Performance Indicators in PEMPAL Countries: Trends and Challenges

****

**HOW DOES BUDGET SPENDING MEASURE UP?**

Knowledge Product prepared by the Budget Community of Practice (BCOP) and Program and Performance Budgeting Working Group (PPBWG)

2018

Table of Contents

Introduction 3

Rationale and Approach for PEMPAL Performance Indicators (PIs) Review 3

Review of Performance Indicators in PEMPAL Countries Based on 10 Criteria 4

**SUMMARY JOINT ANALYSIS** 4

**COUNTRY BY COUNTRY REVIEW** 4

**Russian Federation** 4

**Armenia** 4

**Bosnia and Herzegovina** 4

**Croatia** 4

**Serbia** 4

**Bulgaria** 4

**Moldova** 4

**Kyrgyz Republic** 4

**Belarus** 4

Review of Health and Education Indicators in PEMPAL Countries 4

**SUMMARY JOINT ANALYSIS** 4

**COUNTRY BY COUNTRY REVIEW** 4

**Russian Federation: Education** 4

**Serbia: Education** 4

**Croatia: Education** 4

**Kyrgyz Republic: Education** 4

**Bulgaria: Education** 4

**Belarus: Education** 4

**Armenia: Education** 4

**Turkey: Education** 4

**Russian Federation: Health** 4

**Serbia: Health** 4

**Croatia: Health** 4

**Moldova: Health** 4

**Bulgaria: Health** 4

**Belarus: Health** 4

**Armenia: Health** 4

# Introduction

1. **Public Expenditure Management Peer Assisted Learning (PEMPAL) provides a public finance network platform to connect member governments in Europe and Central Asia (ECA) countries**. The network is organized in three Communities of Practice (COPs) of budget (BCOP), treasury (TCOP) and internal audit (IACOP). Technical content is facilitated through donor supported resource teams from the World Bank and other donors. The latest international standards and approaches are examined and experiences in reform implementation shared in the official network languages of English, Russian and Bosnian-Croatian-Serbian (BCS). The key donors to the program have been the Swiss State Secretariat for Economic Affairs (SECO), the Ministry of Finance of the Russian Federation, and the World Bank.[[1]](#footnote-1)
2. **The BCOP comprises 21 member countries and aims to strengthen budget methodology, planning and transparency**. It has also established several working groups, which comprise a sub-set of members who meet more regularly to discuss and address common challenges. The Program and Performance Budgeting Working Group (PPBWG), which is led by Mr. Nikolay Begchin from the Ministry of Finance (MoF) of the Russian Federation, aims to identify key trends in program and performance budgeting implementation and spending review and to learn from specific PEMPAL and international country examples in these areas.
3. **The Working Group on Program and Performance Budgeting Working Group comprises 15 member countries**, whichincludes Albania, Armenia, Belarus, Bulgaria, Bosnia and Herzegovina (BiH), Croatia, Georgia, Kosovo, Kyrgyz R, Moldova, Russian Federation, Serbia, Turkey, Ukraine, and Uzbekistan

# Rationale and Approach for PEMPAL Performance Indicators (PIs) Review

1. **The program and performance budgeting has consistently been identified as one of the top priorities** among the member countries’ budgeting reform priorities, which BCOP regularly collects from each BCOP member country on annual basis. Consequently, BCOP has formed the Program and Performance Budgeting Working Group (PPBWG) in 2016.
2. **In 2016, PPBWG facilitated PEMPAL’s participation in the OECD Performance Budgeting Survey[[2]](#footnote-2)** (noting that survey was based on self-assessment and no data cleaning/verification was conducted), which: i) provided baseline data on status of program and performance budgeting reforms in PEMPAL countries, ii) provided opportunity for PEMPAL countries to benchmark their progress against OECD, and iii) provided information on newest trends and best practices in OECD countries. PPBWG also held in-depth discussions with representatives from the Ministries of Finance of France, Ireland, and the Netherlands and the World Bank on program and performance budgeting and the use of spending reviews to strengthen performance.
3. **The findings of the OECD-PEMPAL Performance Budgeting Survey in 2016 indicate that PEMPAL countries have a common challenge in defining and tracking performance indicators**:
4. Encouraging culture of performance was a high priority for PEMPAL countries in introducing performance budgeting (more so than in the OECD countries)
5. Performance indicators are underused in budget negotiations (similarly to OECD countries)
6. The second top challenge in performance budgeting implementation in PEMPAL countries is unclear policy/program objectives that make it difficult to set performance measures and targets (which is a challenge not identified by OECD countries as a top challenge), while the other top challenges are also related to performance indicators, such as lack of performance culture and lack of accurate/timely data (similarly to OECD countries)
7. Lack and/or poor quality of performance information/data is identified as top challenge for spending reviews (as is the case in OECD countries).
8. **Moreover, BCOP countries’ reform priorities collected from each member country on annual level show that program and performance budgeting is the top priority area for BCOP countries, in particular topics related to performance indicators.** Based on the PPBWG sessions held during 2017 BCOP’s plenary meeting and the overall PEMPAL country reform priorities collected at that time, PBBWG decided to focus its future work on program budgeting performance indicators.
9. **In its review of performance indicators in PEMPAL countries, PPBWG collected examples/full sets of performance indicators from nine countries in Summer 2017**. The indicators were collected from Armenia, Belarus, Bulgaria, Bosnia and Herzegovina[[3]](#footnote-3), Croatia, Kyrgyz Republic, Moldova, Russian Federation, and Serbia.
10. **In September 2017, PPBWG agreed on the 10 criteria for review of PIs in PEMPAL countries.** In the same working session, each country presented on its trends and challenges in program and performance budgeting against these 10 criteria, four of which are based on the OECD Performance Budgeting Survey. Based on these presentations and the review of the sets of performance indicators previously collected from the member countries, the PPBWG Resource Team presented summary findings. The ten criteria are (first four being based on OECD Performance Budgeting Survey questionnaire):
11. Does a **performance budgeting framework** applied uniformly across central government exist?
12. What are the **key elements of performance budgeting framework?**
13. Which **institutions** play an important role in generating performance information?
14. What are **performance budgeting challenges** identified as high among options within OECD Survey?
15. At what **levels are PIs defined and monitored**?
16. What are the **types of PIs**?
17. What is the **frequency** of tracking PIs?
18. What is the **average number of PIs per program** and what is the structure of progrsm budgeting?
19. What is the estimate of **ratio of output to outcome indicators** in total indicators?
20. What are the **main challenges related specifically to PIs**?
21. **Given differences in scope of PIs set collected, PPBWG decided to also further focus the review on PI examples in the sectors of health and education, to examine more closely: i) program structure, ii) number of PIs, iii) examples of highest-level PIs (i.e. PIs at highest outcome level), and iv) examples of other PIs (i.e. PIs at lower result levels).** In October, 2017, PPBW further collected health and education PIs from ten countries (Armenia, Belarus, Bulgaria, Bosnia and Herzegovina, Croatia, Kyrgyz Republic, Moldova, Russian Federation, Serbia, and Turkey) in the area of health and/or education.
22. **This document serves as a knowledge product that takes stock of main characteristics of the performance indicators collected in budget planning processes in PEMPAL countries and identifies main challenges of PEMPAL countries related to performance indicators. It comprises of two parts:**
23. **General PI review based on 10 criteria**
24. **Detailed review of PIs in health and education**

Both parts provide the overall summary joint analysis followed by information per each country. Moreover, it is supplemented by the sets of PIs or examples of PIs collected from ten PPBWG countries, including overall PIs in different sectors and more specifically PIs in health and education sectors, which have been circulated to PPBWG member countries. **This knowledge product is meant to be used by the PEMPAL BCOP member countries as a benchmarking tool, as well as a resource od specific PIs used in other countries. Finally, summary analysis laid out in this document will be considered by the PPBWG in its decisions on the focus of future work of the PPBWG.**

# Review of Performance Indicators in PEMPAL Countries Based on 10 Criteria

## **SUMMARY JOINT ANALYSIS**

## **Criterion 1: Does a PB framework applied uniformly across central government exist?**

1. **All of the analyzed nine PEMPAL countries (**Armenia, Belarus, Bulgaria, Bosnia and Herzegovina, Croatia, Kyrgyz Republic, Moldova, Russian Federation, and Serbia) **have compulsory performance budgeting framework for both ministries and agencies.** This criterion is based on a question from the 2016 OECD Performance Budgeting Survey, which included four answer options: i) compulsory for line ministries and agencies, ii) compulsory for line ministries only, iii) optional for both line ministries and agencies, and iv) none.Compared to the data on OECD countries in the 2016 OECD Performance Budgeting Survey,the coverage of performance budgeting frameworks is wider and more uniform in PEMPAL countries than in OECD countries, where around half countries do not have a framework that is compulsory for both line ministries and agencies[[4]](#footnote-4).

## **Criterion 2: What are the key elements of performance budgeting framework?**

1. **Almost all PEMPAL countries have general guidelines/definitions and standard PI reporting templates** (both with exception of Armenia), **while over half also have standard ICT tools for PIs** (Croatia, Bosnia and Herzegovina, Serbia, Moldova, and Russia**). Only one third has standards set of PIs and/or targets** (Armenia, Bulgaria, and Russia).See Exhibit 1.This criterion is based on a question from the 2016 OECD Performance Budgeting Survey, which included four answer options: i) general guidelines and definitions, ii) standard templates for reporting performance information, iii) standard set of performance indicators and/or targets, and iv) standard ICT tool for entering/reporting performance information.These results are broadly similar to the results for OECD countries (out of 33 OECD countries within the OECD Performance Budgeting Survey, 24 have general guidelines and definitions, 19 standard reporting templates, 12 a standard ICT tool, and 8 a standard set of performance indicators/targets)[[5]](#footnote-5).

