

**PISA** Capacity Needs Assessment  
**Kyrgyzstan**

Programme for International Student Assessment



# **PISA CAPACITY NEEDS ASSESSMENT: KYRGYZSTAN**

This report has been authorised by Andreas Schleicher, Director of the Directorate for Education and Skills, OECD.

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

**Photo credits:** © Monkey Business Images/Shutterstock

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.

## *Acknowledgements*

This report has been produced with the support of the Government of the Federal Republic of Germany, through its Programme for International Student Assessment (PISA) – Building data competences and increasing the usefulness of data for decision-making in education (2021-2022) arrangement with the Organisation for Economic Co-operation and Development (OECD).

The OECD has contracted the Australian Council for Educational Research (ACER) to undertake the Capacity Building and Implementation Support (CBIS) option for new countries participating in PISA. The Capacity Needs Assessment (CNA) presented in this report is an important element of the support. The CNA report for Kyrgyzstan has been produced by ACER researcher Mrs. Jennifer Hong (Research Fellow and CBIS Liaison Officer for Kyrgyzstan) with valuable input from Mr. Tue Halgreen, Senior Project Manager, Dr. Michael Ward, Senior Policy Analyst, and Ms. Sophie Vayssettes, Analyst, Directorate for Education and Skills at the OECD. The publication was prepared by the OECD Secretariat, principally by Isis González Pérez, Noelle Geller and Kelly Makowiecki.

The OECD and ACER would like to thank the following stakeholders who substantially contributed to the establishment of a collaborative relationship between Kyrgyzstan and ACER and to the undertaking of the CNA for Kyrgyzstan and the facilitation of the in-country visit and meetings. From the Kyrgyzstan Ministry of Education and Science (MES), Mrs. Samara Umralieva and Mrs. Olga Bryzgalova; from the National Learning Quality Assessment and Information Technologies Center (NACEQ and IT), Mrs. Baktygul Shamshidinova and Ms. Dinara Dautova; and from the Project Implementation Unit World Bank (WB), Mrs. Mira Mykyeva and Mrs. Onolkan Umankulova (appointed co-National Project Managers (co-NPMs) for PISA 2025). We also express our special thanks to all those who contributed to the in-country meetings and CNA consultations. A complete list of people who were consulted for the CNA is included in Annex C.

The OECD and ACER would also like to express their gratitude to the national reviewers, Mrs. Onolkan Umankulova, Mrs. Mira Mykyeva and Mrs. Baktygul Shamshidinova, who provided important input to this CNA report.

## Table of contents

<b>Acknowledgements</b> .....	<b>3</b>
<b>List of acronyms</b> .....	<b>5</b>
<b>Executive summary</b> .....	<b>6</b>
<b>1. Introduction and background</b> .....	<b>9</b>
1.1. PISA 2025 Capacity Building and Implementation Support .....	9
<b>2. Framework</b> .....	<b>11</b>
2.1. Dimensions.....	11
2.2. Indicators .....	11
Rating criteria .....	12
<b>3. Methods</b> .....	<b>13</b>
<b>4. Capacity Needs Assessment for Kyrgyzstan</b> .....	<b>14</b>
4.1. CNA activities for Kyrgyzstan .....	14
4.2. Summary of key findings .....	14
<b>5. Conclusions</b> .....	<b>21</b>
<b>Annex A. Detailed findings of the CNA</b> .....	<b>22</b>
<b>Annex B. Stakeholder and document mapping</b> .....	<b>36</b>
<b>Annex C. Capacity Needs Assessment consultations</b> .....	<b>39</b>
<b>Annex D. CNA questionnaires</b> .....	<b>42</b>
Questionnaire for officials.....	42
Questionnaire for individuals .....	55

## Figures

Figure 1: CBIS planning and preparation support for participants starting in 2022	10
-----------------------------------------------------------------------------------	----

