education level (%)</i>	ISCED				
	<i>Youth unemployment rates (15–24) by gender (%)</i>					

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. POP: armed forces and conscripts are excluded from the reference population; ISCED: no reference to ISCED; AGE: different age groups used; m.d.: missing data for some economic sectors; CLAS: different classification of employment status used; 15+, 14–64, 15–70: reference population; ISIC, rev.3/rev.2: International Standard Industrial Classification of all Economic Activities, revision 3/revision 2; SICNE: Soviet Industrial Classification of National Economy; GCO: General Classifier of Occupations.

Two issues arise when evaluating educational indicators (see TABLES 4.7 and 4.8). First, as previously mentioned, the lack of reference to ISCED when using the education attainment breakdown represents a serious problem when comparing data from different countries, unless there exists a detailed knowledge of the education systems in the selected countries. Second, when referring to teacher training, the available data refer not only to in-service but also to pre-service training; this distorts the overall picture, since the primary interest is in the training of teachers who already teach.

**TABLE 4.7 COMPLIANCE OF INDICATORS IN CENTRAL ASIA – EDUCATION: ATTAINMENT AND ENROLMENT**

Code	Indicator	KZ	KG	TJ	TM	UZ
ATT.1	Education attainment of population (15+) by age and gender		ISCED			
	<i>Education attainment of population (15+) by age</i>			ISCED		
	<i>Education attainment of population (15+) by gender</i>			ISCED		
ATT.2	Education attainment of population (15+) by rural/urban		ISCED	ISCED		
ATT.3	Education attainment of population (15+) by income group			ISCED		
	<i>Education attainment of the heads of households (15+) by income group</i>		ISCED			
ILL.1	Illiteracy/literacy rates by gender (%)					
LLL.1	Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by gender					
LLL.2	Participation in lifelong learning by education level and gender					
ENR.1	Total number of pupils/students enrolled by education level, programme (VET and general) and gender					
PRI.1	Private education as % of total by education level and programme (VET and general)					
	<i>Private education as % of total in ISCED 0–3</i>					
	<i>Private education as % of total in ISCED 3 by programme (VET and general)</i>					
ENR.2	Gross enrolment rates by education level, programme (VET and general) and gender (%)					
	<i>Gross enrolment rates by education level and gender (%)</i>					
ENR.3	Participation in VET in % by field of study					
APP.1	Percentage of apprentices in the VET system by gender and education level					
DRO.1	Drop-out rates in upper secondary (general and VET) by gender (%)					
	<i>Drop-out rates in total TVET (%)</i>					
	<i>Repeaters by gender in ISCED 1–3</i>					
COM.1	Gross completion rate by education level and programme (VET and general) (%)					
	<i>Gross completion rate in ISCED 5A (%)</i>					
	<i>Gross completion rate in primary education (%)</i>					
CON.1	Percentage of VET pupils who continue to higher levels of education					
GRA.1	Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)					

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED.

**TABLE 4.8 COMPLIANCE OF INDICATORS IN CENTRAL ASIA – EDUCATION: EXPENDITURE AND TEACHERS**

Code	Indicator	KZ	KG	TJ	TM	UZ
EXP.1	Public expenditure on education by education level and programme (VET and general) as % of GDP					
	<i>Public expenditure on education (total) and VET as % of GDP</i>					
	<i>Public expenditure on education (total) as % of GDP</i>					
	Public expenditure on education by education level and programme (VET and general) as % of public expenditure					
	<i>Public expenditure on education (total) and VET as % of public expenditure</i>					
	<i>Public expenditure on education (total) as % of public expenditure</i>					
	Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure					
	<i>Public expenditure on pre-primary, post-secondary and tertiary education as % of total educational expenditure</i>					
	<i>Public expenditure on VET as % of total educational expenditure</i>					
EXP.2	Cost per pupil by programme (VET and general) in ISCED 3					
	<i>Cost per pupil in tertiary education</i>					
TEA.1	Student/teacher ratios by education level and programme (VET and general)	ISCED	ISCED m.d.			
	<i>Student/teacher ratios in ISCED 0–3</i>					
TEA.2	Share of teachers in teacher training per year by gender (%)					
	<i>Share of teachers in teacher training per year by gender in ISCED 0–3 (%)</i>		TRA			
	<i>Share of teachers in teacher training per year (%)</i>			TRA		
TEA.3	Teacher salaries as % of average wage					

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED; TRA: includes both pre-service and in-service training; m.d.: missing data.

**TABLES 4.9** and **4.10** show the PES and socioeconomic indicators, respectively. In addition to the issue of education classification previously discussed (here in the case of the number of registered unemployed people by education level and gender in Kyrgyzstan), the main problem relates to the population considered for the indicator showing the percentage of registered unemployed people covered by ALMPs in Tajikistan. The reference population is much wider, as those who are not registered as unemployed are also included.

**TABLE 4.9 COMPLIANCE OF INDICATORS IN CENTRAL ASIA – PUBLIC EMPLOYMENT SERVICES**

Code	Indicator	KZ	KG	TJ	TM	UZ
PES.1	Expenditure on active labour market policies (ALMPs) as % of GDP					
	Expenditure on active labour market policies (ALMPs) as % of public expenditure					
PES.2	Percentage of registered unemployed population covered by ALMPs			POP		
PES.3	Registered unemployed population by education level, age and gender					
	<i>Registered unemployed population by education level and gender</i>		ISCED			
	<i>Registered unemployed population by age and gender</i>					
	<i>Registered unemployed population by gender</i>					
	<i>Registered unemployed population (total)</i>					
PES.4	Number of staff in public employment services (PESs)					
PES.5	Number of vacancies					

*Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. POP: the population of registered unemployed includes not only those who are searching for work, but also those who are not officially registered as unemployed; ISCED: no reference to ISCED.*

**TABLE 4.10 COMPLIANCE OF INDICATORS IN CENTRAL ASIA – SOCIOECONOMIC CONTEXT**

Code	Indicator	KZ	KG	TJ	TM	UZ
ADD.1	GDP by economic sector (%)					
ADD.2	GDP per capita in PPP					
ADD.3	Dependency rates (%)					
ADD.4	Mean score of student performance on the reading scale (PISA)					
ADD.5	Human Development Index					
ADD.6	Global Competitiveness Index					
ADD.7	Doing Business Index					

*Note: Shaded cells indicate the data availability.*

To summarise, there are two main issues that need to be taken into account when assessing and comparing the relevant data in the Central Asian countries. First, the fact that ISCED is used in very few countries makes it difficult to compare the countries with one another. Consequently, detailed information on the educational structures needs to be available in order to correctly identify and classify each education level. Second, close attention must be paid to the reference population used. The age specifications and the inclusion/exclusion of specific population groups must be taken into account, since these can have serious consequences for interpretations based on the available data.

In order to improve the coverage and compliance of data in the Central Asia region, the real availability of missing information should be investigated, primarily through increased cooperation with the relevant data providers, such as ministries and statistical offices. At the same time, awareness should be raised with respect to the importance of evidence provision and the comparability issue.

## 4.2 SOUTHERN AND EASTERN MEDITERRANEAN<sup>4</sup>

The data for the southern and eastern Mediterranean (ENPI South) region were collected from international data sources such as the World Bank, the ILO and UIS, and from the websites and publicly available documents from statistical offices and relevant ministries. In addition, several data have been gathered from the MEDA Education and Training for Employment database created by the ETF, or received directly from the national authorities, as in the case of Israel, Morocco, Syria and Egypt.

This section is divided into two main parts, focusing on coverage and compliance of the data collected for four main areas of interest, namely the labour market, education, PESs and socioeconomic background.

### 4.2.1 Coverage of indicators

The coverage of labour market data is highly comprehensive and up-to-date, covering activity, employment and unemployment rates for most of the countries (see **TABLE 4.11**). The only problematic indicator is the one for youth unemployment by education level and gender, which is only available for three countries, namely Israel, Morocco and the occupied Palestinian territory. In the remaining countries the educational dimension is missing, and in Lebanon only the proportions of young people unemployed by gender could be obtained.

**TABLE 4.11 COVERAGE OF INDICATORS IN SOUTHERN AND EASTERN MEDITERRANEAN – LABOUR MARKET**

Code	Indicator	DZ	EG	IL	JO	LB	MA	OPT	SY	TN
ACT.1	Activity rates by education level and gender (%)	07	07	09	08	07	09	09	09	07
	Activity rates by age and gender (%)	07	07	09	08	07	09	09	09	07
EM.1	Employment rates by education level and gender	07	07	09	08	07	09		09	07
EM.2	Employment rates of older workers (55–64) by gender (%)	07	07	09	07	07	09		09	07
EM.3	Employment by employment status and gender	09	09	09		07	09	09	09	03
EM.4	Employment by economic sector	07	09	09	03	07	09	09	09	07
UN.1	Unemployment rates by education level and gender (%)	07	07	09	08		09	09	09	07
	<i>Proportion of unemployed population by education level and gender (%)</i>					07				
UN.2	Youth unemployment rates (15–24 and 25–34) by education level and gender (%)			09			09	09		
	<i>Youth unemployment rates (15–24 and 25–34) by gender (%)</i>	07	07		07				09	07
	<i>Proportion of youth unemployed population (15–24 and 25–34) by gender (%)</i>					07				

Notes: Names of indicators in italics indicate proxy or partial indicator. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

The data collected on the educational dimension are rather poor in all the countries except Israel (see **TABLES 4.12** and **4.13**). Despite the existence of general indicators on education attainment, several gaps exist. In particular, data are missing for the indicators on lifelong learning (except for Tunisia and Israel) and for vocational education, including enrolment rates (except for Israel), number of apprentices (available only for Israel and Egypt), VET participation by field of study (except for the occupied Palestinian territory and Syria), number of VET students continuing with higher education (a partial indicator available for Egypt), drop-out rates (available only for Israel) and completion rates (only partial information available for most of the countries). In addition, data on educational expenditure and on quality of education are very scarce and do

<sup>4</sup> Sources (applicable for all tables in this section): Central Agency for Public Mobilization and Statistics, Egypt; Central Agency for Public Mobilization and Statistics, 'Statistical Yearbook', Cairo, 2009; Central Agency for Public Mobilization and Statistics, 'Quarterly Bulletin Labour Force Survey', third quarter (July–September 2009), Cairo, 2009; Central Bureau of Statistics, Syrian Arab Republic, 'Statistical Yearbook', Damascus, 2009; ETF–MEDA Education and Training for Employment database; Haut Commissariat au Plans, Morocco; ILO, Summary of International Public Employment Services (PES), Administrative Statistics, 2004; ILO Labour Statistics database; ILO KILM database; LFSs; Ministry of Education, OPT; Ministry of Education, Tunisia; Ministry of Labour, OPT; National Statistical Institute of the Republic of Tunisia; OECD; Palestinian Central Bureau of Statistics, Labour Force Survey 2000–09 Database, Ramallah, 2010; Palestinian Central Bureau of Statistics, Revised Estimate Based on the Final Results of Population, Housing and Establishment Census 2007, Ramallah, 2010; State Statistical Office of Israel; State Statistical Office of the Republic of Algeria; UNDP; UIS; World Bank – World Development Indicators; World Economic Forum.

not allow a comprehensive picture to be gained of the situation in the region. In order to compensate for such a shortage of information, several partial and proxy indicators are presented in the tables below. In most cases the existing data provide only a partial picture, referring only to a limited number of education levels (APP.1, COM.1, DRO.1, PRI.1, EXP.1, TEA.1 and TEA.2) or omitting some required dimensions, such as breakdown by education programme (ENR.1, ENR.2, EXP.1 and TEA.1), breakdown by education level (LLL.2, EXP.1), breakdown by age (ATT.1) or breakdown by gender (TEA.2). Finally, on occasion it was necessary to rely only on proxy indicators, such as in the case of drop-out rates, where only the numbers of repeaters were available for some of the countries (Algeria, Egypt, Jordan and Lebanon).