***Exhibit 1: Key elements of performance budgeting framework in PEMPAL countries***

****

**Armenia, Bulgaria, and Russia**

**Croatia, BiH,**

**Serbia, Moldova,**

**and Russia**

**of countries, exception is Armenia**

**of countries, exception is Armenia**

## **Criterion 3: Which institutions play an important role in generating performance information?**

1. **In all PEMPAL countries, central budget authority (i.e. ministries of finances) and budget users/spending units (line ministries and agencies) play the key role in generating performance information,** as shown in Exhibit 2. The Chief Executive plays an important role in generating PI only in Russia and Kyrgyz Republic (KR), while legislature, supreme audit, and internal audit do not play an important role in any PEMPAL country. In OECD countries, central budget authorities’ (CBAs) role is less important and overall roles are more shared, with budget users/spending playing an important role in almost all countries, the central budget agency playing an important role in around half of countries, and the Chief Executive, supreme audit, internal audit, and legislature also playing an important role in some countries[[6]](#footnote-6).

***Exhibit 2: Institutions that play an important role in generating performance information***



**Russia**

 **and**

 **KR**

NONE

NONE

NONE

## **Criterion 4: What are performance budgeting challenges identified as high or medium high among options within the 2016 OECD Performance Budgeting Survey?**

1. **The five most common challenges selected by PEMPAL countries are:**
2. **Lack of resources (time, staff, operating funds) to devote to performance evaluations;**
3. **Unclear policy/program objectives make it difficult to set performance measures/targets;**
4. **Lack of capacity/training for staff/civil servants with regards to performance measurement;**
5. **Lack of performance culture; and**
6. **Lack of accurate/timely data**

This criterion is based on a question from the 2016 OECD Performance Budgeting Survey and it included 17 answer options: 1. Lack of accurate and timely data to serve as input for performance measures, 2. Unclear policy/program objectives make it difficult to set performance measures/targets. 3. Lack of leadership/commitment in promoting performance-based approach to budgeting, 4. Gaming- whereby selection of performance targets chosen deliberately in ways that bias results, 5. Unclear what role, if any, performance information presented in budget has played in allocation decisions, 6. Performance information provided not relevant for budgetary decision-making, 7. Focus on performance decreases once funds have been allocated, 8. Horizontal working and cooperation across central government organizations has decreased due to greater competition for funds or to show ownership over activities, 9.Performance measures do not provide information on efficiency or cost-effectiveness, 10. Lack of capacity/training for staff/civil servants with regards to performance measurement, 11. Lack of resources (time, staff, operating funds) to devote to performance evaluations, 12. Lack of culture of “performance”, 13. Lack of framework/guidance on performance-budgeting, 14. Information overload—too much information is presented and not always clear which are most adequate for decision-making, 15. Performance budgeting procedures too bureaucratic/lengthy/complicated, 6. Inconsistencies/duplication between performance budgeting practices and procedures of CBAs and line ministries/agencies, and 17. Lack of adequate ICT. For OECD countries, the five greatest challenges to effectively implementing performance budgeting are:

1. Lack of performance culture;
2. Lack of resources (time, staff, operating funds) to devote to performance evaluations;
3. Lack of capacity/training for staff/civil servants with regards to performance measurement;
4. Lack of accurate/timely data; and
5. Lack of information on efficiency or cost-effectiveness

## **Criterion 5: At what levels are performance indicators defined and monitored?**

1. **In most PEMPAL countries, performance indicators are defined by line ministries/agencies, usually with the CBA’s assistance and/or guidelines**. In Belarus and Russia, performance indicators are approved by the Government.
2. **In most PEMPAL countries, performance indicators are tracked by the line ministries/agencies and sent to Government/Parliament as additional information within the budget documentation only** (not for adoption). Data on performance indicators from all ministries/agencies is consolidated by the Ministries of Finance in Balkans countries and by the Ministry of Economy in Russia and Belarus.

## **Criterion 6: What are the types of performance indicators used?**

1. **In around half PEMPAL countries, there is no official typology of performance indicators, while in other half usually some combination of output and outcomes** (and also efficiency in some cases) **is used.**

## **Criterion 7: What is the frequency of tracking performance indicators?**

1. **In all PEMPAL countries indicators are tracked at annual basis, except for Armenia whether it is quarterly and Serbia where at some levels also semi-annual monitoring occurs.**

## **Criterion 8: What is the average number of performance indicators per program and what is the structure of program budgeting?**

1. **In most cases there are two levels of results – programs and activities/sub-programs (or policy areas and programs).** The exception is Kyrgyz Republic, where three levels are used – sustainable development level, program level, and activity level. **PIs given in most cases at both result levels** (except in BiH where indicators are given only at lower level - activity level).
2. **Number of PIs varies greatly in most countries, with rough estimated averages per country ranging from 10 to 80 (**80 in Russia, 50 in Armenia, 15 in BiH, 30 in Croatia, 30 in Serbia, 20 in Bulgaria, 10 in Moldova, 10 in Kyrgyz R, and 40 in Belarus)**. However, it must be noted that scope of a program varies among countries, from whole sectors (e.g. in Russia) to much smaller scope at a level of one department in one agency/Ministry (e.g. Bosnia and Herzegovina).**

## **Criterion 9: What is the rough estimate of ratio of output and outcome indicators in total indicators?**

## **Rough estimate for most countries is around two thirds of indicators being output indicators and one third outcome indicators,** however, it is difficult to estimate due to large number of indicators and large variety and quality variations of indicators within most countries.

## **Criterion 10: What are the main challenges related specifically to performance indicators?**

Most frequently identified challenges by PEMPAL countries are:

1. Program budgeting still being in early stages.
2. Quality of PIs varying from budget user (ministry/agency) to user.
3. Too many PIs.
4. Lack of defined standard key national indicators/highest-level national strategy with standard PIs.
5. Weak connection with overall government strategic planning.
6. Some PIs not being quantifiable in some cases.
7. Weak or non-existent program budgeting and/or performance information at sub-national governance level.
8. Lack of use of PIs in decision-making.
9. Challenges in setting and tracking PIs for inter-agency programs.
10. Difficulties in targeting PI values.
11. Need for strengthening overall performance-based mindset.

## **COUNTRY BY COUNTRY REVIEW**

## **Russian Federation**

|  |  |
| --- | --- |
| 1. Does a PB framework applied uniformly across central government exist? | **Yes, compulsory for line ministries and agencies** |
| 2.   What are the key elements of PB framework? | **General guidelines and definitions; Standard templates for reporting performance information; and Standard ICT tool for entering/reporting performance information** |
| 3.   Which institutions play an important role in generating PIs? | **CBA, Agencies, Chief Executive** |
| 4.  What are PB challenges identified as high or medium high among options within OECD Survey? | **i) Gaming- whereby selection of performance targets chosen deliberately in ways that bias results, ii) Lack of accurate and timely data to serve as input for performance measures;  iii) Lack of culture of “performance”; and iv) Performance budgeting procedures too bureaucratic/lengthy/complicated**  |
| 5.  At what levels are PIs defined and monitored? | **Established and approved by the Government for all Government Programs. Tracked by Ministry of Economy.**  |
| 6.   What are the types of PIs? | **No type is prescribed, except for a list of task-based indicators for government agencies.**  |
| 7.   What is the frequency of tracking PIs? | **Annual** |
| 8.   What is the average number of PIs per program and what is the structure of PB? | **Ranges from around 3 to around 30 at program level, with average around 10 (nothing that in some cases programs are as broad as a sector). PIs also given at sub-program level (on average around 7 sub-programs per program, ranging from 1 to 20), for which around 10 PIs are given, but in some cases more.**  |
| 9.   What is the rough estimate of ratio of output and outcome indicators in total indicators? | **Around 2/3 are output indicators, 1/3 outcome indicators.** |
| 10.   What are the main challenges related specifically to PIs? | **Absence of top-level KNIs, as there is no one overall national strategy for socio-economic development. Too many PIs. Lack of defined standard KNIs, so every ministry defined own indicators.**  |

## **Armenia**

|  |  |
| --- | --- |
| 1. Does a PB framework applied uniformly across central government exist? | **Yes, compulsory for line ministries and agencies** |
| 2.   What are the key elements of PB framework? | **Standard set of performance indicators and/or targets** |
| 3.   Which institutions play an important role in generating PIs? | **CBA, Agencies** |
| 4.  What are PB challenges identified as high or medium high among options within OECD Survey? | **Lack of capacity/training for staff/civil servants with regards to performance measurement** |
| 5.  At what levels are PIs defined and monitored? | **Defined by Ministries/Agencies. Tracked by Government.**  |
| 6.   What are the types of PIs? | **Quantitative, Qualitative, and Timeliness Indicators (currently in most cases the latter two types are not defined yet). Transfers have different PIs - Number of beneficiaries, Amounts, and Payment Frequency** |
| 7.   What is the frequency of tracking PIs? | **Quarterly** |
| 8.   What is the average number of PIs per program and what is the structure of PB? | **Varies greatly. For the examples of social affairs sector, the Ministry has 6 programs, with average of 4 PIs , and its Social Affairs Office has 11 (noting that some of them overlap) with average of 3 PIs.**  |
| 9.   What is the rough estimate of ratio of output and outcome indicators in total indicators? | **Mostly outputs.** |
| 10.   What are the main challenges related specifically to PIs? | **PB still in early stages. No uniform way of PIs across sector. In most cases qualitative and timeliness indicators are not defined. Quarterly reporting is too frequent.**  |