## Tables

Table 1. Rating of the Capacity Needs Assessment for Kyrgyzstan	7
Table A A.1. Enabling environment	23
Table A A.2. Organisational level	29
Table A A.3. Individual level	33
Table A B.1. Stakeholder mapping table	36
Table A B.2. Document mapping table	38
Table A C.1. List of in-country stakeholder consultations conducted during in-country visit from 3-7 October 2022	39
Table A C.2. List of the participants from school №53 who attended the PISA seminar on 5 October 2022	40
Table A C.3. List of the participants from a school named after Kychan Jakypov. Jeek village, Ysyk-Atinskiy Rayon on 5 October 2022	40
Table A C.4. List of the participants of the seminar at the Ministry of Education and Science of Kyrgyzstan on 6 October 2022	41

## *List of acronyms*

ACER	Australian Council for Educational Research
CBA	Computer-based assessment
CBIS	Capacity Building and Implementation Support
CBP	Capacity Building Plan
CEATM	Center for Educational Assessment and Teaching Methods
CNA	Capacity Needs Assessment
EGMA	Early Grade Maths Assessment
EGRA	Early Grade Reading Achievements
KAE	Kyrgyz Academy for Education
MES	Ministry of Education and Science Kyrgyzstan
NC	National Centre
NACEQ and IT	National Learning Quality Assessment and Information Technologies Center
NPM	National Project Manager
NSBA	National Sample-Based Assessment
OECD	Organisation for Economic Co-operation and Development
PBA	Paper-based assessment
PISA	Programme for International Student Assessment
PISA-D	PISA for Development
PBA	Paper-based assessment
SED	Strategy for education development
WB	World Bank

## *Executive summary*

The Organisation for Economic Co-operation and Development (OECD)'s Programme for International Student Assessment (PISA) measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges.

Based on the experiences of the support programmes provided in PISA previously, PISA 2025 offers new participants the Capacity Building and Implementation Support (CBIS) option. CBIS aims to provide new participants with specific and targeted support for their successful implementation of PISA 2025.

At the outset of CBIS, a Capacity Needs Assessment (CNA) is carried out to assess CBIS participants' capacity to implement PISA. The assessment focuses on the CBIS National Project Managers (NPM) and key National Centre (NC) roles to gain information about their capacity assets and needs in relation to what is required to implement PISA successfully.

The capacity assets and needs to successfully implement PISA 2025 are structured into three dimensions:

1. The enabling environment
2. The organisational level
3. The individual level.

For each dimension, a number of capacity indicators are defined and rated according to the extent of capacity assets and needs a participant has. The ratings are as follows:

- Latent: There is little or no capacity [in this indicator area] – significant capacity building required.
- Emerging: There is some capacity [in this indicator area] – capacity building required.
- Established: There is sufficient capacity [in this indicator area] – capacity building optional.

This report presents detailed findings of the CNA for Kyrgyzstan. In summary, the CNA ratings for Kyrgyzstan are presented in Table 1.

Table 1. Rating of the Capacity Needs Assessment for Kyrgyzstan

Indicator area	Rating		
	Established	Emerging	Latent
<b>Enabling Environment dimension</b>			
E1 Assessment system structure	✓		
E2 Legislation or policy		✓	
E3 Leadership		✓	
E4 Institutional arrangements		✓	
E5a Funding			✓
E5b Funding from donors	✓		
E6 Use of assessment data	✓		
E7 Educational Management Information System		✓	
<b>Organisational Level dimension</b>			
O1 Assessment team		✓	
O2 Mobilisation of funding	✓		
O3 Temporary staff	✓		
O4 Physical infrastructure			✓
O5 IT infrastructure and support			✓
O6 Security policies and procedures			✓
O7 Instrument development		✓	
O8 Translation and linguistic quality control		✓	
O9 Target population and sampling		✓	
O10 Survey operations and logistics		✓ (PBA)	✓ (CBA)
O11 Data management		✓	
O12 Data analysis and reporting		✓	
O13 Dissemination and communication		✓	
<b>Individual Level dimension</b>			
I1 National Project Manager		✓	
I2 Assessment instruments co-ordinator*		✓	
I3 Sampling manager*		✓	
I4 Survey operations and logistics manager*		✓ (PBA)	✓ (CBA)
I5 Data manager*		✓	
I6 Data analyst*		✓	
I7 Information Technology co-ordinator*			✓
I8 Communication in English		✓	

Note: PBA = paper-based assessment; CBA = computer-based assessment. NC roles with \* indicates that the role was yet to be filled at the time of undertaking the CNA and, therefore, no rating is provided.