**TABLE 4.12 COVERAGE OF INDICATORS IN SOUTHERN AND EASTERN MEDITERRANEAN – EDUCATION: ATTAINMENT AND ENROLMENT**

Code	Indicator	DZ	EG	IL	JO	LB	MA	OPT	SY	TN
ATT.1	Education attainment of population (15+) by age and gender			09				09		
	<i>Education attainment of population (15+) by gender</i>	07	07			07			09	07
ATT.2	Education attainment of population (15+) by rural/urban		06	09						
	<i>Education attainment of population (15+) by rural/urban (share)</i>							09	09	
ATT.3	Education attainment of population (15+) by income group			08						
ILL.1	Illiteracy/literacy rates by gender (%)	07	06	09	07	07	09	09		08
LLL.1	Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by gender			09						
LLL.2	Participation in lifelong learning by education level and gender									
	<i>Participation in lifelong learning by gender</i>									07
ENR.1	<i>Structure of the labour force by participation in education, gender and education attainment</i>			09						
	Total number of pupils/students enrolled by education level, programme (VET and general) and gender	08	08	09	07	08	08			07
PRI.1	<i>Total number of pupils/students enrolled by education level and gender</i>		09						08	
	Private education as % of total by education level and programme (VET and general)		04		07	08	08		08	07
ENR.2	<i>Private education as % of enrolment in pre-primary education</i>			08						
	Gross enrolment rates by education level, programme (VET and general) and gender (%)			09						
ENR.3	<i>Gross enrolment rates by education level and gender (%)</i>	07	07		08	09	08	09	09	08
	Participation in VET in % by field of study							09	09	
APP.1	<i>Participation in VET in %</i>						07			
	Percentage of apprentices in the VET system by gender and education level									
	<i>Percentage of apprentices in the VET system by gender in ISCED 2+3</i>			09						
DRO.1	<i>Percentage of apprentices in the TVET system</i>		07							
	<i>Percentage of apprentices in the VET system in ISCED 3+4</i>									08
	Drop-out rates in upper secondary (general and VET) by gender (%)			09					08	
	<i>Drop-out rates in primary and preparatory education (%)</i>		09							
COM.1	<i>Repeaters by gender in ISCED 1</i>		07		07					
	<i>Repeaters by gender in ISCED 1+2</i>	07		07		08				
	<i>Repeaters by gender in ISCED 2+3</i>		04		05					
	Gross completion rate by education level and programme (VET and general) (%)								08	
	<i>Gross completion rate by programme (VET and general)</i>									
CON.1	<i>Gross completion rate in ISCED 5A (%)</i>			07	07	08	08			
	<i>Gross completion rate in ISCED 3 (%)</i>			09						
GRA.1	<i>Graduates by education level</i>								08	
	Percentage of VET pupils who continue to higher levels of education									
	<i>Number of students in technical education who enter governmental universities</i>		09							
GRA.1	Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)		07	09						
	<i>Graduates in mathematics as % of total graduates (ISCED 5)</i>									07
	<i>Graduates in science as % of total graduates by gender (ISCED 5+6)</i>	07			07	08			08	

Notes: Names of indicators in italics indicate proxy or partial indicator. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.



**TABLE 4.13 COVERAGE OF INDICATORS IN SOUTHERN AND EASTERN MEDITERRANEAN – EDUCATION: EXPENDITURE AND TEACHERS**

Code	Indicator	DZ	EG	IL	JO	LB	MA	OPT	SY	TN	
EXP.1	Public expenditure on education by education level and programme (VET and general) as % of GDP		08	07	07						
	<i>Public expenditure on education as % of GDP by education level</i>					05					
	<i>Expenditure on education as % of GDP</i>	08					06		07	08	
	<i>Public expenditure on VET as % of GDP</i>						05				
	<i>Public expenditure on VET and general education as % of GDP</i>									08	
	<i>Public expenditure on education as % of GDP in ISCED 3 and 5+6</i>									08	
	Public expenditure on education by education level and programme (VET and general) as % of public expenditure			07							
	<i>Public expenditure on education as % of government expenditure</i>	08	08			08	08		08	08	
	<i>Public expenditure on VET and general education as % of government expenditure</i>									08	
	Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure			07							
EXP.2	Cost per pupil by programme (general and VET) in ISCED 3		09	06	05						
	<i>Cost per pupil by programme (general and VET) in ISCED 3–5</i>									07	
	<i>Cost per pupil in VET in ISCED 3</i>						08				
TEA.1	Student/teacher ratios by education level and programme (VET and general)		06							07	
	<i>Student/teacher ratios by education level</i>		09								
	<i>Pupil/teacher ratios in pre-school, primary and secondary school</i>	08			03		08		08		
	<i>Pupil/teacher ratios in primary and secondary school</i>			07		08					
	<i>Student/teacher ratios in VET and general education</i>							08			
	<i>Student/teacher ratios in VET</i>								08		
TEA.2	Share of teachers in teacher training per year by gender (%)					08					
	<i>Number of teachers in teacher training by education level</i>		09								
	<i>Share of teachers in teacher training by gender in ISCED 1 (%)</i>	06					08				
TEA.3	Teacher salaries as % of average wage										

Notes: Names of indicators in italics indicate proxy or partial indicator. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

Data on PES indicators are almost completely missing except for some information on the number of registered unemployed people and the number of staff and vacancies in the occupied Palestinian territory, Tunisia and Algeria (see **TABLE 4.14**). On the other hand, data referring to the socioeconomic context can be obtained for most of the countries (see **TABLE 4.15**). The only exception is the PISA survey, which is available only for three countries (Israel, Jordan and Tunisia).

**TABLE 4.14 COVERAGE OF INDICATORS IN SOUTHERN AND EASTERN MEDITERRANEAN – PUBLIC EMPLOYMENT SERVICES**

Code	Indicator	DZ	EG	IL	JO	LB	MA	OPT	SY	TN
PES.1	Expenditure on active labour market policies (ALMPs) as % of GDP									
	Expenditure on active labour market policies (ALMPs) as % of government expenditure									
PES.2	Percentage of registered unemployed population covered by ALMPs									
PES.3	Registered unemployed population by education level, age and gender									
	<i>Registered unemployed population by gender</i>									03
	<i>Registered unemployed population</i>							09		
PES.4	Number of staff in public employment services (PESs)	03						09		03
PES.5	Number of vacancies							09		

Notes: Names of indicators in italics indicate proxy or partial indicators. Figures indicate the most recent year for which an indicator is available.

**TABLE 4.15 COVERAGE OF INDICATORS IN SOUTHERN AND EASTERN MEDITERRANEAN – SOCIOECONOMIC CONTEXT**

Code	Indicator	DZ	EG	IL	JO	LB	MA	OPT	SY	TN
ADD.1	GDP by economic sector (%)	08	08		08	08	08	09	08	08
ADD.2	GDP per capita in PPP	09	09	09	09	09	09		09	09
ADD.3	Dependency rates (%)	08	08	08	08	08	08	09	09	08
ADD.4	Mean score of student performance on the reading scale (PISA)			09	09					09
ADD.5	Human Development Index	10	10	10	10	08	10	08	10	10
ADD.6	Global Competitiveness Index	10	10	10	10	10	10		10	10
ADD.7	Doing Business Index	09	09	09	09	09	09	09	09	09

Note: Figures indicate the most recent year for which an indicator is available.

In conclusion, the coverage of these indicators is not comprehensive. Despite having a large amount of up-to-date data for labour market and socioeconomic indicators, there is a serious shortage of information on the educational dimension and the PESs.

#### 4.2.2 Indicator compliance

In this section the compliance with standard definitions of labour market, education, PES and socioeconomic indicators is discussed. **TABLE 4.16**, which assesses labour market indicators, reveals two main problems. First, Syria, Jordan and partly Algeria and Egypt define the working-age population as the population aged 15 years and over, unlike the remaining countries, which refer to the population aged 15–64 years. This could lead to an underestimation of final rates in the case of the countries mentioned when making a comparison in the region. Second, the use of country-specific names for education levels rather than ISCED terms in Jordan and Syria makes it difficult to ensure the comparability of the countries when the educational dimension is included. This also applies to the data on employment by economic sector, where different classifications are used throughout the region. References are made in Table 4.16 to the specific classification. This issue needs to be taken into account before any conclusions are drawn on the data available.

**TABLE 4.16 COMPLIANCE OF INDICATORS IN SOUTHERN AND EASTERN MEDITERRANEAN – LABOUR MARKET**

Code	Indicator	DZ	EG	IL	JO	LB	MA	OPT	SY	TN
ACT.1	Activity rates by education level and gender (%)	15+			15+ ISCED				15+ ISCED	
	Activity rates by age and gender (%)	15+			15+				15+	
EM.1	Employment rates by education level and gender (%)				15+ ISCED		15–59		15+ ISCED	
EM.2	Employment rates of older workers (55–64) by gender (%)									
EM.3	Employment by employment status and gender		15+			15+			15+	15+
EM.4	Employment by economic sector	NACE rev.1	15+	ISIC rev.3.1	NACE rev.1 15+	NACE rev.1		NACE rev.2	15+	NACE rev.1
UN.1	Unemployment rates by education level and gender (%)			15–64	ISCED			15–64	ISCED	
	<i>Proportion of unemployed population by education level and gender (%)</i>									
UN.2	Youth unemployment rates (15–24 and 25–34) by education level and gender (%)									
	<i>Youth unemployment rates (15–24 and 25–34) by gender (%)</i>									
	<i>Proportion of youth unemployed population (15–24 and 25–34) by gender (%)</i>									

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED; 15+, 15–64, 15–59: reference population; NACE rev.1/rev.2: Classification of Economic Activities in the European Community, revision 1/revision 2; ISIC rev.3.1: International Standard Industrial Classification of all Economic Activities, revision 3.1.

In a similar situation to the findings for labour market indicators, **TABLES 4.17** and **4.18** show that education data in Syria and Egypt do not refer to ISCED, making cross-country comparisons rather difficult. Furthermore, data are often not complete, and data by education level are missing. Finally, the data on teacher training include not only in-service training, which is the main focus of interest, but also pre-service training, overestimating the final values.