## **Bosnia and Herzegovina**

|  |  |
| --- | --- |
| 1. Does a PB framework applied uniformly across central government exist? | **Yes, compulsory for line ministries and agencies** |
| 2.   What are the key elements of PB framework? | **General guidelines and definitions; Standard templates for reporting performance information; and Standard ICT tool for entering/reporting performance information** |
| 3.   Which institutions play an important role in generating PIs? | **CBA, Agencies** |
| 4.  What are PB challenges identified as high or medium high among options within OECD Survey? | **Lack of accurate and timely data to serve as input for performance measures; Unclear policy/program objectives make it difficult to set performance measures/targets Performance information provided not relevant for budgetary decision-making; Lack of capacity/training for staff/civil servants with regards to performance measurement; Lack of culture of “performance”; Lack of framework/guidance on performance-budgeting; and Lack of adequate ICT** |
| 5.  At what levels are PIs defined and monitored? | **Defined by Ministries/Agencies (in most cases with MF’s assistance, more so at the State-level than at the FBiH level). Tracked also by Ministries/Agencies and sent to Government and Parliament by MF for all users as addition information in budget adoption procedure at State-level.**  |
| 6.   What are the types of PIs? | **Outputs, Outcomes, and Efficiency Indicators** |
| 7.   What is the frequency of tracking PIs? | **Annual** |
| 8.   What is the average number of PIs per program and what is the structure of PB? | **Each Ministry/Agency has programs (on average 3-4, but varies) and within each program there are activities (on average 4-5 per program, but varies). Indicators are given for activities. At State-level 3 indicators per activity (one output, one outcome, one efficiency indicator), while at FBiH more indicators can be given.** |
| 9.   What is the rough estimate of ratio of output and outcome indicators in total indicators? | **Around 2/3 are output indicators, 1/3 outcome indicators.** |
| 10.   What are the main challenges related specifically to PIs? | **Connection with overall government strategic planning insufficient (work is planned/undergoing to improve this). Lack of defined standard PIs/KNIs. Quality of PIs varies from user to user and overall needs review and improvement. Some PIs not quantifiable (FBiH level). Lack of use of PIs in decision-making. Weak or nonexistent PB at Canton/municipal level.** |

## **Croatia**

|  |  |
| --- | --- |
| 1. Does a PB framework applied uniformly across central government exist? | **Yes, compulsory for line ministries and agencies** |
| 2.   What are the key elements of PB framework? | **General guidelines and definitions; Standard templates for reporting performance information; and Standard ICT tool for entering/reporting performance information** |
| 3.   Which institutions play an important role in generating PIs? | **CBA, Agencies** |
| 4.  What are PB challenges identified as high or medium high among options within OECD Survey? | **Unclear policy/program objectives make it difficult to set performance measures/target;  Lack of leadership/commitment in promoting performance-based approach to budgeting; Performance information provided not relevant for budgetary decision-making; Focus on performance decreases once funds have been allocated; Lack of capacity/training for staff/civil servants with regards to performance measurement; and Lack of resources (time, staff, operating funds) to devote to performance evaluations.** |
| 5.  At what levels are PIs defined and monitored? | **Defined by Ministries/Agencies with MF’s methodological assistance. Tracked also by Ministries/Agencies and sent to Government and Parliament as additional information.**  |
| 6.   What are the types of PIs? | **No official typology** |
| 7.   What is the frequency of tracking PIs? | **Annual** |
| 8.   What is the average number of PIs per program and what is the structure of PB? | **There are programs and within each program there are activities. Number of PIs varies greatly, on average it 30 PIs per program.** |
| 9.   What is the rough estimate of ratio of output and outcome indicators in total indicators? | **Mostly output indicators.** |
| 10.   What are the main challenges related specifically to PIs? | **Quality of PIs in some cases is still poor. Some programs/activities have too many PIs, some too few. Lack of use of PIs in decision-making. Lack of highest-level national strategy with standard PIs/KIs. Although PB introduced at local governance level, it is still being developed.**  |

## **Serbia**

|  |  |
| --- | --- |
| 1. Does a PB framework applied uniformly across central government exist? | **Yes, compulsory for line ministries and agencies** |
| 2.   What are the key elements of PB framework? | **General guidelines and definitions; Standard templates for reporting performance information; and Standard ICT tool for entering/reporting performance information** |
| 3.   Which institutions  play an important role in generating PIs? | **CBA, Agencies** |
| 4.  What are PB challenges identified as high or medium high among options within OECD Survey? | **Lack of accurate and timely data to serve as input for performance measures; and Unclear policy/program objectives make it difficult to set performance measures/targets.** |
| 5.  At what levels are PIs defined and monitored? | **Defined by Ministries/Agencies with MF’s methodological assistance. Tracked by Ministries/Agencies and sent to Government and Parliament as additional information.**  |
| 6.   What are the types of PIs? | **Output and Outcome indicators.** |
| 7.   What is the frequency of tracking PIs? | **Annual (for programs and program activities and projects) and semi-annual (for program activities and projects)** |
| 8.   What is the average number of PIs per program and what is the structure of PB? | **There are around 70 programs in total, with activities within each program (on average around 7 activities per program). PIs given a both program (mostly higher-level outcome indicators) and activity level (mostly lower-level output indicators). On average around 5 PIs per program, but some with many more. On average 3 PIs per activity, but varies greatly.** |
| 9.   What is the rough estimate of ratio of output and outcome indicators in total indicators? | **Around 2/3 are output indicators, 1/3 outcome indicators.** |
| 10.   What are the main challenges related specifically to PIs? | **Quality and number of PIs varies greatly. Lack of use of PIs in decision-making. Lack of highest-level national strategy with standard PIs/KIs.**  |

## **Bulgaria**

|  |  |
| --- | --- |
| 1. Does a PB framework applied uniformly across central government exist? | **Yes, compulsory for line ministries and agencies** |
| 2.   What are the key elements of PB framework? | **General guidelines and definitions; Standard templates for reporting performance information; and Standard set of performance indicators and/or targets** |
| 3.   Which institutions play an important role in generating PIs? | **CBA, Agencies** |
| 4.  What are PB challenges identified as high or medium high among options within OECD Survey? | **Unclear policy/program objectives make it difficult to set performance measures/targets; Performance information provided not relevant for budgetary decision-making; Focus on performance decreases once funds have been allocated; Performance measures do not provide information on efficiency or cost-effectiveness; Information overload—too much information is presented and not always clear which are most adequate for decision-making; and Lack of adequate ICT** |
| 5.  At what levels are PIs defined and monitored? | **Defined by Ministries/Agencies in line with MF’s guidelines. Monitored by MF and External Audit (ex-post) and sent to Government and Parliament as additional information.**  |
| 6.   What are the types of PIs? | **Input, Product/Service (Output), Outcome, Process (Efficiency), and Quality indicators** |
| 7.   What is the frequency of tracking PIs? | **Annual, some multiannual** |
| 8.   What is the average number of PIs per program and what is the structure of PB? | **Programs are given within policy areas (socio-economic sectors). Line Ministries have 2-5 policy areas, each area has 3-5 programs. For each program PIs indicators given related to products/services delivered within the program, with output, quality, and input indicators mostly used. For policy areas, outcome indicators given related to strategic goals of Government (as per MF’s guidelines), but not always. Number of PIs varies greatly, with a rough average (based on examples collected by the PPBWG) being around 20 per program.** |
| 9.   What is the rough estimate of ratio of output and outcome indicators in total indicators? | **Around 2/3 are output indicators, 1/3 outcome indicators.** |
| 10.   What are the main challenges related specifically to PIs? | **Need to strengthened link between PIs and budget decisions and have Government and Parliament more involved. Quality and number of PIs varies greatly.**  |

## **Moldova**

|  |  |
| --- | --- |
| 1. Does a PB framework applied uniformly across central government exist? | **Yes, compulsory for line ministries and agencies** |
| 2.   What are the key elements of PB framework? | **General guidelines and definitions; Standard templates for reporting performance information; and Standard ICT tool for entering/reporting performance information** |
| 3.   Which institutions play an important role in generating PIs? | **CBA, Agencies** |
| 4.  What are PB challenges identified as high or medium high among options within OECD Survey? | **Performance information provided not relevant for budgetary decision-making; Horizontal working and cooperation across central govt. organizations has decreased due to greater competition for funds or to show ownership over activities; Lack of resources (time, staff, operating funds) to devote to performance evaluations; and Lack of culture of “performance”** |
| 5.  At what levels are PIs defined and monitored? | **Defined by Ministries/Agencies and intended only as internal tool for them.** |
| 6.   What are the types of PIs? | **Input, Output, and Outcome indicators.** |
| 7.   What is the frequency of tracking PIs? | **Annual** |
| 8.   What is the average number of PIs per program and what is the structure of PB? | **PIs are defined for programs. There are also tasks within each program, but no PIs are defined for tasks, as they are used as tools to reach PI targets of the program. Average number of programs per budget user is around 4 and some programs are inter-agency. Average number of PIs per program is 10.**  |
| 9.   What is the rough estimate of ratio of output and outcome indicators in total indicators? | **Around 80% are output indicators, 20% outcome indicators.** |
| 10.   What are the main challenges related specifically to PIs? | **Too many PIs, some not relevant. Changes/dropping of PIs too frequent. Challenges for setting and tracking PIs for inter-agency programs. Overall performance-based mindset needs to be strengthened.**  |