Kyrgyzstan's PISA NC will be located within the MES's National Learning Quality Assessment and Information Technologies Center (NACEQ and IT). At the time of this CNA report, some of the PISA NC staff had been identified but not formally appointed. The individual level ratings have taken into consideration the expertise of the staff identified by the NACEQ and IT director and WB appointed NPM for the PISA NC positions.

An overview of the CNA ratings for Kyrgyzstan shows that capacity to implement PISA 2025 varies between established dimensions and others in need of capacity building. The CNA for Kyrgyzstan indicates several areas in which capacity needs to be further developed for a successful implementation of PISA 2025. Further capacity is required, particularly in the areas of government funding at the enabling environment level, physical infrastructure, IT infrastructure and support and security policies and procedures at the



organisational level. A well experienced and skilled Information Technology co-ordinator will be important to the successful implementation of PISA 2025 at the individual level, especially if CBA is the preferred delivery option. To further strengthen the establishment of the PISA NC, physical infrastructure, IT infrastructure, and support and security policies and procedures need to be addressed as a matter of urgency to ensure the security and confidentiality requirements comply with the PISA Technical Standards.

Participation in the CBIS programme and PISA 2025 will present many capacity building opportunities for Kyrgyzstan's PISA NC team. These will be detailed in the upcoming Capacity Building Plan (CBP).

## 1. Introduction and background

The Organisation for Economic Co-operation and Development (OECD)'s Programme for International Student Assessment (PISA) is the world's largest international learning assessment. PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges. PISA provides an international benchmark of learning outcomes that inform evidence-based decision-making in education policy over time.

PISA 2025 is the 9th cycle of PISA, which has been conducted every three years since 2000.<sup>1</sup> The focus of PISA 2025 is science, and the assessment also includes the innovative domain of Learning in the Digital World. The innovative domain aims to measure students' ability to engage in self-regulated learning while using digital tools.<sup>2</sup> The overall management of contractors, the implementation of PISA 2025, as well as the instrument development for the innovative domain, is carried out by the Australian Council for Educational Research (ACER). Other contractors include Oxford University Press for the science framework development and Westat for sampling.

### 1.1. PISA 2025 Capacity Building and Implementation Support

Implementing a large-scale assessment that delivers high-quality data and using the data for evidence-based decision making are demanding tasks for any education system. While participating in PISA offers a range of capacity-building opportunities to participants, it can be particularly challenging for new participants. Therefore, capacity development has been an integral part of every PISA cycle.

Based on the experiences of the support programme provided in PISA for Development (PISA-D)<sup>3</sup> and PISA 2022 through the Country Preparation and Implementation Support partnership option, PISA 2025 offers new participants the Capacity Building and Implementation Support (CBIS) option. CBIS aims at providing new participants with specific and targeted support for their successful implementation of PISA 2025. The CBIS option is implemented by ACER.

CBIS consists of the following five components:

- Planning and preparation support
- Support through a CBIS Liaison Officer
- In-country visit
- Peer learning
- Implementation support

The planning and preparation support includes resources, tools and activities that are designed to assist participants with their planning and preparation for PISA 2025. The main

---

<sup>1</sup> With the exception of PISA 2022, which was implemented four years after PISA 2018 due to the COVID-19 pandemic.

<sup>2</sup> [www.oecd.org/pisa/innovation/learning-digital-world/](http://www.oecd.org/pisa/innovation/learning-digital-world/)

<sup>3</sup> [www.oecd.org/pisa/pisa-for-development/](http://www.oecd.org/pisa/pisa-for-development/)

features of the component are a Capacity Needs Assessment, Capacity Building Plan and Project Implementation Plan (see Figure 1).