COM.1	Gross completion rate by education level and programme (VET and general) (%)									
	<i>Gross completion rate by programme (VET and general) (%)</i>									
	<i>Gross completion rate in ISCED 5A (%)</i>									
	<i>Gross completion rate in ISCED 3 (%)</i>									
	<i>Graduates by education level</i>									ISCED
CON.1	Percentage of VET pupils who continue to higher levels of education									
	<i>Number of students in technical education who enter governmental universities</i>		ISCED							
GRA.1	Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)									
	<i>Graduates in mathematics as % of total graduates (ISCED 5)</i>									
	<i>Graduates in science as % of total graduates by gender (ISCED 5+6)</i>								ISCED	

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED; m.d.: missing data for some education levels; 10+, 15+, 15–64: reference population.

**TABLE 4.18 COMPLIANCE OF INDICATORS IN SOUTHERN AND EASTERN MEDITERRANEAN – EDUCATION: EXPENDITURE AND TEACHERS**

Code	Indicator	DZ	EG	IL	JO	LB	MA	OPT	SY	TN
EXP.1	Public expenditure on education by education level and programme (VET and general) as % of GDP		ISCED							
	<i>Public expenditure on education as % of GDP by education level</i>									
	<i>Expenditure on education as % of GDP</i>									
	<i>Public expenditure on VET as % of GDP</i>									
	<i>Public expenditure on VET and general education as % of GDP</i>									
	<i>Public expenditure on education as % of GDP in ISCED 3 and 5+6</i>									
	Public expenditure on education by education level and programme (VET and general) as % of public expenditure									
	<i>Public expenditure on education as % of government expenditure</i>									
	<i>Public expenditure on VET and general education as % of government expenditure</i>									
	Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure									
EXP.2	Cost per pupil by programme (general and VET) in ISCED 3		ISCED							
	<i>Cost per pupil by programme (general and VET) in ISCED 3–5</i>									
	<i>Cost per pupil in VET in ISCED 3</i>									
TEA.1	Student/teacher ratios by education level and programme (VET and general)		m.d.							
	<i>Student/teacher ratios by education level</i>		ISCED							
	<i>Pupil/teacher ratios in pre-school, primary and secondary school</i>	m.d.					m.d.			
	<i>Pupil/teacher ratios in primary and secondary school</i>									
	<i>Student/teacher ratios in VET and general education</i>									
	<i>Student/teacher ratios in VET</i>								ISCED	
TEA.2	Share of teachers in teacher training per year by gender (%)					TRA				
	<i>Number of teachers in teacher training by education level</i>		ISCED*							
	<i>Share of teachers in teacher training by gender in ISCED 1 (%)</i>	TRA					TRA			
TEA.3	Teacher salaries as % of average wage									

(\*) No information about the nature of training (whether in-service training only, or also pre-service training).

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED; m.d.: refers to missing data for some education levels; TRA: both pre-service and in-service training are included.

No significant problems were encountered with the PES or socioeconomic indicators (see **TABLES 4.19** and **4.20** respectively). This is mainly due to the lack of available data in the case of the first, and the use of international sources in the case of the second. When data are available from international sources, it is assumed that there are no significant problems of harmonisation and comparability of data (unless otherwise clearly specified).

**TABLE 4.19 COMPLIANCE OF INDICATORS IN SOUTHERN AND EASTERN MEDITERRANEAN – PUBLIC EMPLOYMENT SERVICES**

Code	Indicator	DZ	EG	IL	JO	LB	MA	OPT	SY	TN
PES.1	Expenditure on active labour market policies (ALMPs) as % of GDP									
	Expenditure on active labour market policies (ALMPs) as % of government expenditure									
PES.2	Percentage of registered unemployed population covered by ALMPs									
PES.3	Registered unemployed population by education level, age and gender									
	<i>Registered unemployed population by gender</i>									18+
	<i>Registered unemployed population</i>									
PES.4	Number of staff in public employment services (PESs)									
PES.5	Number of vacancies									

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. 18+: reference population.

**TABLE 4.20 COMPLIANCE OF INDICATORS IN SOUTHERN AND EASTERN MEDITERRANEAN – SOCIOECONOMIC CONTEXT**

Code	Indicator	DZ	EG	IL	JO	LB	MA	OPT	SY	TN
ADD.1	GDP by economic sector (%)									
ADD.2	GDP per capita in PPP									
ADD.3	Dependency rates (%)									
ADD.4	Mean score of student performance on the reading scale (PISA)									
ADD.5	Human Development Index									
ADD.6	Global Competitiveness Index									
ADD.7	Doing Business Index									

Note: Shaded cells indicate the data availability.

In a similar situation to that in the Central Asia region, the two main problems encountered with respect to the compliance of indicators in the southern and eastern Mediterranean region are the use of different classifications of education and economic activities and the use of different reference populations, mainly in the case of labour market and educational indicators. Both of these issues hamper the possibility of cross-country comparison.

It can be concluded increasing the data coverage and improving the data compliance in the southern and eastern Mediterranean region would require the enhancement of cooperation between ETF and the national data providers in order to investigate the potential availability of missing information and/or to provide support in the creation of (comparable) evidence.

## 4.3 EASTERN EUROPE<sup>5</sup>

The collected data for the eastern European (ENPI East) region are based on a mix of information from public sources, including international databases and publicly available data from statistical offices, and data provided directly by countries. Only in the case of the Russian Federation and Moldova were no country data requested.

This section discusses two aspects of the data collected, coverage and compliance, dividing them into four thematic fields, namely the labour market, education, PESs and socioeconomic background.

### 4.3.1 Coverage of indicators

The coverage of labour market indicators is fairly comprehensive (see **TABLE 4.21**). Nevertheless, one gap remains, namely the lack of information by education level, with only Armenia, and partly Moldova, Georgia and the Russian Federation, providing activity, employment and (youth) unemployment rates by education attainment level. Consequently, it is difficult to assess and fully compare the returns on education on the labour market for all the countries. To compensate for this problem, some proxy or partial indicators can be used. In particular, the proportions of the labour force can be calculated not only for different age groups, but also for different education levels (available for Azerbaijan, Ukraine and partly for Georgia, Belarus, Moldova and the Russian Federation). However, it is difficult to use such data for comparative purposes.

**TABLE 4.21 COVERAGE OF INDICATORS IN EASTERN EUROPE – LABOUR MARKET**

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
ACT.1	Activity rates by education level and gender (%)	08				08		
	<i>Proportion of active population by education level and gender</i>		08		08		08	07
	Activity rates by age and gender (%)	08	08	07		08	08	08
	<i>Proportion of active population by age and gender</i>				08			
EM.1	Employment rates by education level and gender (%)	08			08			
	<i>Proportion of employed population by education level and gender</i>					08	08	07
	<i>Employment rates by gender (%)</i>		08	08		08	08	08
EM.2	Employment rates of older workers (55–64) by gender (%)	08			08	08	08	08
	<i>Proportion of employed older workers by gender</i>		07	08				
EM.3	Employment by employment status and gender	08	08	99	08	08	08	07
EM.4	Employment by economic sector	08	08	08	07	08	08	07
UN.1	Unemployment rates by education level and gender (%)	08			08	08	07	
	<i>Proportion of unemployed population by education level and gender</i>		07	07				07
	<i>Unemployment rates by gender (%)</i>		07	07				08
UN.2	Youth unemployment rates (15–24 and 25–34) by education level and gender (%)	08						
	<i>Youth unemployment rates (15–24 and 25–34) by gender (%)</i>		07	07	08	08	07	08

Notes: Names of indicators in italics indicate proxy or partial indicators. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

An assessment of the coverage of educational indicators (see **TABLES 4.22** and **4.23**) highlights several problems. First, some data are not up-to-date, in particular the indicators referring to the education attainment of the population in Belarus, Georgia, Armenia and the Russian Federation. Second, data are missing for several indicators, such as those on lifelong learning (except for Moldova) and VET education, including the gross enrolment rates (except

<sup>5</sup> Sources: Federal State Statistics Service of Russia; ILO KILM database; ILO Labour Statistics database; Kuddo, A., 'Employment Services and Active Labour Market Programs in Eastern European and Central Asian Countries', Social protection and labour discussion paper, No. 918, World Bank, 2009; LFSs; Ministry of Education and Science of Georgia; Ministry of Finance of Armenia; Ministry of Finance of Azerbaijan; Ministry of Finance of Moldova; National accounts of Moldova; National Bureau of Statistics of Moldova; National statistical committee of the Republic of Belarus (2000–01, 2004, 2006 and 2008), 'Labour and employment in Belarus', Minsk; National Statistical Office of Georgia; National Statistical Service of the Republic of Armenia; OECD; State Employment Agency of Armenia; Statistical Office of Belarus, Statistical yearbook, Minsk, 2009; State Statistics Committee of Ukraine; State Statistical Office of Azerbaijan; State Statistical Office of Belarus; UNDP; UNECE Statistical Division Database; UIS; World Bank – World Development Indicators; World Economic Forum.



for Armenia and Georgia), continuing education and apprentices. Third, the coverage of several indicators is limited: these include drop-out rates (available only for Armenia and partly for Georgia), completion rates (available only for Armenia and partly for Azerbaijan, Belarus and the Russian Federation), participation in VET by field of study (except for Armenia, Azerbaijan and Georgia), expenditure on education by education level and programme (except for Armenia and Belarus) and the quality of education (mostly partial data are available for most of the countries). Instead, several proxy and partial indicators for some countries are presented (see below) providing information for only a limited number of education levels (PRI.1, ENR.3, COM.1, EXP.1, EXP.2, TEA.1 and TEA.2) or excluding some of the requested dimensions, such as gender (ATT.1), education levels (EXP.1 and TEA.2) and education programmes (ENR.2 and EXP.1). For some indicators only proxy data could be obtained; for example, for drop-out rates, only information on the number of repeaters and early school leavers is provided for Moldova, the Russian Federation, Azerbaijan and Belarus. Another example is the case of education attainment by income groups in Moldova, where only data on the education attainment of the heads of households by income groups were available.