## **Kyrgyz Republic**

|  |  |
| --- | --- |
| 1. Does a PB framework applied uniformly across central government exist? | **Yes, compulsory for line ministries and agencies** |
| 2.   What are the key elements of PB framework? | **General guidelines and definitions; and Standard templates for reporting performance information** |
| 3.   Which institutions play an important role in generating PIs? | **CBA, Agencies, Chief Executive** |
| 4.  What are PB challenges identified as high or medium high among options within OECD Survey? | **Lack of adequate ICT; Lack of accurate and timely data to serve as input for performance measures; Unclear policy/program objectives make it difficult to set performance measures/targets; Lack of leadership/commitment in promoting performance-based approach to budgeting; Gaming- whereby selection of performance targets chosen deliberately in ways that bias results; Unclear what role, if any, performance information presented in budget has played in allocation decisions; Focus on performance decreases once funds have been allocated; Lack of capacity/training for staff/civil servants with regards to performance measurement; and Lack of framework/guidance on performance-budgeting.** |
| 5.  At what levels are PIs defined and monitored? | **Defined by Ministries/Agencies in the attachment to budget documentation. Will be monitored starting 2018.**  |
| 6.   What are the types of PIs? | **Quality at program level and quantity at activity level.** |
| 7.   What is the frequency of tracking PIs? | **Annual (used to be quarterly)** |
| 8.   What is the average number of PIs per program and what is the structure of PB? | **PIs are defined for both programs and activities within programs. There are around 103 programs, many inter-agency, with average of 5 activities per program. On average, there are 10 PIs per budget user, including both program and activity-level PIs. In most cases one PI at program level and 1-2 at activity level. In addition, there are 70 highest-level Government indicators (sustainable development indicators)**  |
| 9.   What is the rough estimate of ratio of output and outcome indicators in total indicators? | **Around 2/3 are output indicators, 1/3 outcome indicators.** |
| 10.   What are the main challenges related specifically to PIs? | **Too many PIs usually proposed by Ministries/Agencies. There are inter-agency programs, but common PIs not established. Difficulties in targeting PI values. Connections to national versus sectoral strategies in terms of PIs.**  |

## **Belarus**

|  |  |
| --- | --- |
| 1. Does a PB framework applied uniformly across central government exist? | **Yes, compulsory for line ministries and agencies** |
| 2.   What are the key elements of PB framework? | **General guidelines and definitions; Standard templates for reporting performance information; and Standard set of performance indicators and/or targets** |
| 3.   Which institutions play an important role in generating PIs? | **CBA, Agencies** |
| 4.  What are PB challenges identified as high or medium high among options within OECD Survey? | **Lack of leadership/commitment in promoting performance-based approach to budgeting; Lack of capacity/training for staff/civil servants with regards to performance measurement;  Lack of resources (time, staff, operating funds) to devote to performance evaluations; and Lack of culture of “performance”** |
| 5.  At what levels are PIs defined and monitored? | **About 400 PIs approved by the Government for 21 government programs (82 sub-programs), all of these PIs proposed and tracked by Ministries/Agencies. Ministry of Economy prepares a consolidated report on PIs.**  |
| 6.   What are the types of PIs? | **Output, Outcome and Efficiency indicators** |
| 7.   What is the frequency of tracking PIs? | **Annual (some quarterly)** |
| 8.   What is the average number of PIs per program and what is the structure of PB? | **PIs are defined for program (so called consolidated target indicators) and for activity/sub-program level (so called target indicators). Number of PIs per program is usually between 1 and 5, and on average around 5 per activity, with average of 8 activities per program.** |
| 9.   What is the rough estimate of ratio of output and outcome indicators in total indicators? | **Mostly outputs.** |
| 10.   What are the main challenges related specifically to PIs? | **Government’s focus is mostly on high-level consolidated socio-economic development indicators.  Need to use PI values more for budget decisions.** |

# Review of Health and Education Indicators in PEMPAL Countries

## **SUMMARY JOINT ANALYSIS**

1. **Number and structure of programs and number of PIs vary greatly among PEMPAL countries,** as shown in Exhibit 3**. However, as noted above, comparison is not entirely applicable, as scope of a program varies among countries, from whole sectors (e.g. in Russia) to much smaller scope at a level of one department in one agency/Ministry (e.g. Serbia).**
2. **In majority of cases PIs are properly defined** -  it is clear what they measure, what the unit of measure is, and they are neutral in their name. However, this is not always the case.
3. **In most cases, PIs are in large part outputs, however, outcome-level indicators are also given**. **In most cases, low output/process level PIs are also given** (e.g. Number of meetings or Yes/No indicators related to legislation/regulation being developed).
4. **Highest-level long-term indicators**, **usually based in internationally comparable measurements, are also included in most cases**– e.g. student PISA scores, population covered by education levels, investment in R&D, life expectancy, mortality related to different disease types, vaccination coverage.

***Exhibit 3: Number and structure of programs and number of PIs in health and education sectors***

|  |  |  |
| --- | --- | --- |
|   | **EDUCATION SECTOR** | **HEALTH SECTOR** |
|   | **NUMBER AND STUCTURE OF PROGRAMS** | **NUMBER OF PIs** | **NUMBER AND STUCTURE OF PROGRAMS** | **NUMBER OF PIs** |
| **Russian Federation** | 1 program with 7 sub-programs | 154 | 1 program with 11 sub-programs | 96 |
| **Serbia** | 6 programs with 64 activities | 272 | 6 programs with 45 activities | 142 |
| **Croatia** | 4 programs with 40 activities | 113 | 4 programs with 8 activities | 18 |
| **Kyrgyz Republic** | 6 programs with 27 activities | 73 | 5 programs with 40 activities | 68 |
| **Bulgaria** | 2 policy areas with 12 programs | 210 (of which 21 at policy area level ) | 3 policy areas with 12 programs | 635 (of which 14 at policy area level) |
| **Belarus** | 1 program with 11 sub-programs | 31 | 1 program with 7 sub-programs | 23 |
| **Moldova** |   |   | 12 programs | 95 |
| **Armenia** | 9 programs with 69 sub-programs | 153 | 9 programs with 56 sub-programs | 165 |
| **Turkey** | 7 strategic objectives and 42 performance objectives  | 175 |  |  |
| ***AVERAGE*** |  | ***131*** |  | ***138*** |

1. **In education, PIs can generally be grouped as related to:**
2. **Access to education** (e.g. Share of population covered by education at different levels)
3. **Quality of education** (e.g Average scores on state exams, Average scores on PISA, Share of university graduates who are employed)
4. **Number of service beneficiaries** (students) **and number of service providers** (teachers) **and their ratio per different education levels**
5. **Investment in fixed assets and IT** (Share of schools with modern internet and IT services, Share of schools with safety standards, Number of modernized objects that are realized using the IT system, Share of schools with the access to computers for educational purposes)
6. **Gifted students** (e.g. Number of awards, Ratio of the number of pupils using student scholarships, Number of secondary school students in international competitions, Number of gifted children and students who were given additional specific forms of support according to their needs, preferences and skills)
7. **Access of marginalized groups** (e.g. Number of pedagogical assistants involved in working with Roma children, Number of students with disabilities, Number of children attending a program of educational work with children on hospital treatment, Increasing the number of supplementary classes for students with learning disabilities)
8. **Support services** (e.g. Number of available student dorms, Number of students using accommodation services)
9. **Extracurricular activities** (e.g. Percentage of pupils involved in extracurricular activities)
10. **Compliance with standards** (e.g. Number of higher education institutions which are aligned with revised European standards, Number of standard documents for student achievement for primary and secondary education)
11. **Research and development (**e.g. Percentage of GDP expenditures for science and research, Share of funds allocated by universities to development of research work, Share of recent graduates involved in implementation of research and development)
12. **Teachers’ education** (e.g. Number of employees in education who received trainings in the area of violence prevention, and Share of teachers participating in advanced vocational training programs)
13. **Legal/regulatory documents** (e.g. Administrative acts regulating learning/training process, Laws/bylaws, Preparation of documents on policies (the total number of documents)
14. **In health, PIs can generally be grouped as related to:**
15. **Life expectancy**
16. **Users’ perceptions of quality of services** (e.g. Percent satisfaction of patients provided with health care)
17. **Mortality rates** (e.g. Mortality from all causes per 1,000 persons, Infant mortality per 1,000 births, Mortality from cardiovascular diseases, Disease prevalence by type, and Percentage of deaths from malignant tumors)
18. **Prevalence of diseases** (e.g. Porevalence of cardiovascular diseases and TB incidence rate)
19. **High-technology health services and investment in fixed assets** (e.g. Average age of equipment for radiological diagnostics and air therapy, Number of public health centers equipped with validated laboratory equipment, Number of e-services implemented, and Per capita capital investment expenditure)
20. **Research and Development** (e.g. Percentage of researchers aged through 39 in the overall number of researchers and Number of studies on severely hazardous infections)
21. **Vaccination coverages** (e.g. Percentage of fully vaccinated children, Vaccination coverage for children under 2 years of age, and Coverage of women 30-60 years of age in screening Cervical Cancer)
22. **Prevention and preventive health exam coverage** (e.g. Percentage of women covered by preventive examinations, Consumption of kitchen salt, Consumption of fruit and vegetables, and Percentage of physically active population)
23. **Health workers’ qualification and training** (e.g. Number of health workers who participated in professional training)
24. **Awareness raising** (e.g. Developed information materials on prevention of diseases, and Number of awareness-raising campaigns)
25. **Number of health care workers and associated ratios** (e.g. Ratio of physicians per 10,000 persons, Number of nursing personnel per 1 physician, Number of doctor specialists per 100,000 inhabitants, Number of medical workers per capita)
26. **Legal/regulatory documents** (e.g. Total number of developed draft legal acts and Number of agreements developed, memoranda, protocols, programs and other documents, meetings, discussions and other cooperation activities)