**Figure 1: CBIS planning and preparation support for participants starting in 2022**



### ***1.1.1. Capacity Needs Assessment (CNA)***

At the start of CBIS, a CNA is carried out to assess CBIS participants' capacity to implement PISA. The assessment focuses on the CBIS National Project Managers (NPMs) and key National Centre (NC) roles to gain information about their capacity assets and needs in relation to what is required to implement PISA successfully. Findings from the CNA are summarised in a report to highlight areas for capacity strengthening, which in turn will help the NC to allocate resources appropriately and focus on building capacity where needed.

### ***1.1.2. Capacity Building Plan (CBP)***

A CBP is prepared for CBIS participants to assist with planning for strengthening their capacity to implement PISA. The CBP lists all the capacity building opportunities offered to PISA participants throughout the PISA 2025 project as well as those catered specifically for CBIS participants according to the needs identified in the CNA. The CBP includes details of the PISA meetings and trainings and CBIS-specific activities.

### ***1.1.3. Project Implementation Plan (PIP)***

The PIP is a set of resources and tools designed to assist CBIS participants with the preparation for and implementation of PISA 2025. The PIP Schedule – the main feature of the PIP – is a tool that lists all the PISA tasks that PISA NCs are required to complete according to agreed timeline. CBIS participants will be supported to adapt the PIP Schedule to suit their national requirements and context. The PIP Schedule is updated continuously throughout the PISA 2025 implementation period and used as a comprehensive planning and monitoring tool.

This report presents the CNA for Kyrgyzstan. The report describes the framework, methodology and findings of the CNA.

## 2. Framework

The PISA 2025 CNA aims to identify capacity assets and needs of CBIS participants to implement PISA 2025 successfully. The framework for the PISA 2025 CBIS CNA was developed based on the PISA-D Capacity Needs Analysis<sup>4</sup> and the PISA 2022 Capacity Needs Analysis Framework (unpublished). In addition, specific PISA materials were consulted to identify capacity required for the successful implementation of PISA 2025. These include drafts of the PISA 2025 Technical Standards, PISA 2025 NPM Manual, and the PISA 2025 NPM and NC Roles and Responsibilities document.<sup>5</sup>

Focusing on the preparation and implementation of PISA 2025, capacity is defined as:

*the ability of the individuals and institutions responsible for the project in each country to carry out the different tasks associated with the multiple steps of the PISA implementation and the options selected by the country (e.g. computer-based or paper-based assessment), to solve problems that may arise during implementation, adhere to project timelines, set and achieve project objectives in a sustainable manner and conduct national analysis and reporting.*

This definition is operationalised in the three framework dimensions and their capacity indicators.

### 2.1. Dimensions

The capacity assets and needs to successfully implement PISA 2025 are structured into three dimensions:

1. The enabling environment: Focuses on the context of large-scale assessments in the country at the system level. This dimension addresses more general aspects of the assessment system, such as policies and regulations, institutional arrangements and funding.
2. The organisational level: Focuses on capacity assets and needs to implement large-scale assessments at the national level. Organisational aspects of managing, designing, implementing and analysing data from large-scale assessments are covered, with a focus on the implementation of PISA.
3. The individual level: Focuses on the key roles and responsibilities and the knowledge, skills and experience required to successfully complete the diverse PISA tasks. Through these three dimensions, the CNA covers capacity assets and needs that are required to successfully implement PISA within the broader context of current and desired future capacities of a sustained assessment system.