**TABLE 4.22 COVERAGE OF INDICATORS IN EASTERN EUROPE – EDUCATION: ATTAINMENT AND ENROLMENT**

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
ATT.1	Education attainment of population (15+) by age and gender	00	07		02	08	02	07
	<i>Education attainment of population (15+) by age</i>			99				
ATT.2	Education attainment of population (15+) by rural/urban	00				08		
ATT.3	Education attainment of population (15+) by income group							
	<i>Education attainment of the heads of households (15+) by income group</i>					08		
ILL.1	Illiteracy/literacy rates by gender (%)	07	08	07	02	07	07	07
LLL.1	Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by gender							
LLL.2	Participation in lifelong learning by education level and gender							
	<i>Participation in lifelong learning by education level</i>					08		
	<i>Participation in lifelong learning by gender</i>					08		
ENR.1	Total number of pupils/students enrolled by education level, programme (VET and general) and gender	08	08	08	08	08	08	08
PRI.1	Private education as % of total by education level and programme (VET and general)	09			09	07		
	<i>Private education as % of total by education level (ISCED 0–4) and programme (VET and general)</i>		08				07	
	<i>Private education as % of total in ISCED 0</i>			07				
	<i>Private education as % of total by education level (ISCED 0–3)</i>							08
ENR.2	Gross enrolment rates by education level, programme (VET and general) and gender (%)	09			08			
	<i>Gross enrolment rates by education level and gender (%)</i>		08	08		08	08	08
ENR.3	Participation in VET in % by field of study	08	08		08			
	<i>Participation in ISCED 4 in % by field of study</i>			05				
	<i>Graduation from VET in % by field of study</i>					05		
APP.1	Percentage of apprentices in the VET system by gender and education level							
DRO.1	Drop-out rates in upper secondary (general and VET) by gender (%)	09						
	<i>Drop-out rates in upper secondary general education by gender (%)</i>				08			
	<i>Early school leavers by gender (%)</i>					08		
	<i>Repeaters by gender in ISCED 1–3</i>		08	08			07	
COM.1	Gross completion rate by education level and programme (VET and general) (%)	09						
	<i>Gross completion rate in ISCED 5A (%)</i>		08	08			07	
	<i>Graduates by education level</i>					08		
CON.1	Percentage of VET pupils who continue to higher levels of education							
GRA.1	Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)	09	08	08	09	06	07	08

Notes: Names of indicators in italics indicate proxy or partial indicators. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

**TABLE 4.23 COVERAGE OF INDICATORS IN EASTERN EUROPE – EDUCATION: EXPENDITURE AND TEACHERS**

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
EXP.1	Public expenditure on education by education level and programme (VET and general) as % of GDP	09		06				
	<i>Public expenditure on education by education level as % of GDP</i>		05					07
	<i>Public expenditure on education – total, ISCED 0 and ISCED 5+6 as % of GDP</i>						06	
	<i>Public expenditure on education (total) as % of GDP</i>		07		05	08		
	Public expenditure on education by education level and programme (VET and general) as % of public expenditure	09						
	<i>Public expenditure on education (total) as % of public expenditure</i>		07	08	09	08	04	07
	Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure	09						
	<i>Public expenditure on total VET as % of total educational expenditure</i>		07	06				
EXP.2	Cost per pupil by programme (VET and general) in ISCED 3	09				08		
	<i>Cost per pupil by programme in ISCED 5+6</i>							07
TEA.1	Student/teacher ratios by education level and programme (VET and general)	09						
	<i>Student/teacher ratios in VET</i>		08					
	<i>Student/teacher ratios in ISCED 0–3</i>			08	09	08		08
	<i>Student/teacher ratios in ISCED 0+1</i>		08				07	
TEA.2	Share of teachers in teacher training per year by gender (%)							
	<i>Share of teachers in teacher training per year by gender in ISCED 0–3 (%)</i>				08			
	<i>Share of teachers in teacher training per year by gender in ISCED 1 (%)</i>	05						
	<i>Share of teachers in teacher training per year by gender in ISCED 0+1 (%)</i>		08					
	<i>Share of teachers in teacher training per year by gender in ISCED 0 (%)</i>					08		
	<i>Share of teachers in teacher training per year (%)</i>			08				
	<i>Share of teachers in teacher training per year in primary education (%)</i>							08
TEA.3	Teacher salaries as % of average wage	08				08		

Notes: Names of indicators in italics indicate proxy or partial indicators. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

The PES indicators are well covered in Armenia, Azerbaijan, Belarus and Ukraine, including information not only on those registered as unemployed, but also on ALMP expenditure, and numbers of vacancies and staff in the PESs (see TABLE 4.24). In the other countries, the information obtained is partial, or is not available, as in the case of Georgia.

**TABLE 4.24 COVERAGE OF INDICATORS IN EASTERN EUROPE – PUBLIC EMPLOYMENT SERVICES**

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
PES.1	Expenditure on active labour market policies (ALMPs) as % of GDP	09		08				08
	Expenditure on active labour market policies (ALMPs) as % of public expenditure	09						
PES.2	Percentage of registered unemployed population covered by ALMPs	09	08	08				08
PES.3	Registered unemployed population by education level, age and gender							
	<i>Registered unemployed population by education level and gender</i>		08	08			08	
	<i>Registered unemployed population by age and gender</i>		08	08				
	<i>Registered unemployed population by education level</i>	09						
	<i>Registered unemployed population by gender</i>					07		08
	<i>Registered unemployed population (total)</i>							
PES.4	Number of staff in public employment services (PESs)	09	08	08		08		
PES.5	Number of vacancies	09	08	08				08

Notes: Names of indicators in italics indicate proxy or partial indicators. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

The data relating to the socioeconomic context (see **TABLE 4.25**) present a very comprehensive picture. Only Belarus, which does not participate in the PISA survey or in the World Economic Forum's Global Competitiveness Assessment, has more than one gap. The other countries that do not take part in the PISA survey are Armenia, Georgia, Moldova and Ukraine.

**TABLE 4.25 COVERAGE OF INDICATORS IN EASTERN EUROPE – SOCIOECONOMIC CONTEXT**

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
ADD.1	GDP by economic sector (%)	09	08	08	08	08	07	08
ADD.2	GDP per capita in PPP	09	09	09	09	09	09	09
ADD.3	Dependency rates (%)	08	09	08	08	08	08	09
ADD.4	Mean score of student performance on the reading scale (PISA)		09				09	
ADD.5	Human Development Index	10	10	10	10	10	10	10
ADD.6	Global Competitiveness Index	10	10		10	10	10	10
ADD.7	Doing Business Index	09	09	09	09	09	09	09

*Notes: Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.*

The coverage of the indicators is relatively wide, especially in the case of labour market and sociodemographic data. On the other hand, despite the availability of general information on education, such as the education attainment of the population, literacy rates, number of pupils by education level, and educational expenditure, specific and more detailed information is missing, in particular in the field of VET and lifelong learning.

#### 4.3.2 Indicator compliance

This section examines the correspondence between the available indicators and the standard international definitions, which further influences cross-country comparability. Again, the focus is on four types of data, namely those relating to the labour market, education, PESs and the socioeconomic context.

An assessment of the compliance of the labour market indicators (see **TABLE 4.26**) shows that there are similar problems here as those in the other regions. First, differences exist in the working-age population used. In the case of activity and employment rates, for example, the working-age population in Armenia is specified as 15–64 years of age, while in the Russian Federation and Georgia the population used is 15+. Second, different classifications of education and economic activities are used. This can be seen, for example, in the case of employment by economic sector, where the categorisation of economic activities is based not only on different classifications, but also on different versions of these classifications. Furthermore, unlike the other countries, Georgia and the Russian Federation do not refer to ISCED in their educational data. This further complicates the comparability of the available data across countries in the eastern European region.

TABLE 4.26 COMPLIANCE OF INDICATORS IN EASTERN EUROPE – LABOUR MARKET

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
ACT.1	Activity rates by education level and gender (%)					25–64		
	<i>Proportion of active population by education level and gender</i>				15+ ISCED		15+	
	Activity rates by age and gender (%)					25–64	15+	15–70
	<i>Proportion of active population by age and gender</i>				15+			
EM.1	Employment rates by education level and gender (%)				15+ ISCED			
	<i>Proportion of employed population by education level and gender</i>						ISCED 15–72	15–70
	<i>Employment rates by gender (%)</i>		15+				15+	15–70
EM.2	Employment rates of older workers (55–64) by gender (%)	AGE					AGE	AGE
	<i>Proportion of employed older workers by gender</i>			55+				
EM.3	Employment by employment status and gender		15+	15+	15+	CLAS	15–72	15–70
EM.4	Employment by economic sector	NACE rev.2	15+ ISIC rev.3	15+ NACE rev.1	15+ NACE rev.1.1	NACE rev.1	15–72 ISIC rev.3	15–70 NACE rev.1
UN.1	Unemployment rates by education level and gender (%)	15–64			ISCED		15–72 ISCED	
	<i>Proportion of unemployed population by education level and gender</i>							
	<i>Unemployment rates by gender (%)</i>							
UN.2	Youth unemployment rates (15–24 and 25–34) by education level and gender (%)							
	<i>Youth unemployment rates (15–24 and 25–34) by gender (%)</i>			AGE				

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED; AGE: different age groups used; CLAS: different classification of employment statuses used; 15+, 25–64, 15–70, 15–72, 55+, 15–64: reference population; NACE rev.1/rev.1.1/rev.2: Classification of Economic Activities in the European Community, revision 1/revision 1.1/revision 2; ISIC rev.3: International Standard Industrial Classification of all Economic Activities, revision 3.

TABLES 4.27 and 4.28 provide an overview of educational indicators and the problematic aspects encountered. Many eastern European countries have adopted the ISCED classification, allowing comparisons to be made between the countries in a meaningful way. However, there are some exceptions, such as the indicator on education attainment in Belarus and the Russian Federation. In all the cases mentioned, national education classifications are used, without reference to ISCED. Furthermore, when relying on the UNESCO data on the number of teachers in training, the definition is much wider than required, including as it does not only in-service training, but also pre-service training. Thus, it must be borne in mind that the available data provide an overestimate, since the focus should only be on the share of working teachers in training.

**TABLE 4.27 COMPLIANCE OF INDICATORS IN EASTERN EUROPE – EDUCATION: ATTAINMENT AND ENROLMENT**

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
ATT.1	Education attainment of population (15+) by age and gender		25+			25+	ISCED	25+
	<i>Education attainment of population (15+) by age</i>			ISCED				
ATT.2	Education attainment of population (15+) by rural/urban					25+		
ATT.3	Education attainment of population (15+) by income group							
	<i>Education attainment of the heads of households (15+) by income group</i>					ISCED		
ILL.1	Illiteracy/literacy rates by gender (%)							
LLL.1	Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by gender							
LLL.2	Participation in lifelong learning by education level and gender							
	<i>Participation in lifelong learning by education level</i>							
	<i>Participation in lifelong learning by gender</i>							
ENR.1	Total number of pupils/students enrolled by education level, programme (VET and general) and gender							
PRI.1	Private education as % of total by education level and programme (VET and general)							
	<i>Private education as % of total by education level (ISCED 0–4) and programme (VET and general)</i>		m.d.				m.d.	
	<i>Private education as % of total in ISCED 0</i>							
	<i>Private education as % of total by education level (ISCED 0–3)</i>							
ENR.2	Gross enrolment rates by education level, programme (VET and general) and gender (%)				m.d.			
	<i>Gross enrolment rates by education level and gender (%)</i>							
ENR.3	Participation in VET in % by field of study							
	<i>Participation in ISCED 4 in % by field of study</i>							
	<i>Graduation from VET in % by field of study</i>							
APP.1	Percentage of apprentices in the VET system by gender and education level							
DRO.1	Drop-out rates in upper secondary (general and VET) by gender (%)	m.d.						
	<i>Drop-out rates in upper secondary general education by gender (%)</i>							
	<i>Early school leavers by gender (%)</i>							
	<i>Repeaters by gender in ISCED 1–3</i>						m.d.	
COM.1	Gross completion rate by education level and programme (VET and general) (%)	m.d.						
	<i>Gross completion rate in ISCED 5A (%)</i>							
	<i>Graduates by education level</i>							
CON.1	Percentage of VET pupils who continue to higher levels of education							
GRA.1	Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)							

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED; 25+: reference population; m.d.: data for some education levels is missing.