## **COUNTRY BY COUNTRY REVIEW**

## **Russian Federation: Education**

|  |  |
| --- | --- |
| Program structure  | **Government Program on 2013-2020 Education System Development, with 7 Sub-Programs: 1. Development of Vocational Education, 2. Development of Preschool, General and Further Education of Children, 3. Development of the System of Assessment of the Quality of Education and Information Transparency of Education System, 4. Social Engagement of the Youth, 5.Ensuring the Implementation of the National Program of the Russian Federation 'Development of Education' in 2013-2020 and Other Measures in the Field of Education of the National Program 'Development of Education' for 2013-2020, 6.Federal Target Program "Russian Language" for 2011-2015, and 7.Federal Target Program of Education Development for 2011 - 2015** |
| Number of PIs | **80 at Program level and total of 74 at sub-program level, average of 10 per sub-program.** |
| Highest-level PIs | **Relative share of the population in the 5-18 year bracket, covered by general and vocational education, in the overall population in the 5 - 18 year bracket****Availability of preschool education (ratio of the number of children aged 3 to 7 who receive preschool education in the current year to the sum total of children aged 3 to 7 who receive preschool education in the current year and the number of children aged 3 to 7 who are on a waiting list for preschool education in the current year)****Ratio of the average score of the universal state exam (in terms of 2 mandatory subjects) at 10 per cent of the schools with best universal state exam results to the average score of the universal state exam (in terms of 2 mandatory subjects) at 10 per cent of the schools with worst universal state exam results****Relative share of the higher education sector in the internal expenses on research and development****Relative share of the number of students at state and municipal organizations of general education who are able to study in accordance with the main current requirements (considering the federal state educational standards) to the overall number of students at state and municipal organizations of general education****Relative share of the graduates of organizations of vocational training of the latest year who were placed in a job for which they were trained** **Outreach of the programs of further vocational education (relative share of the economically active population aged 25-65 trained at refresher and (or) retraining courses to the overall number of economically active population in said age bracket)****Relative share of the young people aged 14 to 30 engaged in the activity of youth mass associations to the overall number of young people aged 14 to 30** |
| Examples of other PIs | **Relative share of the number of organizations of intermediate vocational education and organizations of higher vocational education whose buildings are fit for people with disabilities****Number of students enrolled in intermediate vocational education programs per 1 person, serving as lecturers and (or) foremen of vocational training****Ratio of the average monthly wage of the faculty of state and municipal organizations of higher education to the average monthly wage in a given constituent entity****Number of Russian universities in the world rating of 100 top universities of the world Availability of preschool education organizations to children (ratio of the number of children aged 2 months to 3 years who attend preschool education organizations to the overall number of children aged 2 months to 3 years)****Number of enrollees per one teacher of general education****Relative share of the number of Russian schoolchildren who have reached the basic level of educational achievements in international comparative studies of education quality (PIRLS, TIMSS, PISA) in their overall number** **TIMSS international study (grade 4)****Ratio of the average monthly wage of teachers of state (municipal): preschool education organizations to the average monthly wage in the general education field in a given constituent entity of the Russian Federation****Relative share of the number of education organizations fitted with fire alarms, smoke detectors, and fire hose cabinets in the overall number of relevant organizations****Number of the international comparative studies of education quality in which Russia participates regularly****Relative share of the number of young people aged 14 to 30 engaged in the projects and programs in the field of support of talented youth, which are implemented by executive authorities, in the overall number of young people aged 14 to 30****Number of events for young people****Number of recipients of awards for literature, art, education, printed media, science and engineering and other citations to honor distinguished services to the state****Level of compliance of education with modern standards** |

## **Serbia: Education**

|  |  |
| --- | --- |
| Program structure  | **6 Programs: Editing, monitoring and development of all levels of the education system, Pre-school education, Primary Education, High school, High education, Support in the education of students and students** |
| Number of PIs | **31 at Program level and additional 241 for 64 activities within the 6 Programs.** |
| Highest-level PIs | **Number of pedagogical assistants involved in working with Roma children.****The number of calls to the SOS phone or the reporting of violence.****Number of visits to schools by the violence prevention and discrimination unit.****Number of students enrolled in higher education****Number of students covered by affirmative measures.****Number of students enrolled in higher education in IT profiles****Percentage covers children with preschool programs****Percentage of dropouts from elementary education****Percentage of the population enrolled in high school****Percentage of students in three-year profiles****Percentage includes children with pre-school curriculum in the year before going to school****Coverage of pupils of the first and second cycle of compulsory primary education and upbringing****The average score of students at TIMMS testing****Average score of students at the final exam (from all tests)****The average result of students on PISA testing****Percentage of pupils who complete elementary school (number of pupils who passed the final exam****Number of new publicly recognized adult education activists (JPOAs) who implement approved education and training programs issued on the basis of quality standards****Number of secondary education courses developed on the basis of qualification standards****Number of adults enrolled in secondary education programs annually****Number of students enrolled in secondary schools for further education and acquiring knowledge and skills****Percentage of pupils who complete secondary education according to programs passed on the basis of the standard of qualifications****Number of newly enrolled students in the first year of master studies****Number of newly enrolled students in the first year of basic studies****Number of students who completed their master studies****Number of students covered by affirmative measures through the programs of the Government of the Republic of Serbia****Number of students who have completed basic studies****The ratio of the number of pupils using student scholarships and the number of students enrolled****Ratio of the number of pupils in dormitories and the total number of students in secondary schools in RS****Relation of the capacity of student dormitories and the number of students who meet the conditions for using homes****The ratio of the number of teachers with the passed professional exam and the total number of teachers****The ratio of the number of students who are eligible for a student loan and the number of students en****rolled** |
| Examples of other PIs | **Rulebook - List of regulated professions Law on regulated professions and recognition of professional qualifications.****Percentage of gymnasiums and art schools that meet standards of quality of work of institutions.****Number of curricula prepared****Number of professional grades for the quality of textbooks****Number of employees in institutions providing professional support****Number of published works in the database on the website of the Institute****Number of standard documents for student achievement for primary and secondary education****Number of employees in education who received trainings in the area of violence prevention.****Number of functional resource centers for assistive technology****Number of meetings of the Board of Directors at which decisions on the work of ERI SEE are made****Number of children attending a program of educational work with children on hospital treatment****Percentage of pupils involved in extracurricular activities****Number of secondary school students in international competitions****Number of equipped facilities after rehabilitation****Number of students who completed their master studies****Number of students covered by affirmative measures through the programs of the Government of the Republic of Serbia****Number of modernized objects that are realized using the IT system****Number of students using accommodation services** |

## **Croatia: Education**

|  |  |
| --- | --- |
| Program structure  | **4 Programs: Development of the educational system, Higher education, Investing in scientific research, and Development of the information society** |
| Number of PIs | **26 at Program level (outcome indicators) at State level and 5 outcome indicators at local governance level. Additional 82 PIs for 40 activities and 5 projects within the 4 Programs.** |
| Highest-level PIs | **Increase in the number of 25- to 64-year-olds who have completed tertiary education****Increase in the number of educational institutions where external evaluation of work quality is performed** **Increase in the number of educational institutions involved in the Erasmus+ program****2017-2019 Action plan for the mobility of scientists adopted** **Development of the educational system****Increased number of persons involved in some form of lifelong learning****Increased amount of information in the adult education system****Heads of adult education have successfully completed all five program modules and thus improved their skills and competence** **Increase in the number of persons aged 30 to 34 with tertiary educational attainment****Increase in the number of higher education institutions which are aligned with revised European standards and guidelines and other relevant standards and examples from good practice****Increase in the number of scientific organizations that are aligned with national standards based on the EU principles of scientific excellence****Meaningful and effective quality assurance systems established at Croatian higher education institutions, pursuant to Part I of the European Higher Education Area****Candidates have been successfully registered in the National IT System of Applications and Enrollment in Secondary Education Institutions** **Increased composite indicator of research excellence****Increasing the percentage of GDP expenditures for science and research****The degree of quality and efficiency of procedures recognizing industrial property rights, aligned with European standards (cumulative)****The degree of quality and efficiency of copyright and related rights protection aligned with European standards (cumulative)****Increased number of applications for industrial rights protection by domestic holders in national and European procedures (SOIP, EPO, OHIM)****Increased efficiency of the implementation of intellectual property rights (cumulative)****Increasing the GDP share of private sector investments into science and research****Increase in the number of international scientific co-publications per million inhabitants****Ensuring that network infrastructure is 100% present at every college dormitory in Croatia****Increase in the number of users of the grid infrastructure and the Isabella cluster****Increase in the number of Internet services that exchange data via CIX****Received number of authentication requests (RADIUS servers)****Received number of authentication requests (SSO servers)****Increasing the number of students in the ISVU system****Increase in the number of users of the Merlin e-learning platform****Increase the number of given lessons as part of the Srce educational programs****Increasing the number of students who are involved in various school projects/events****Increase in the number of students who are participating in various cultural activities (going to museums, theatres, concerts etc.) organized by the school****Complete alignment with the Government pedagogical standard in terms of class size****Introducing one-shift programs in schools****Increasing the number of supplementary classes for students with learning disabilities** |
| Examples of other PIs | **Number of successfully implemented projects****Increase in the number of gifted children and students who were given additional specific forms of support according to their needs, preferences and skills****Larger income of scientific organizations from contracted projects with economic entities, state administration bodies and units of local government and self-government, the civil sector and NGOs, in total revenues** **Implemented programs of mentor and trainee work Number of children and students who were given systematic support (teaching assistants, transport, teaching materials and tools, meals) Increasing the number of preschool children included in the system of early and preschool education** |