**TABLE 4.28 COMPLIANCE OF INDICATORS IN EASTERN EUROPE – EDUCATION: EXPENDITURE AND TEACHERS**

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
EXP.1	Public expenditure on education by education level and programme (VET and general) as % of GDP							
	<i>Public expenditure on education by education level as % of GDP</i>							m.d.
	<i>Public expenditure on education – total, ISCED 0 and ISCED 5+6 as % of GDP</i>							
	<i>Public expenditure on education (total) as % of GDP</i>							
	Public expenditure on education by education level and programme (VET and general) as % of public expenditure							
	<i>Public expenditure on education (total) as % of public expenditure</i>							
	Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure							
	<i>Public expenditure on total VET as % of total educational expenditure</i>							
EXP.2	Cost per pupil by programme (VET and general) in ISCED 3					ISCED		
	<i>Cost per pupil by programme in ISCED 5+6</i>							
TEA.1	Student/teacher ratios by education level and programme (VET and general)	m.d.						
	<i>Student/teacher ratios in VET</i>							
	<i>Student/teacher ratios in ISCED 0–3</i>				m.d.			
	<i>Student/teacher ratios in ISCED 0+1</i>							
TEA.2	Share of teachers in teacher training per year by gender (%)							
	<i>Share of teachers in teacher training per year by gender in ISCED 0–3 (%)</i>				TRA			
	<i>Share of teachers in teacher training per year by gender in ISCED 1 (%)</i>	TRA						
	<i>Share of teachers in teacher training per year by gender in ISCED 0+1 (%)</i>		TRA					
	<i>Share of teachers in teacher training per year by gender in ISCED 0 (%)</i>					TRA		
	<i>Share of teachers in teacher training per year (%)</i>							
	<i>Share of teachers in teacher training per year in primary education (%)</i>							TRA
TEA.3	Teacher salaries as % of average wage							

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. m.d.: data for some education levels is missing; TRA: both pre-service and in-service training are included.

The evaluation of PES and socioeconomic indicators (see TABLES 4.29 and 4.30) revealed no significant problems apart from the fact that different reference populations are used for the numbers of registered unemployed by gender in Moldova and Ukraine.

**TABLE 4.29 COMPLIANCE OF INDICATORS IN EASTERN EUROPE – PUBLIC EMPLOYMENT SERVICES**

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
PES.1	Expenditure on active labour market policies (ALMPs) as % of GDP							
	Expenditure on active labour market policies (ALMPs) as % of public expenditure							
PES.2	Percentage of registered unemployed population covered by ALMPs							
PES.3	Registered unemployed population by education level, age and gender							
	<i>Registered unemployed population by education level and gender</i>							
	<i>Registered unemployed population by age and gender</i>							
	<i>Registered unemployed population by education level</i>							
	<i>Registered unemployed population by gender</i>					16–60		15–70
	<i>Registered unemployed population (total)</i>							
PES.4	Number of staff in public employment services (PESs)							
PES.5	Number of vacancies							

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. 16–60, 15–70: reference population.

**TABLE 4.30 COMPLIANCE OF INDICATORS IN EASTERN EUROPE – SOCIOECONOMIC CONTEXT**

Code	Indicator	AM	AZ	BY	GE	MD	RU	UA
ADD.1	GDP by economic sector (%)							
ADD.2	GDP per capita in PPP							
ADD.3	Dependency rates (%)							
ADD.4	Mean score of student performance on the reading scale (PISA)							
ADD.5	Human Development Index							
ADD.6	Global Competitiveness Index							
ADD.7	Doing Business Index							

Note: Shaded cells indicate the data availability.

An evaluation of the indicators' compliance reveals once more that the two main problems encountered in the eastern European region are the different definitions of the working-age (reference) populations and the problem of comparability of the national education structures when no reference is made to ISCED.

In order to improve the quality and coverage of the key indicators in the eastern European region, an effort should be made to undertake a more thorough mapping of the available data, especially in the case of vocational and adult education. In addition, more detailed mappings of the education systems in the eastern European region should be carried out in order to allow a sound comparison to be made of the data, where the educational dimension is included. Finally, a solution should be found to problem of harmonising the definitions of working-age population, reflecting the available data and their characteristics.

## 4.4 WESTERN BALKANS AND TURKEY<sup>6</sup>

This section discusses the coverage and compliance of indicators in the Western Balkan and Turkey (IPA) region. The data was collected both from international sources, such as Eurostat, the World Bank, UIS and the ILO, and from national sources. The latter data were gathered from public sources, such as websites and documents of statistical offices and relevant

<sup>6</sup> Sources: Agency for Statistics of Bosnia and Herzegovina (ASBA); Census of Population 2002, Serbia (CP); Centre of Public Employment Services of Southeast European Countries (CPESSEC); Croatian Bureau of Statistics (CBS); Demographic and Health Survey, Kosovo (DHS); Employment Agency of Montenegro (EAM); Eurostat; Eurostat, *Pocketbook on Candidate and Potential Candidate countries* (PCPC), Luxembourg, 2009; Institute of Statistics of the Republic of Albania (INSTAT); ILO Labour Statistics database; International Relations Division (IRD); Kuddo, A., 'Employment services and active labour market programs in Eastern European and Central Asian countries', Working paper no. 918 (EAM09), World Bank, 2009; LFSs; Living Standards Measurement Study (LSMS); Ministry of Labour and Social Welfare, Labour and Employment Department, Kosovo (MLSW); Ministry of Education and Science of the Republic of Albania (MES); Ministry of Education, Turkey (METU); Ministry of National Education Statistics (ILSIS); Montenegro Statistical Office (MONSTAT); Montenegro Statistical Office, 'Statistical Yearbook 2009' (SY), Podgorica, 2009; Statistical Office of Kosovo (SOK); Official Gazette of Montenegro, 17/07 (OG); OECD; State Statistical Office of the Republic of Macedonia (SSO); Turkish Employment organisation (ISKUR); UNDP; UIS; World Bank – World Development Indicators; World Economic Forum.

ministries, or received directly from countries themselves (except for the former Yugoslav Republic of Macedonia, Serbia and Turkey).

#### 4.4.1 Coverage of indicators

The coverage of labour market indicators (see **TABLE 4.31**) is relatively comprehensive. In the case of the main indicators (activity, employment and unemployment rates by specific breakdowns) information is provided for all countries except Bosnia and Herzegovina, where data on the educational dimension are not available. However, when focusing on youth unemployment by education level and gender, there is a lack of data in half of the countries, in particular Bosnia and Herzegovina, Kosovo, Montenegro and Serbia, where only partial information are available for youth unemployment by gender.

**TABLE 4.31 COVERAGE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – LABOUR MARKET**

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
ACT.1	Activity rates by education level and gender (%)	08		09		09	09	07	09
	Activity rates by age and gender (%)	08	09	09		09	09	07	09
	<i>Activity rates by education (%)</i>							09	
	<i>Activity rates by age (%)</i>							09	
	<i>Activity rates by gender (%)</i>				08				
EM.1	Employment rates by education level and gender (%)	08		09	08	09	09	07	09
	<i>Employment rates by gender (%)</i>		09						
	<i>Employment rates by education (%)</i>							09	
	<i>Number of employed by education</i>		09						
EM.2	Employment rates of older workers (55–64) by gender (%)	08	09	09	08	09	09	07	09
	<i>Employment rates of older workers (55–64), total (%)</i>							09	
EM.3	Employment by employment status and gender	08	09	09	08	09	09	09	09
EM.4	Employment by economic sector	08	09	09	08	09	09	09	09
UN.1	Unemployment rates by education level and gender (%)	08		09	08	09	09	07	09
	<i>Unemployment rates by gender (%)</i>		09						
	<i>Unemployment rates by education (%)</i>							09	
	<i>Number of unemployed by education level (%)</i>		09						
UN.2	Youth unemployment rates (15–24 and 25–34) by education level and gender (%)	08							09
	<i>Youth unemployment rates (15–24 and 25–34) by gender (%)</i>							07	
	<i>Youth unemployment rates by education level and gender (15–24) (%)</i>			08		09			
	<i>Youth unemployment rates by gender (15–24) (%)</i>		09		08		09		09
	<i>Youth unemployment rates by education level and gender (25–49) (%)</i>					09			
	<i>Youth unemployment rates by education level and gender (25–39) (%)</i>			08					
	<i>Youth unemployment rates by gender (25–49) (%)</i>		09				09		09

Notes: Names of indicators in italics indicate proxy or partial indicator. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

**TABLES 4.32** and **4.33** present an overview of the collected educational indicators. The data gathered are rather limited, providing some general information on the education attainment of the population, the number of pupils by education level and programme, and literacy rates. However, a great deal of information is either missing or is only present to a limited extent. This is the case for indicators on the education attainment of the population by income groups and urban/rural areas (except for Kosovo and Serbia), participation in lifelong learning by education level and gender (available only for Albania and Croatia), gross enrolment rates by education level and programme, participation in VET by field of study, number of apprentices and pupils continuing to higher levels of education, drop-out rates (available only in Kosovo) and completion rates by education level and programme. Where possible, partial or proxy data have been obtained to compensate to some extent for the missing information. In addition, data on educational spending and education quality are very scarce. This means that often all that is available is partial data providing information only for a limited number of education levels (TEA.1), or only for education programmes (EXP.1 and TEA.1) and levels (EXP.1, EXP.2 and TEA.1) alone.



**TABLE 4.32 COVERAGE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – EDUCATION: ATTAINMENT AND ENROLMENT**

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
ATT.1	Education attainment of population (15+) by age and gender				03		09		08
	<i>Education attainment of population (15+) by gender</i>		09						
	<i>Education attainment of population (15+) by age</i>							09	
	<i>Labour force by education, age and gender</i>	08		08		08			
ATT.2	Education attainment of population (15+) by rural/urban				03			09	
ATT.3	Education attainment of population (15+) by income group								
	<i>Average earnings by education attainment</i>						06	04	
ILL.1	Illiteracy/literacy rates by gender (%)	07	00	07	03	07		02	07
	<i>Illiterate population by age group and gender</i>						03		
LLL.1	Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by gender	08		09		08			08
	<i>Percentage of 25–64-year-olds having participated in lifelong learning</i>							07	
LLL.2	Participation in lifelong learning by education level and gender	08		09					
ENR.1	Total number of pupils/students enrolled by education level, programme (VET and general) and gender	08		07	09	08		08	08
	<i>Total number of pupils/students enrolled by education level and gender</i>		07				09		
	<i>Total number of pupils/students enrolled in upper secondary by programme</i>		07						
PRI.1	Private education as % of total by education level and programme (VET and general)	08		07	09	07		08	08
ENR.2	Gross enrolment rates by education level, programme (VET and general) and gender (%)								
	<i>Gross enrolment rates by education level and gender (%)</i>	09	09	07		07	09	09	08
ENR.3	Participation in VET in % by field of study								
APP.1	Percentage of apprentices in the VET system by gender and education level								
	<i>Percentage of apprentices in the VET system by education level</i>								07
DRO.1	Drop-out rates in upper secondary (general and VET) by gender (%)				09				
	<i>Drop-out rates in upper secondary by gender (%)</i>	08							
	<i>Drop-out rates in primary by gender</i>					07			07
	<i>Drop-out rates in primary and secondary</i>							07	
COM.1	<i>Rate of children of primary school age who are out of school</i>			07					
	Gross completion rate by education level and programme (VET and general) (%)								
	<i>% of passed in primary and secondary</i>	06							
	<i>Gross completion rate in ISCED 5A by gender (%)</i>			07		07		08	07
CON.1	<i>Gross completion rate in ISCED 1–3 by programme (%)</i>				09				
	Percentage of VET pupils who continue to higher levels of education								
GRA.1	Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)	03		08		07		08	07
	<i>Total graduates in mathematics, science and technology</i>						08		

Notes: Names of indicators in italics indicate proxy or partial indicator. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

**TABLE 4.33 COVERAGE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – EDUCATION: EXPENDITURE AND TEACHERS**

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
EXP.1	Public expenditure on education by education level and programme (VET and general) as % of GDP								
	<i>Public expenditure on education in current prices by level</i>			07					
	<i>Expenditure on education as % of GDP</i>	08		07	07			08	
	<i>Public expenditure on education by education level as % of GDP</i>					03			06
	Public expenditure on education by education level and programme (VET and general) as % of public expenditure								
	<i>Expenditure on education as % total state budget</i>	08			07			08	
	Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure								
	<i>Expenditure on public education by level and programme</i>						08		
EXP.2	Cost per pupil by programme (VET and general) in ISCED 3								
	<i>Public expenditure on education per pupil by education level as % of GDP</i>								06
	<i>Private educational expenditure by education level</i>					03			
	<i>Expenditure on public institutions per pupil by education level</i>			07					
TEA.1	Student/teacher ratios by education level and programme (VET and general)				09			08	09
	<i>Student/teacher ratios by education level</i>	07		09		07			
	<i>Pupil/teacher ratios in pre-primary and upper secondary</i>		07						
	<i>Student/teacher ratios in VET and general education</i>	07							
	<i>Pupil/teacher ratios in pre-school, primary and secondary</i>						08		
TEA.2	Share of teachers in teacher training per year by gender (%)			00					
TEA.3	Teacher salaries as % of average wage								

Notes: Names of indicators in italics indicate proxy or partial indicator. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

Compared to the other three regions, more data on PESs is available in the Western Balkan and Turkey region. Not only is there information in most of the countries on the number of staff in PESs, the number of vacancies and the number registered as unemployed (though several partial data have been collected for this indicator), there is also information on ALMPs for Croatia, the former Yugoslav Republic of Macedonia and partly for Bosnia and Herzegovina, Serbia and Turkey (see **TABLE 4.34**).

**TABLE 4.34 COVERAGE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – PUBLIC EMPLOYMENT SERVICES**

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
PES.1	Expenditure on active labour market policies (ALMPs) as % of GDP		08	09		08		08	
	Expenditure on active labour market policies (ALMPs) as % of government expenditure								
	<i>Expenditure of the Employment Agency of Montenegro (EAM)</i>						09		
PES.2	Percentage of registered unemployed population covered by ALMPs			09		08			08
	<i>Number of recipients of unemployment cash benefits</i>						08		
PES.3	Registered unemployed population by education level, age and gender								
	<i>Registered unemployed population by education level and gender</i>			09					
	<i>Registered unemployed population by age and gender</i>			09		09			
	<i>Registered unemployed population</i>		08		08		09		
	<i>Qualification level of registered unemployed population</i>						09		
	<i>Registered unemployed population by age</i>	07							07
	<i>Registered unemployed population by gender</i>	07						09	
	<i>Registered unemployed population by education</i>	07							07
PES.4	Number of staff in public employment services (PESs)		08	09	08	09			
PES.5	Number of vacancies		08	08	09		09	08	08

Notes: Names of indicators in italics indicate proxy or partial indicator. Figures indicate the most recent year for which an indicator is available. Shaded cells indicate data that were provided by national authorities.

**TABLE 4.35** refers to the socioeconomic context indicators for the Western Balkan and Turkey region. As these data provide general information on the countries, mostly collected from international sources, the coverage is comprehensive and up-to-date. The only missing pieces of information relate to the PISA survey, in which Bosnia and Herzegovina and Kosovo do not participate. In addition, information on GDP per capita and the value of the Global Competitiveness Index is missing for Kosovo.

**TABLE 4.35 COVERAGE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – SOCIOECONOMIC CONTEXT**

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
ADD.1	GDP by economic sector (%)	08	08	08	08	08	08	08	08
ADD.2	GDP per capita in PPP	09	09	09		09	09	09	09
ADD.3	Dependency rates (%)	08	08	09	08	08	08	08	09
ADD.4	Mean score of student performance on the reading scale (PISA)	09		09		00	09	09	09
ADD.5	Human Development Index	10	10	10	07	10	10	10	10
ADD.6	Global Competitiveness Index	10	10	10		10	10	10	10
ADD.7	Doing Business Index	09	09	09	09	09	09	09	09

Note: Figures indicate the most recent year for which an indicator is available.

In conclusion, the coverage of indicators selected in the Western Balkan and Turkey region is relatively high in the case of labour market and socioeconomic indicators. However, several gaps can be found for educational indicators, in which specific information on VET education and adult education is missing, either completely or to a great extent.

#### 4.4.2 Indicator compliance

This section discusses the compliance of the collected data – in other words, how well the indicators match the agreed definitions, which should further secure their comparability. Again, data covering the labour market, education, PESs and socioeconomic context are evaluated here.

An assessment of the labour market indicators (**TABLE 4.36**) reveals the usual problems of the use of various classifications and the difference in the specifications of working-age (reference) population. The former relates to indicators in which a reference to education systems or economic activities is made. In the case of the classification of education, many countries of the Western Balkan and Turkey region refer to ISCED. However, some countries – namely Bosnia and Herzegovina, Kosovo, Montenegro, Serbia and partly Albania – provide data based on national classifications of education levels, which are then difficult to compare unless a detailed knowledge of the education systems of those countries exists. The same applies to the classification of economic activities for the indicator on employment by economic sector, where reference is made to different classifications, and to different versions of these. A second problem relates to the specification of the working-age population, with the data available often referring to two different age ranges, 15+ and 15–64. This issue needs to be borne in mind when looking at the region as a whole in order to draw accurate conclusions.

TABLE 4.36 COMPLIANCE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – LABOUR MARKET

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
ACT.1	Activity rates by education level and gender (%)						ISCED 15+	ISCED 15+	
	Activity rates by age and gender (%)			15+				15+	
	<i>Activity rates by education (%)</i>							ISCED 15+	
	<i>Activity rates by age (%)</i>							15+	
	<i>Activity rates by gender (%)</i>								
EM.1	Employment rates by education level and gender (%)				ISCED		ISCED 15+	ISCED 15+	
	<i>Employment rates by gender (%)</i>		15+						
	<i>Employment rates by education (%)</i>							ISCED 15+	
	<i>Number of employed by education</i>		ISCED 15+						
EM.2	Employment rates of older workers (55–64) by gender (%)		AGE	AGE					
	<i>Employment rates of older workers (55–64), total (%)</i>								
EM.3	Employment by employment status and gender		15+				15+	15+	
EM.4	Employment by economic sector	15+ NACE rev.1.1	15+ m.d. NACE rev.2	15+ NACE rev.2	NACE rev.2	NACE rev.2	15+ m.d. NACE rev.1	15+ CoA	NACE rev.2
UN.1	Unemployment rates by education level and gender (%)	15–64 ISCED		15–64	ISCED	15–64	ISCED	ISCED	15–64
	<i>Unemployment rates by gender (%)</i>								
	<i>Unemployment rates by education (%)</i>							ISCED	
	<i>Number of unemployed by education level (%)</i>		ISCED						
UN.2	Youth unemployment rates (15–24 and 25–34) by education level and gender (%)	ISCED							
	<i>Youth unemployment rates (15–24 and 25–34) by gender (%)</i>								
	<i>Youth unemployment rates by education level and gender (15–24) (%)</i>								
	<i>Youth unemployment rates by gender (15–24) (%)</i>								
	<i>Youth unemployment rates by education level and gender (25–49) (%)</i>								
	<i>Youth unemployment rates by education level and gender (25–39) (%)</i>								
<i>Youth unemployment rates by gender (25–49) (%)</i>									

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED; AGE: differing age groups; 15+, 15–64: reference population; NACE rev.1/rev.1.1/2: Classification of Economic Activities in the European Community, revision 1/revision 1.1/ revision 2; CoA: the Classification of Activities, which is further comparable to ISIC, version 3; m.d.: missing data.

TABLE 4.37 COMPLIANCE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – EDUCATION: ATTAINMENT AND ENROLMENT

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
ATT.1	Education attainment of population (15+) by age and gender				20–49 ISCED		ISCED		15–74
	<i>Education attainment of population (15+) by gender</i>		ISCED						
	<i>Education attainment of population (15+) by age</i>							ISCED	
	<i>Labour force by education, age and gender</i>	15–74 ISCED		15–74		15–74			
ATT.2	Education attainment of population (15+) by rural/urban				20–49 ISCED			ISCED	
ATT.3	Education attainment of population (15+) by income group						ISCED	ISCED	
	<i>Average earnings by education attainment</i>								
ILL.1	Illiteracy/literacy rates by gender (%)				10+			10+	
	<i>Illiterate population by age group and gender</i>						10+		
LLL.1	Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by gender								
	<i>Percentage of 25–34-year-olds having participated in lifelong learning</i>								
LLL.2	Participation in lifelong learning by education level and gender								
ENR.1	Total number of pupils/students enrolled by education level, programme (VET and general) and gender			m.d.		ISCED m.d.		m.d.	m.d.
	<i>Total number of pupils/students enrolled by education level and gender</i>		ISCED						
	<i>Total number of pupils/students enrolled in upper secondary by programme</i>								
PRI.1	Private education as % of total by education level and programme (VET and general)							m.d.	m.d.
ENR.2	Gross enrolment rates by education level, programme (VET and general) and gender (%)								
	<i>Gross enrolment rates by education level and gender (%)</i>	m.d.	m.d.			m.d.	m.d.	m.d.	
ENR.3	Participation in VET in % by field of study								
APP.1	Percentage of apprentices in the VET system by gender and education level								
	<i>Percentage of apprentices in the VET system by education level</i>								
DRO.1	Drop-out rates in upper secondary (general and VET) by gender (%)								
	<i>Drop-out rates in upper secondary by gender (%)</i>								
	<i>Drop-out rates in primary by gender</i>								
	<i>Drop-out rates in primary and secondary</i>							m.d.	
	<i>Rate of children of primary school age who are out of school</i>								
COM.1	Gross completion rate by education level and programme (VET and general) (%)								
	<i>% of passed in primary and secondary</i>								
	<i>Gross completion rate in ISCED 5A by gender (%)</i>								
	<i>Gross completion rate in ISCED 1–3 by programme (%)</i>				m.d.				
CON.1	Percentage of VET pupils who continue to higher levels of education								
GRA.1	Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)								
	<i>Total graduates in mathematics, science and technology</i>								

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED; m.d.: missing data for some education levels; 10+, 20–49, 15–74: reference population.