## **Kyrgyz Republic: Education**

|  |  |
| --- | --- |
| Program structure  | **5 Programs: Planning, administration and management; Implementation of the Program of State Guarantees for Providing Citizens of the Kyrgyz Republic with Health Care Assistance; Implementation of the basic program of compulsory health insurance; Basic state medical insurance (BHMS) (pilot); Ensuring the availability of hemodialysis services for patients with terminal stage of chronic renal failure** |
| Number of PIs | **8 highest-level sustainable development indicators. 4 additional PIs at Program level and additional 56 for 40 activities within these 5 Programs.**  |
| Highest-level PIs | **Share of schools with the access to electricity****Share of schools with the access to the Internet for educational purposes****Share of schools with the access to computers for educational purposes****Share of schools with the access to adapted infrastructure and materials for students with disabilities****Share of schools with the access to drinking water****Share of schools with the access to separate minimally equipped toilets****Share of schools with the access to basic facilities for hand washing****Share of teachers: a) in pre-school institutions, b) in elementary school c) in junior secondary school, and d) in upper secondary school** |
| Examples of other PIs | **Coverage of children of the relevant age (5-7 years old) with pre-school training programs (from those who wish)****Number of children of the relevant age covered with pre-school training programs** **Share of class kits equipped under pre-school training as required****Number of new children’s educational institutions****Share of new children’s educational institutions as required** **Coverage of children with basic education (1-9 forms)****Share of schools completely (100%) staffed with teachers****Number of schools renovated and equipped in accordance with up-to-date requirements and conditions for persons with disabilities****Share of universities (% of the total number) forming the enrollment plan on the basis of the target training treaties made with employers****Share of teachers participating in advanced vocational training programs** **Share of funds allocated by universities to development of research work****Increase in the share of research projects aimed at achieving positive structural change in the economy of the Republic** **Share of recent graduates involved in implementation of research and development**  |

## **Bulgaria: Education**

|  |  |
| --- | --- |
| Program structure  | **2 Policy Areas (Policy in the area of inclusive, accessible and quality pre-school and school education. Lifelong learning and Policy in the area of equal access to quality higher education and development of scientific potential) with 12 Budget Programs: Budget Program "Ensuring Quality in the System of Pre-School and School Education“; Budget Program "Increasing Access to Education. Inclusive Education“; Budget Program "School Education“; Budget Program "Developing Capabilities of Children and Students“; Budget Program "Education of Bulgarians Abroad“; Budget Program "Lifelong Learning“; Budget Program "Improving Access to and Increasing Quality of Higher Education“; Budget Program "Student Support“; Budget Program "International Educational Exchange"; Budget Program ”Assessment and development of the national scientific potential for building a sustainable relationship education - science - business as a basis for the development of a knowledge-based economy "; Budget Program ”Coordination and monitoring of the scientific potential for integration into the European Research Area and the Global Information Network”; Budget Program ”Administration”**  |
| Number of PIs | **210 PIs  (of which 21 at policy area level)** |
| PIs at policy area level | **Share of children included in pre-school education****Share of early school leavers (aged 18 and 24)****Share of 15-years old with low results/success at reading****Share of 15-years old with low results/success at maths****Share of 15-years old with low results/success at natural sciences****Share of population aged 25-64 participating in education****Total expenditures for education as a % of GDP****Literacy rate****Share of population with at least some extent of secondary education (% aged 25 and over)****Share of enrolled in primary education****Share of enrolled in secondary education****Coefficient of leaving in school education****Teachers in pre-school and school education who have completed a pedagogical specialty / have passed qualification courses****Share of employed persons with completed secondary education and acquired professional qualification who work in the professional area they have completed****Share of pedagogical staff up to 35 years of age compared to the total number of pedagogical staff****Share of the population aged 30-34 with completed tertiary education****Relative share of R & D expenditure in GDP / Total R & D expenditures as a % of GDP****Share of persons with completed tertiary education who work in the professional area they have completed****Share of graduates who work in the professional area they have completed within 3 years after graduation****Share of enrolled in tertiary education****Bulgaria's position in the world ranking by number of indexations in WoS publications / Bulgaria's position in world scientific databases** |
| Examples of other PIs | **Developed and updated laws and by-laws****Students of vocational schools who obtained professional qualifications****Students who underwent educational or practical training in real working environment****Students who underwent educational or practical training at educational institutions****Register of public and municipal schools and entities offering training at educational institutions****Developed national programs for obtaining professional qualifications in new jobs****External assessment at each stage of schooling - conducted examinations****Share of students who passed exams under national external assessment****Monitoring of activities on school organization and management - inspections** **Development of administrative acts regulating learning/training process****Conducted working meetings with managers, experts from education inspectorates, school principals****Teachers and school principals honored with the annual reward for high professional achievements and contribution to development of Bulgarian education****Conducted workshops and conferences                                                                                                                                       Schools with Wi-Fi Internet access****1-4 grade students who receive textbooks on a free-of-charge basis****Increased inclusion of children and students with special educational needs****Students attending studies on a full-time basis****Five-year-old children covered by the ECD system****Number of schools****Students studying at general education, special and vocational schools****Established and functioning Coordination Council of the National Platform for Adult Education****Bulgarian scholarship students** |

## **Belarus: Education**

|  |  |
| --- | --- |
| Program structure  | **National Program *Education and Youth Policies for 2016-2020* and it has 11 sub-programs: Preschool  Education Development Subprogram, General Secondary Education Development Subprogram; Special Education Development Subprogram; Secondary Technical Vocational Education and Training Development Subprogram; Higher Education Development Subprogram; Postgraduate Education Development Subprogram; Subprogram  of Continuous Vocational Education Development for Adults; Extracurricular Education Development Subprogram; Subprogram of  Education Management; and Training of Specialists for Nuclear Power Industry Subprogram.** |
| Number of PIs | **1 highest-level indicator, and 30 additional indicators at sub-program level.**  |
| Highest-level PIs | **Place of the Republic of Belarus in the human development index (education level index) ranking of countries, place in the ranking****Coverage of young people with youth policy and patriotic education activities, %** |
| Examples of other PIs | **Coverage of children aged 3-6 with preschools – total and in rural areas, %****Share of preschools with learning facilities and equipment, %** **Share of preschool teachers with completed training in early childhood pedagogics, %****the highest skill category, %** **the basic skill category, %****Equipment of preschools with a management information system for record-keeping and quality assurance of food, %****Share of general school teachers with:****the ‘teacher/counselor’ category, %****the highest and the basic skill categories, %****Share of general secondary schools with up-to-date learning facilities and training equipment, %****Average number of students per class in general secondary schools located in urban areas, people** **Share of students with special needs (due to specifics of their mental and physical development) learning under integrated training and care and inclusive education, %** **Coverage of children with special education needs with early integrated care, %****Share of people who completed technical vocational training with resultant higher skill levels (the 4th grade or higher) in the total number of graduates, %****Share of updated educational standards for****technical vocational training,****secondary vocational education, %****Number of blue- and white-color workers graduated from technical vocational training programs, thou. people****Number of workers and specialists graduated from secondary vocational schools, thou. people** **Share of approved educational standards or their updates in the total number of higher education standards, %** **Number of university teaching staff who completed internships abroad, people****Number of established affiliated departments, departments** **Number of universities, ranked among the 4,000 best world universities under the Webometrics rating and (or) among 1,000 under the QS or SIR rankings, universities****Compliance with the admission quotas annually established by the founders of universities, %****Share of those admitted to master’s degree programs in the total number of graduates from the bachelor’s degree programs, %** **Share of employed graduates in the total number of graduates to be assigned to workplaces, %****Share of research officers with the highest qualifications admitted to PhD programs (postgraduate military courses) for priority specializations to contribute into the development of high-tech operations of the 5th and 6th technical categories, %****Share of those admitted to PhD programs (postgraduate military courses) for enterprises and organizations of the real sector, %****Share of those who completed PhD programs (postgraduate military courses) with their theses defended within the established timeframes** **for the PhD programs (postgraduate military courses), %****for doctorate programs, %****Share of updated education programs for specialized retraining, %** **Share of education institutions, delivering professional development programs for managers and specialists through distance learning, %****Coverage of children and youth with extracurricular education, %****Share of actually disbursed financial resources in the total amount of financing made available for the implementation of the subprogram, %** |

## **Armenia: Education**

|  |  |
| --- | --- |
| Program structure  | **PIs given at three levels: i) PIs of directly provided services, ii) indicators of the results of policies and financial management,** **carried out under the responsibility of the Minister, and iii) transfers. Nine Programs: Program on the development of public policy, coordination and monitoring of program (NOTE: THIS IS A GENERAL PROGRAM TO WHICH ALL MINISTRIES REPORT); Higher and postgraduate professional education program; Research and development services; Primary (vocational) and secondary vocational education; Program for the Preservation of the Armenian Diaspora; General Education Program; Program for extracurricular upbringing; Social package program; and Management services for development programs territories of Armenia. Each program has sub-programs, total of 69 sub-programs, on average 8 per program ranging from 1 to 30.** |
| Number of PIs | **93 quantity indicators, 35 quality, and 26 timeliness (noting in some cases different subprograms have same PIs), plus within transfers 20 PIs related to number of beneficiaries, 20 for amount, and 20 for frequency of transfers.** |
| Examples of PIs | **QUANTITY:** **Preparation of documents on policies (the total number of documents)****Informing the public (number of events)****Reception of citizens, examination of applications and complaints Assignment of academic degrees****Assignment of scientific and pedagogical titles** **Number of leaders, teachers, experts and staff retraining in primary (handicraft) and medium****professional bodies (person)** **Number of universities Number of teachers of the diaspora, annual retraining** **Number of comprehensive schools** **Number of pupils in primary** **Total number of children from socially unsecured families** **Number of educational institutions** **Children with physical, mental and (or) mental development issues****QUALITY:** **The proportion of educators who received certificate from persons who have accepted participation in retraining courses****(percentage)** **Average grade of pupils as a result of testing their knowledge****Implementation of subject programs /percentage/** **Average grade of pupils with mental disabilities** **Number of pupils of 10th grades senior government****secondary schools, receiving textbooks****TIMELINESS:** **Number of hours of retraining one specialist** **Duration of training sessions first-year students / week /****Duration of training sessions second-grade students / week /****Duration of training sessions pupils of the third and fourth****classes / week /****Duration of training sessions students 10-12 grades / week /** |