**TABLE 4.38 COMPLIANCE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – EDUCATION: EXPENDITURE AND TEACHERS**

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
EXP.1	Public expenditure on education by education level and programme (VET and general) as % of GDP								
	<i>Public expenditure on education in current prices by level</i>								
	<i>Expenditure on education as % of GDP</i>								
	<i>Public expenditure on education by education level as % of GDP</i>								
	Public expenditure on education by education level and programme (VET and general) as % of public expenditure								
	<i>Expenditure on education as % total state budget</i>								
	Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure								
	<i>Budget on public education by level and programme</i>							ISCED	
EXP.2	Cost per pupil by programme (VET and general) in ISCED 3								
	<i>Public expenditure on education per pupil by education level as % of GDP</i>								
	<i>Private educational expenditure by education level</i>								
	<i>Expenditure on public institutions per pupil by education level</i>								
TEA.1	Student/teacher ratios by education level and programme (VET and general)							m.d.	
	<i>Student/teacher ratios by education level</i>								
	<i>Pupil/teacher ratios in pre-primary and in upper secondary</i>								
	<i>Student/teacher ratios in VET and general education</i>								
	<i>Pupil/teacher ratios in pre-school, primary and secondary</i>								
TEA.2	Share of teachers in teacher training per year by gender (%)			TRA					
TEA.3	Teacher salaries as % of average wage								

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate the data availability. ISCED: no reference to ISCED; m.d.: missing data for some education levels; TRA: both pre-service and in-service training are included.

In a similar way to the labour market indicators, TABLES 4.37 and 4.38 show that in some countries, namely Albania, Bosnia and Herzegovina, Kosovo, the former Yugoslav Republic of Macedonia, Montenegro and Serbia, no reference is made to ISCED in the indicators on the education attainment of the population and the enrolment of pupils by education level. Moreover, when presenting results on literacy rates or the education attainment of the population, countries differ in the reference population they use for the calculations, which further complicates the comparability of the countries in the region. In addition, the data available on the share of teachers in training for Croatia are overestimated, as they include not only in-service training but also pre-service training (this is the same situation as that in the other regions when data from the UIS are used). Finally, data is often missing (in an unsystematic manner) when the educational dimension is taken into account.

No substantial comments are required on the PES and socioeconomic indicators (see TABLES 4.39 and 4.40) except the one already mentioned: there is no reference to ISCED in the data on the number of people registered as unemployed by education level in Albania and Turkey.

**TABLE 4.39 COMPLIANCE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – PUBLIC EMPLOYMENT SERVICES**

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
PES.1	Expenditure on active labour market policies (ALMPs) as % of GDP								
	Expenditure on active labour market policies (ALMPs) as % of government expenditure								
	<i>Expenditure of the Employment Agency of Montenegro (EAM)</i>								
PES.2	Percentage of registered unemployed population covered by ALMPs								
	<i>Number of recipients of unemployment cash benefits</i>								
PES.3	Registered unemployed population by education level, age and gender								
	<i>Registered unemployed population by education level and gender</i>								
	<i>Registered unemployed population by age and gender</i>								
	<i>Registered unemployed population</i>								
	<i>Qualification level of registered unemployed population</i>								
	<i>Registered unemployed population by age</i>								
	<i>Registered unemployed population by gender</i>							m.d.	
<i>Registered unemployed population by education</i>	ISCED								ISCED
PES.4	Number of staff in public employment services (PESs)								
PES.5	Number of vacancies								

Notes: Names of indicators in italics indicate proxy or partial indicators. Shaded cells indicate data that were provided by national authorities. ISCED: no reference to ISCED; m.d.: missing data.

**TABLE 4.40 COMPLIANCE OF INDICATORS IN THE WESTERN BALKANS AND TURKEY – SOCIOECONOMIC CONTEXT**

Code	Indicator	AL	BA	HR	XK	MK	ME	RS	TR
ADD.1	GDP by economic sector (%)								
ADD.2	GDP per capita in PPP								
ADD.3	Dependency rates (%)								
ADD.4	Mean score of student performance on the reading scale (PISA)								
ADD.5	Human Development Index								
ADD.6	Global Competitiveness Index								
ADD.7	Doing Business Index								

Note: Shaded cells indicate data that were provided by national authorities.

In a similar situation to the other three regions, it can be concluded that the main inconsistencies in the data for the Western Balkan and Turkey region are the unsystematic use of ISCED and classifications of economic activity, and the use of different working-age/reference populations, mainly in relation to labour market and educational data, both of which threaten cross-regional comparability.

There are three main measures that could be taken in order to improve the coverage and compliance of data. First, support should be given to closer cooperation with the relevant institutions, in particular in the field of VET and adult education, in order to improve the coverage of educational indicators. Second, the description of education systems and their classifications with respect to ISCED should be developed in the relevant countries. Finally, the potential for access to primary data, such as LFSs, should be investigated. Such access would permit the direct calculation of many indicators based on raw national data.



# 5. CONCLUSIONS AND RECOMMENDATIONS

It is to be expected that neighbouring countries will often display similar systems and approaches; hence, some similarities between countries in a particular region would naturally occur, and these could then lead to suggestions for the collection of key indicators at the regional level. From the outset, one of the expected outcomes of the 2010 ETF Key Indicators project has been that future key indicator collections would have slight variations in definitions and coverage by region based on the detailed overviews of indicator coverage and compliance.

As expected, differences between countries were found in terms of which age groups were covered and how national education programmes were grouped into broader categories in the published information. This final chapter will therefore focus on the potential for adopting regional definitions for future data collections, though it will not go into detail regarding each indicator or country. Recommendations will be made by region.

## 5.1 CENTRAL ASIA

In this region the age group 15+ is used in almost all countries for all labour market indicators. This age group should therefore constitute the regional norm in future indicator collections. Unfortunately Tajikistan uses different age groups (except for employment), but as Tajikistan uses different age groups for different labour market indicators, it may be possible to discuss the adaptation of new age groups with the national authorities.

It will probably be more difficult to harmonise the classification of employment by economic sector, since each country seems to prefer a different classification.

Another problem arises when examining the educational data, as ISCED is rarely used. National systems differ substantially, so the best hope for harmonisation may lie with the introduction of a new ISCED, which is expected to take place in 2011. Once ISCED 2011 is introduced and is about to be implemented, the ETF should take the initiative and bring the countries of the region together to agree on regional standards for categorising education programmes according to the new classification standard.

In order to improve the coverage and compliance of data in the Central Asia region, the real availability of missing information should be investigated, mainly through increased cooperation with the relevant data providers, such as ministries and statistical offices. At the same time, awareness should be raised with respect to the importance of evidence provision and the issue of comparability.

## 5.2 SOUTHERN AND EASTERN MEDITERRANEAN

The preferred age group for labour market indicators in the southern and eastern Mediterranean region is 15–64 years, though there are several exceptions. Hence, for this region it is recommended that the ETF aims to collect labour market information for the 15–64 age group, while clearly noting the exceptions so that account can be taken of the effect of the different populations in the interpretation of the indicators. Apart from this recommendation, which will improve several indicators in terms of comparability, it is difficult to make clear recommendations, as the reference populations used are rather heterogeneous.

When it comes to classifications of the economic sectors, no clear trend is apparent. Several different classifications are in use, from NACE to ISIC; countries also use different versions of the same classifications.

Educational indicators that refer to ISCED are generally available, making them internationally comparable. However, Syria and Egypt do not use ISCED, so comparisons involving these two countries are problematic. As mentioned in the discussion of the Central Asia region, the introduction of a new ISCED in 2011 may be used as a lever for the introduction of internationally comparable educational data.

### **5.3 EASTERN EUROPE**

The eastern European region displays the greatest heterogeneity in terms of age groups and classifications of economic sectors. For example, three different versions of the NACE classification are used: 1, 1.1 and 2. Full account must be taken of these differences when interpreting data across countries. The most prudent approach would be to only make comparisons over time within specific countries, rather than to compare countries directly with one another.

For educational data, ISCED is often used, and this allows meaningful comparisons to be made between countries. Most countries in the eastern European region have adopted this classification. However, there are exceptions, such as the indicator on education attainment in Belarus and the Russian Federation, or the number of enrolled students by education level in Azerbaijan and Ukraine. In all these cases, national education classifications are used, with no reference being made to ISCED.

In order to improve the quality and coverage of the key indicators in the region, an effort should be made to undertake a more thorough mapping of available data, especially for vocational and adult education. In addition, more detailed mappings of the education systems in the eastern European region should be carried out in order to ensure that sound comparisons of the data can be made where the educational dimension is included. Finally, a solution should be found to the issue of the harmonisation of the definitions of working-age (reference) population, reflecting the available data and their characteristics.

### **5.4 WESTERN BALKANS AND TURKEY**

Significant problems are encountered when assessing labour market indicators owing to the use of various classifications and to differences in the specifications of working-age (reference) population. The problem of classifications refers both to education systems and to economic activities. In the case of education, many countries of the Western Balkan and Turkey region use ISCED. However, some countries, namely Bosnia and Herzegovina, Kosovo, Montenegro, Serbia and partly Albania, provide data based on the national classifications of education levels, and these are then difficult to classify and compare unless a detailed knowledge of the education systems of those countries exists. This also applies to the classification of economic activities, in which reference is made to different classifications, as well as to different versions of these classifications. However, revision 2 of NACE is used by five of the countries, so this is the classification that comes closest to being a regional standard.

Thus, two recommendations can be made. Firstly, better information must be made available on the national education systems and how they correspond to ISCED. Second, countries should be encouraged to adopt NACE rev. 2. A third option is to explore the possibility of using micro data coming from LFSs in order to calculate the indicators directly.

The specification of the working-age (reference) population is another problem. Available data often refers to two different population ranges, 15+ and 15–64. This needs to be borne in mind when looking at the region as a whole, and caution is required if comparative analysis is to be undertaken.

## **5.5 GENERAL CONCLUSIONS**

The preceding chapters have shown that not all of the ETF 2010 key indicators are readily available. Hence, a reduced list of key indicators is proposed in Section 3. Limiting the scope in terms of breadth and width of the indicators to be collected will allow the ETF to focus more of its resources on helping partner countries to improve their VET evidence.

Strict compliance with one narrow international definition will not advance the availability of the indicators, so a number of regional recommendations have been suggested for implementation in future indicator collections.

# ANNEXES

## ANNEX 1. LIST OF KEY INDICATORS 2010

Indicator	Abbreviation
Activity rates by education level, age and gender (%)	<b>ACT.1</b>
<i>Activity rates by education level and gender (%)</i>	<b>ACT.1.1</b>
<i>Activity rates by age and gender (%)</i>	<b>ACT.1.2</b>
Employment rates by education level and gender (%)	<b>EM.1</b>
Employment rates of older workers (55–64) by gender (%)	<b>EM.2</b>
Employment by employment status and gender	<b>EM.3</b>
Employment by economic sector	<b>EM.4</b>
Unemployment rates by education level and gender (%)	<b>UN.1</b>
Youth unemployment rates (15–24 and 25–34) by education level and gender (%)	<b>UN.2</b>
Education attainment of population (15+) by age and gender	<b>ATT.1</b>
Education attainment of population (15+) by rural/urban	<b>ATT.2</b>
Education attainment of population (15+) by income group	<b>ATT.3</b>
Illiteracy/literacy rates by gender (%)	<b>ILL.1</b>
Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by gender	<b>LLL.1</b>
Participation in lifelong learning by education level and gender	<b>LLL.2</b>
Total number of pupils/students enrolled by education level, programme (VET and general) and gender	<b>ENR.1</b>
Private education as % of total by education level and programme (VET and general)	<b>PRI.1</b>
Gross enrolment rates by education level, programme (VET and general) and gender	<b>ENR.2</b>
Participation in VET in % by field of study	<b>ENR.3</b>
Percentage of apprentices in the VET system by gender and education level	<b>APP.1</b>
Drop-out rates in upper secondary (general and VET) by gender (%)	<b>DRO.1</b>
Gross completion rate by education level and programme (VET and general) (%)	<b>COM.1</b>
Percentage of VET pupils who continue to higher levels of education	<b>CON.1</b>
Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)	<b>GRA.1</b>
Public expenditure on education by education level and programme (VET and general) as % of GDP, public expenditure and total educational expenditure	<b>EXP.1</b>
<i>Public expenditure on education by education level and programme (VET and general) as % of GDP</i>	<b>EXP.1.1</b>
<i>Public expenditure on education by education level and programme (VET and general) as % of public expenditure</i>	<b>EXP.1.2</b>
<i>Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure</i>	<b>EXP.1.3</b>
Cost per pupil by programme (VET and general) in ISCED 3	<b>EXP.2</b>
Student/teacher ratios by education level and programme (VET and general)	<b>TEA.1</b>
Share of teachers in teacher training per year by gender (%)	<b>TEA.2</b>
Teacher salaries as % of average wage	<b>TEA.3</b>
Expenditure on active labour market policies (ALMPs) as % of GDP and public expenditure	<b>PES.1</b>
<i>Expenditure on active labour market policies (ALMPs) as % of GDP</i>	<b>PES.1.1</b>
<i>Expenditure on active labour market policies (ALMPs) as % of public expenditure</i>	<b>PES.1.2</b>
Percentage of registered unemployed population covered by ALMPs	<b>PES.2</b>
Registered unemployed population by education level, age and gender	<b>PES.3</b>
Number of staff in public employment services (PESs)	<b>PES.4</b>
Number of vacancies	<b>PES.5</b>

GDP by economic sector (%)	ADD.1
GDP per capita in PPP	ADD.2
Dependency rates (%)	ADD.3
Mean score of student performance on the reading scale (PISA)	ADD.4
Human Development Index	ADD.5
Global Competitiveness Index	ADD.6
Doing Business Index	ADD.7

## ANNEX 2. DEFINITION OF SELECTED INDICATORS

Definition	Indicator
The <b>activity rate</b> represents the labour force as a percentage of the working-age population (15–64 years). The labour force comprises persons in employment and unemployed persons.	ACT.1
The <b>employment rate</b> represents persons in employment as a percentage of the working-age population (15–64 years).	EM.1
The <b>employment rate of older workers</b> represent persons aged 55–64 in employment as a percentage of the population of working age 55–64.	EM.2
<b>Status in employment</b> refers to the status of an economically active person with respect to his or her employment, that is, the type of explicit or implicit contract of employment with other persons or organisations that the person has in his/her job. It is recommended that the economically active population should be classified by status in employment as follows: <ul style="list-style-type: none"> <li>▪ employees, among whom it may be possible to distinguish between employees with stable contracts (including regular employees) and other employees;</li> <li>▪ employers;</li> <li>▪ own-account workers;</li> <li>▪ contributing family workers;</li> <li>▪ members of producers' cooperatives;</li> <li>▪ persons not classifiable by status.</li> </ul>	EM.3
The <b>unemployment rate</b> represents unemployed persons as a percentage of the labour force (15+).	UN.1
The <b>youth unemployment rate</b> refers to unemployed persons aged 15–24 (25–34) as a percentage of the labour force aged 15–24 (25–34).	UN.2
<b>Education attainment</b> is defined as the highest grade completed within the most advanced level attended in the education system of the country where the education was received.	ATT.1
The <b>illiteracy rate</b> refers to the percentage of the population aged 15 years and over who cannot both read and write with understanding a short, simple statement on his/her everyday life. The <b>literacy rate</b> refers to the percentage of the population aged 15 years and over who can both read and write with understanding a short, simple statement on his/her everyday life.	ILL.1
<b>Lifelong learning</b> is defined as encompassing 'all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences, within a personal, civic, social and or employment-related perspective'. Here it is understood to mean that an individual has participated in training in the four-week reference period prior to the interview (it is assumed that data will come from LFSs or similar).	LLL.1
The <b>gross enrolment rate</b> is the 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. As the calculation of gross enrolment rate takes into account under-age and over-age students, it tends to be higher than net enrolment rate. Moreover, it can be higher than 100%. The <b>net enrolment rate</b> is the enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population.	ENR.1

<p><b>Apprenticeship</b> or training contracts of fixed duration are the contracts drawn up between the employer and the apprentice/trainee in order to enable the apprentice to acquire practical experience in a specific field.</p>	<p><b>APP.1</b></p>
<p>The <b>drop-out rate</b> is the proportion of pupils/students from a cohort enrolled in a given level at a given school year who are no longer enrolled in the following school year.</p>	<p><b>DRO.1</b></p>
<p>The <b>completion rate</b> is defined as all graduates in a given level expressed as a percentage of the number of students starting X years prior, where X is the theoretical duration of the education level.</p>	<p><b>COM.1</b></p>
<p><b>Student/teacher ratio</b> refers to the average number of pupils (students) per teacher at a specific level of education in a given school year.</p>	<p><b>TEA.1</b></p>
<p><b>Active labour market policies (ALMPs)</b> include all social expenditure (other than education) that is aimed at the improvement of the beneficiaries' prospect of finding gainful employment or to otherwise increase their earnings capacity. This category includes spending on PESs and administration, labour market training, special programmes for young people when in transition from school to work, labour market programmes to provide or promote employment for unemployed and other persons (excluding young people and those with disabilities) and special programmes for individuals with disabilities.</p>	<p><b>PES.1</b></p>
<p><b>PPP GDP</b> is gross domestic product converted to international dollars using purchasing power parity rates. An <b>international dollar</b> has the same purchasing power over GDP as the US dollar has in the United States. <b>GDP</b> at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. (World Bank, World Development Indicators).</p>	<p><b>ADD.2</b></p>
<p>The <b>total dependency rate</b> refers to the number of persons under age 15 plus the number of persons aged 65 or older for every 100 persons aged 15–64.  The <b>child dependency rate</b> refers to the number of persons under age 15 for every 100 persons aged 15–64.  The <b>aged dependency rate</b> refers to the number of persons aged 65 or older for every 100 persons aged 15–64.</p>	<p><b>ADD.3</b></p>

# ABBREVIATIONS AND ACRONYMS

<b>ALMPs</b>	Active labour market policies
<b>DCI</b>	Development and Cooperation Instrument
<b>ENPI</b>	European Neighbourhood and Partnership Instrument
<b>ETF</b>	European Training Foundation
<b>EU</b>	European Union
<b>GDP</b>	Gross domestic product
<b>ILO</b>	International Labour Organisation
<b>IPA</b>	Instrument for Pre-Accession Assistance
<b>ISCED</b>	International Standard Classification of Education
<b>ISCO</b>	International Standard Classification of Occupations
<b>ISIC</b>	International Standard Industrial Classification of all Economic Activities
<b>KILM</b>	Key Indicators of the Labour Market (ILO)
<b>LFS</b>	Labour force survey
<b>NACE</b>	Classification of Economic Activities in the European Community
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>PES</b>	Public employment service
<b>PISA</b>	Programme for International Student Assessment
<b>PPP</b>	Purchasing power parity
<b>TVET</b>	Technical vocational education and training
<b>UIS</b>	UNESCO Institute for Statistics
<b>UNDP</b>	United Nations Development Programme
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>UNSCR</b>	United Nations Security Council Resolution
<b>VET</b>	Vocational education and training

## COUNTRY CODES

<b>AL</b>	Albania
<b>AM</b>	Armenia
<b>AZ</b>	Azerbaijan
<b>BA</b>	Bosnia and Herzegovina
<b>BY</b>	Belarus
<b>DZ</b>	Algeria
<b>EG</b>	Egypt
<b>GE</b>	Georgia

<b>HR</b>	Croatia
<b>IL</b>	Israel
<b>JO</b>	Jordan
<b>KG</b>	Kyrgyzstan
<b>KZ</b>	Kazakhstan
<b>LB</b>	Lebanon
<b>MA</b>	Morocco
<b>ME</b>	Montenegro
<b>MD</b>	Moldova
<b>MK<sup>7</sup></b>	former Yugoslav Republic of Macedonia
<b>OPT<sup>7</sup></b>	occupied Palestinian territory
<b>RS</b>	Serbia
<b>RU</b>	Russian Federation
<b>SY</b>	Syria
<b>TJ</b>	Tajikistan
<b>TM</b>	Turkmenistan
<b>TN</b>	Tunisia
<b>TR</b>	Turkey
<b>UA</b>	Ukraine
<b>UZ</b>	Uzbekistan
<b>XK<sup>7</sup></b>	Kosovo (under UNSCR 1244/1999)

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<sup>7</sup> The two-letter codes for the former Yugoslav Republic of Macedonia, Kosovo and the occupied Palestinian territory are yet to be defined. The provisional code MK does not affect the definitive denomination of the country to be attributed after the conclusion of the negotiations currently taking place in the United Nations. XK is the provisional code used by Eurostat, and OPT is commonly used in European Commission documents.





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