## **Turkey: Education**

***Note: transition to program budgeting is currently in progress in Turkey, thus programs, sub-programs, and activities have not been established yet within the budget classification.***

|  |  |
| --- | --- |
| Program structure  | **7 strategic objectives and 42 performance objectives related to them in annual performance plan, structured around one of the highest-level objectives, policies and indicators to which it contributes. There are also activities related to each performance objective, total of 153, average of 5 per objective, ranging from 1 to 17.** |
| Number of PIs | **10 highest-level PIs and additional 165 PIs, average of 5 per program, ranging from 1 to 14.** |
| Highest-level PIs | **Net schooling rates related to education levels****Average education duration (year)****Percentage of early leaving from education and training (%)****Percentage of private education by education levels****Percentage of grade repetition by education levels** **Number of the students per class by education levels****Percentage of the schools or institutions which are regulated for people with disabilities** |
| Examples of other PIs | **Number of the courses opening in the non-formal education institutions** **Number of books read per student by education levels****Number of the individuals guided to special training and educated as a result of the screen test****Net enrollment ratio in preschool education** **Net enrollment rate in primary school** **Net enrollment ratio in secondary education** **Percentage of those who received at least one year of pre-school education from primary school primary****Average training duration (years)** **Early withdrawal rate from education and training (%)****Percentage of students who go out of formal education in secondary education** **Students who settled in one of the top five preferences in transition from basic education to secondary education****Share of private education in secondary education****Completion rate of courses within lifelong learning** **Number of participants in non-formal education activities****The number of individuals whose screening test result is directed to special education****Number of private vocational and technical schools in organized industrial zones****Number of students per teacher-Secondary Education** **Years of in-service training per employee (hours)** |

## **Russian Federation: Health**

|  |  |
| --- | --- |
| Program structure  | **Government Program on Health Care, with 11 Sub-Programs: 1. Prevention of diseases and formation of healthy lifestyle and development of primary healthcare, 2. Improving the provision of specialized medical aid and emergency aid, 3. Development and introduction of innovation methods of diagnosis, prevention, and treatment and fundamentals of personalized medicine, 4. Maternal and infant health care, 5. Development of medical rehabilitation and health resort treatment 6. Provision of palliative care, 7. Staffing of health care system, 8. Development of international relations in health care field, 9. Review and oversight in the health care field, 10. Health service support for special categories of citizens, and 11. Management of the sector development** |
| Number of PIs | **16 at Program level and total of 80 at sub-program level, average of 7 per sub-program.** |
| Highest-level PIs | **Mortality from all causes (per 1,000 persons) Infant mortality (per 1,000 live births)****Mortality from diseases of blood circulation (per 100,000 persons)****Mortality from road traffic accidents   (per 100,000 persons)****Mortality from new growths (including malignant) (per 100,000 persons)****Mortality from tuberculosis (per 100,000 persons)****Consumption of alcoholic products (in terms of absolute alcohol) (per capita per year)****Incidence of tobacco use among adults****Registered patients with a diagnosis established for the first time, active tuberculosis (per 100,000 persons)****Ratio of physicians (per 10,000 persons)****Number of nursing personnel per 1 physician****Ratio of the average wage of physicians and workers of healthcare organizations who have higher medical (pharmaceutical) or other higher education, who render healthcare services (ensure provision of healthcare services), to the average wage in a constituent entity of the Russian Federation****Ratio of the average wage of nursing (pharmaceutical) staff (staff ensuring conditions for the provision of healthcare services) to the average wage in a constituent entity of the Russian Federation****Ratio of the average wage of junior medical staff (staff ensuring conditions for the provision of healthcare services) to the average wage in a constituent entity of the Russian Federation Ratio of the average wage of nursing (pharmaceutical) and junior medical staff (staff ensuring conditions for the provision of healthcare services) to the average wage in a constituent entity of the Russian Federation****Lifetime expectancy at birth** |

|  |  |
| --- | --- |
| Examples of other PIs | **Health assessment coverage of adults****Consumption of fruit and berries on average per consumer per year****Percentage of patients with known malignant tumors at stages I-II****Population coverage of TB preventive medical checkups****Measles morbidity (per 1 mln persons)****Regular vaccination program against diphtheria, whooping cough, and tetanus****Percentage of individuals suffering from alcoholism, readmitted to hospital during a year Percentage of drug addicts readmitted to hospital during a year****Satisfying the demand for medical preparations intended for treatment of the individuals suffering from malignant new growths of the lymphoid, blood producing and associated tissues, haemophilia, cystic fibrosis, pituitary dwarfism, Gaucher disease, and multiple sclerosis; and also transplantation of organs and (or) tissues****Number of drug addicts in remission over 2 years (per 100 drug addicts of the average annual number)****Number of individuals suffering from alcoholism, in remission from 1 year to 2 years (per 100 individuals suffering from alcoholism of the average annual number)****Percentage of patients with mental disorders readmitted to hospital during a year****One-year mortality of patients with malignant tumors****Percentage of ambulance response times under 20 minutes****Percentage of blood transfusion stations delivering the modern level of quality and integrity of blood components****Number of patients receiving hi-tech medical aid****Percentage of researchers aged through 39 in the overall number of researchers****Number of joint international projects implemented in the health care field****Staffing levels of occupational physicians****umber of events to ensure permanent readiness for the provision of health service in conditions of an emergency** |

##

## **Serbia: Health**

|  |  |
| --- | --- |
| Program structure  | **6 Programs: Arrangement and supervision in the field of health, Preventive health care, Development of quality and availability of health care, Development of infrastructure of health institutions, Support to the realization of rights from compulsory health insurance, and Prevention and control of leading chronic noncommunicable diseases** |
| Number of PIs | **18 at Program level and additional 124 for 45 activities within the 6 Programs.** |
| Highest-level PIs | **Assessment of general satisfaction with the services of doctors during hospital stay****Average assessment of general user satisfaction in primary health care institutions****% of women covered by preventive gynecological examination****% of fully vaccinated children****% of adults over 35 years of age who have performed at least one yearly preventive health examination****The number of HLA genotyped patients on a kidney, liver and heart transplant program with a low resolution Report of the Blood Transfusion Institute of Vojvodina****Number of HLA genotyped donors for patients on kidney, liver and heart transplant program with low resolution Report of the Blood Transfusion Institute of Vojvodina****Number of people trained in disaster management****the number of educated new volunteers for voluntary blood donation campaigns****Number of training courses conducted for accidents****number of workshops held for 10,000 children****The presence and specificity of anti-HLA antibodies with the Luminex method****Samples tested with low and high resolution molecular typing****Average age of equipment for radiological diagnostics and air therapy in state ownership****Number of users who can not provide health care on a different basis****Number of persons providing health care against rare diseases****% of deaths from cardiovascular diseases****% of deaths from malignant tumors** |
| Examples of other PIs | **% of candidates who have passed the professional exam for healthcare workers and healthcare associates with a high degree of education****Number of doctors specialists per 100,000 inhabitants****% control with established irregularities****% of deviations from the quality standards of medicines and medical devices in the procedure of systematic control****% satisfaction of patients provided with health care****% of fully vaccinated children****Established databases on childbirth, interruptions of pregnancy and death (yes / no)****% of identified physical and chemical defects of water from public water supply and water facilities****number of analyzed samples of Salmonella, Shigella, Vibrio cholerae and Yersinia enterocolitica****Number of participants in education in the field of health promotion****Number of seminars in the field of health promotion****the number of daily updated reports on the epizootic situation of rabies in RS****the number of samples collected from rabies virus strains****% of women covered by preventive examinations****% customer service satisfaction****Number of telephone calls made to families after discharge****Number of educated pediatricians****Number of educated patients and their family members****Number of educated health workers****Number of inhabitants who have an electronic health record****Number of CT simulators****% improvement of doctors' knowledge** |

## **Croatia: Health**

|  |  |
| --- | --- |
| Program structure  | **4 Programs: Program: Protection, preservation and improvement of health, Program: Health protection and safety of workers, Program: Sanitary inspection, Program: Investments in the health care infrastructure** |
| Number of PIs | **1 at Program level (outcome indicator). Additional 17 PIs for 8 activities within the 4 Programs.** |
| Highest-level PIs | **Increasing life expectancy at birth** |
| Examples of other PIs | **Number of achieved transplants per a million citizens** **The number of performed kidney transplants per a million citizens (rate)** **Total number of hospital beds classified as curative acute care beds** **Percentage of rationalised hospitals without new arrears occurring in the previous calendar year****Number of sanitary inspectors who participated in specialized training programs** **Better response to breast cancer (B), colon cancer (C) and cervix cancer (CV) screenings** **The number of educated and informed stakeholders on the impact of the workplace on health Increased number of access (A) and specialist (S) telemedicine centers****Increased number of telemedicine services****Increased number of health workers who participated in professional training via the Basic network of telemedicine centers****Increased number of health care workers educated on the quality and safety, as well as the indicators of quality health care****Increased number of health care workers educated on the quality and safety, as well as the indicators of quality health care****Increase in the number of monitored indicators of quality and safety****Increase in the number of evaluated medical technologies for safety More professionally trained staff in the emergency and rescue services for providing first aid****More professional training for health workers in emergency medicine****Increased number of county institutes for emergency medical services in the e-ambulance program** |

## **Moldova: Health**

|  |  |
| --- | --- |
| Program structure  | **12 Programs: Monitoring, assessment of health care system, and quality management****National and specialized health care programs****Research applied in public health and health care in health and biomedicine policy area****Health care institutions development and modernization****Mandatory state medical insurance****Public health****Rehabilitation and recovery-related health care****Legal medicine****Medicines and medical devices management****Health policies and governance****Specialized outpatient care** |
| Number of PIs | **95 PIs, of which 30 outcome indicators (of which 18 highest outcome), 45 outputs, and 20 efficiency indicators.** |
| Highest-level PIs | **Service quality** **Number of the successfully implemented technology transfer projects in the total number of initiated projects****Amount of co-financing raised from private sources****Number of public health and sanitary institutions' vaccines and immunological preparations** **Share of checked entities in the total number of recorded entities****Share of persons trained in hygiene-related issues in the labor market in the total number envisaged** **Coverage by vaccination of the designated population in the total number of vaccinated patients****Prevalence of cardiovascular diseases in the designated population****Average duration of inpatient admission****Number of public health centers equipped with validated laboratory equipment****Coverage by the State Public Health Supervision Service medical staff****Share of settlements which have access to pharmaceutical care****Number of post-permit changes****Number of adverse reactions reported to UPPSALA****Number of awareness-raising campaigns****Number of e-services implemented pursuant to the e-Health Strategy****Average number of authorizations/studies per pharmacist****Share of general transfers in total spending by the MMIF** |
| Examples of other PIs | **Unit cost of service provision****Number of permits for placement of medicines in the market****Prepared analytical information****Cost per examination****Average number of appointments per person****Total number of appointments****Number of rehabilitated medical and sanitary facilities with equipment****Number of doctors' appointments****Share of persons who benefited from free-of-charge medicines****Per capita capital investment expenditure****Vaccination coverage of target population****Share of state expenditure in total health-related spending****Rate of assurance with blood products****Number of HIV-positive persons who receive ARVT** |

## **Bulgaria: Health**

|  |  |
| --- | --- |
| Program structure  | **3 Policy Areas (Policy in the area of promotion, prevention and control of public health, Policy in the area of diagnostics and treatment and Policy in the area of drug and medical products) with 12 Budget Programs.** |
| Number of PIs | **635 PIs (of which 14 at policy area level)**  |
| PIs at policy area level | **Efficiency of health control over public facilities and products of significance for public health** **Gradual decrease in the incidence rate and mortality of most frequent non-infectious diseases****Reduced incidence of health risk factors of the living environment and those related to behavior** **Efficient epidemiological surveillance, prophylaxis and control of infectious diseases****Ensuring wide coverage of planned immunizations** **Implementation of tasks specified under national and regional programs for prophylaxis, control and surveillance of infectious diseases****Reduction in mortality rate among children aged 0-1 year****Reduction in mortality rate among children aged 1-9 years****Reduction in mortality rate among adolescents aged 10-19 years****Reduction in mortality rate among economically active people aged 20-65 years****Increasing the average life expectancy of people after the age of 65****Qualitative medicinal products and medical devices according to the health needs of the population****Defined responsibilities in the area of drug regulation****Satisfaction of the population and medical professionals with the functioning and results of the pharmaceutical system** |
| Examples of other PIs | **Number of people living with HIV who are covered in the system of medical service, care and support****Relative share of successfully treated cases: Number and percentage of new cases with pulmonary tuberculosis with positive microscopic and / or culture study who are cured or have completed treatment****Patients covered in psychosocial rehabilitation programs subsidized by the Ministry of Healthcare****Running programs for psychosocial rehabilitation subsidized by the Ministry of Healthcare** |

## **Belarus: Health**

|  |  |
| --- | --- |
| Program structure  | **National Program of the Republic of Belarus for 2016-2020 *Human Health and Demographic Security* and it has 7 sub-programs: Family and Childhood Subprogram; Non-Communicable Disease Prevention and Control Subprogram; Alcohol Abuse and Alcoholism Prevention and Elimination Subprogram; TB Subprogram; HIV Prevention Subprogram; External Migration Subprogram; and Subprogram of Health Care Management in the Republic of Belarus** |
| Number of PIs | **1 highest-level indicator, and 22 additional indicators at sub-program level.**  |
| Highest-level PIs | **Life expectancy, years** |
| Examples of other PIs | **Aggregate birth rate, births** **Infant mortality rate, deaths per 1,000 births** **Child mortality, deaths per 10,000 children****Tobacco smoking prevalence among people aged 16+, %** **Physical activity of the population, %****Consumption of kitchen salt, gr. per 24 hours****Content of trans-isomers of fatty acids in vegetable oil processing products** **Share of general practitioners in the total number of primary health care physicians, %****Share of patients with cancer of stages 1 and 2 in the total number of cancer cases, detected in the course of cancer screening, %****Coverage of working-age patients with rehabilitation after myocardial infarctions, acute cerebrovascular disorders (strokes), cancer surgeries, neurosurgeries, injuries and treatment of other non-communicable diseases, %****Mortality rate for working age people, deaths per 1,000****Severity of primary disability among people of working age, %****Mortality from accidental alcohol poisoning, cases per 100,000 people** **Alcohol consumption per capita, liters****TB prevalence, cases per 100,000 people****TB mortality, deaths per 100,000 people****Share of successfully fully treated MDR-TB cases (full treatment course of 18-24 months) in the total number of MDR-TB cases, %****Coverage of HIV-positive patients in need of treatment with antiretroviral therapy, %****Risk of   HIV mother-to-child transmission, %****Coverage of high-risk populations with HIV prevention activities, %****Net migration, people** **Share of provided care volumes (by health service) in the volumes, approved in health care plans, %** |

## **Armenia: Health**

|  |  |
| --- | --- |
| Program structure  | **PIs given at three levels: i) PIs of directly provided services, ii) indicators of the results of policies and financial management,****carried out under the responsibility of the Minister, and iii) transfers. Nine Programs: Program on the development of public policy, coordination and monitoring of program (NOTE: THIS IS A GENERAL PROGRAM TO WHICH ALL MINISTRIES REPORT); Public Health Program; Services on modernization and increase of efficiency of public health services; Library Services Program; Community health services; Medical aid, program of paramedical, expert services; Hospital Aid Program; Social Package Program; and Alternative Labor Service Program. Each program has sub-programs, total of 56 programs, on average 7 per program ranging from 1 to 16.** |
| Number of PIs | **141 quantity indicators, 31 quality indicators, and 7 timeliness indicators (noting in some cases different subprograms have same PIs), plus within transfers 8 PIs related to number of beneficiaries, 8 for amount, and 8 for frequency of transfers.** |
| Examples of PIs | **QUANTITY:** **Total number of developed draft legal acts (documents and (or) standards) prepared by policy documents, programs, reports and analyzes** **Number of agreements developed, memoranda, protocols, programs and other documents, meetings, discussions and other cooperation activities** **Number of controlled, exposed monitoring of coordinated programs** **Number of prepared and broadcasted television appearance to provide information on healthy food for children****Number of studies on severely hazardous infections** **Number of components suitable for use, blood from the general number of samples (units) collected blood****Number of residents using the services primary health care population, including: a) the number of residents aged 18 and over older, who received medical assistance from the precinct therapist, family doctor** **Number of people who received medication free and on preferential terms** **Number of use cases in the part of medical care with oncology and hematological diseases****QUALITY:** **Full coverage of children 11 months 29 days in all vaccinations, in percentages****Full coverage of children 23 months 29 days in all vaccinations, in percentages****Coverage of organizations implementing service and medical care, in the infection control program, in percentages****The maximum proportion of invalid blood samples****Percentage of those currently receiving time ARV / antiretroviral / treatment among all adults and children, living with HIV****Coverage of women 30-60 years of age in screening Cervical Cancer (%)****TIMELINESS:** **Average response time (day) for incoming to the Ministry official letters****Maximum period of disinfection foci of infectious diseases, time to be disinfected** |

This Knowledge Product has been developed by PEMPAL and is available in English, Russian and Bosnian-Croatian-Serbian languages. Permission to use, reproduce or translate this product can be sought by the project’s Team Leader Elena Nikulina at enikulina@worldbank.org For more information on PEMPAL, see the program’s website at [www.pempal.org](http://www.pempal.org)

1. Refer [www.pempal.org](http://www.pempal.org) for more information. This knowledge product was prepared by Naida Carsimamovic Vukotic, member of the BCOP Resource Team, World Bank, in close consultation with BCOP Working Group Lead, Nikolaz Begchin from the Ministry of Finance of the Russian Federation and Maya Gusarova, BCOP Resource Team Coordinator, World Bank. [↑](#footnote-ref-1)
2. See OECD, 2016, *Performance Budgeting Questionnaire*;OECD, 2016 *Performance Budgeting Survey Highlights*; OECD, 2016 *Performance Budgeting Glossary*; and OECD, 2016 *Performance Budgeting database*, all available at <https://qdd.oecd.org/subject.aspx?Subject=90B147D4-005C-462A-9678-4CF7A931A4CA>. [↑](#footnote-ref-2)
3. From the State-level and the level of Federation of Bosnia and Herzegovina. [↑](#footnote-ref-3)
4. OECD, 2016 *Performance Budgeting Survey Highlights.* [↑](#footnote-ref-4)
5. Ibid. [↑](#footnote-ref-5)
6. OECD, 2016 *Performance Budgeting Survey Database.* [↑](#footnote-ref-6)