### 2.2. Indicators

For each dimension, several capacity indicators are defined. The following areas are covered:

- **Enabling environment:** E1 Assessment system structure, E2 Legislation or policy, E3 Leadership, E4 Institutional arrangements, E5a Funding, E5b Funding from

---

<sup>4</sup> PISA-D Capacity Needs Analysis reports were produced for the eight participating countries. For more information see: [www.oecd.org/pisa/pisa-for-development/pisa-for-development-documentation.htm](http://www.oecd.org/pisa/pisa-for-development/pisa-for-development-documentation.htm)

<sup>5</sup> All documents are forthcoming.

donors, E6 Use of assessment data, E7 Educational Management Information System

- **Organisational level:** O1 Assessment team, O2 Mobilisation of funding, O3 Temporary staff, O4 Physical infrastructure, O5 IT infrastructure and support, O6 Security policies and procedures, O7 Instrument development, O8 Translation and linguistic quality control, O9 Target population and sampling, O10 Survey operations and logistics, O11 Data management, O12 Data Analysis and reporting, O13 Dissemination and communication
- **Individual level:** I1 National Project Manager, I2 Assessment instruments co-ordinator, I3 Sampling manager, I4 Survey operations and logistics manager, I5 Data manager, I6 Data analyst, I7 Information Technology co-ordinator, I8 Communication in English.

A complete description of capacity indicators is included in Annex A.

## Rating criteria

Rating criteria are defined for each indicator area to support the assessment and to identify capacity assets and needs. Three ratings are differentiated:

- **Latent:** There is little or no capacity [in this indicator area] -- significant capacity building required.
- **Emerging:** There is some capacity [in this indicator area] -- capacity building required.
- **Established:** There is sufficient capacity [in this indicator area] -- capacity building optional.

### 3. Methods

The CNA for CBIS participants is essentially qualitative in nature. Three major qualitative data collection methods are used to gain information on the capacity assets and needs:

- **Online questionnaires:** The capacity indicators for each dimension are operationalised into the CBIS CNA questionnaires, which include a questionnaire for officials and a questionnaire for individuals (Annex D). The former is designed to identify capacity assets and needs at the system and organisational levels while the latter does so at the individual level. Participants in the questionnaires are identified by the NPM, which, for Kyrgyzstan, included senior government officials from relevant divisions of the Ministry of Education, senior representatives in education or assessment institutions, organisations, agencies, development partners and donors, Kyrgyzstan PISA working group and the PISA NPM. To assist with the identification of key stakeholders, a stakeholder mapping exercise is carried out.
- **Stakeholder consultations:** Stakeholder consultations are undertaken by a CBIS Liaison Officer during a one-week in-country visit to collect further information that could not be obtained through the online questionnaires. Kyrgyzstan PISA working group and the NPM assisted the consultations by co-ordinating and scheduling the consultations and sourcing an interpreter where needed.
- **Document analysis:** Relevant documents that indicate capabilities in large-scale assessments are also analysed (e.g. policy documents, strategy documents). Kyrgyzstan PISA working group was asked to identify and source relevant documents based on a document mapping exercise.

To analyse capacity assets and needs in the CBIS participant, the data obtained from the CBIS CNA questionnaires, stakeholder consultations and documents are consolidated and assessed as they relate to each dimension and capacity indicator. Each capacity indicator is then given:

- A rating using the defined rating criteria.
- A justification for the rating.
- A description of the identified capacity assets and needs.

This report was prepared to present the findings of the assessment for Kyrgyzstan. To ensure accuracy and completeness of the findings presented, and to gain broad stakeholder agreement and engagement, the NPM for Kyrgyzstan was encouraged to invite key stakeholders to review the report.

## 4. Capacity Needs Assessment for Kyrgyzstan

The CNA activities for Kyrgyzstan and a summary of key findings are presented in this chapter.

### 4.1. CNA activities for Kyrgyzstan

CNA activities for Kyrgyzstan started six weeks before the in-country visit. During this period, the CBIS Liaison Officer held weekly virtual meetings with the appointed Kyrgyzstan NPM where they worked on creating a map of local stakeholders and documents relevant to the implementation of PISA 2025. The list of supporting documents provided information regarding the enabling environment in Kyrgyzstan, the Ministry of Education and Science organisational structure and preparedness, and the NC nominated staff experience and involvement in large-scale assessment quality assurance processes. The stakeholder and document mapping tables are included in Annex B.

The CBIS CNA consent form and CNA questionnaire for officials were translated into Russian, while the CBIS CNA questionnaire for individuals remained in English. Both CNA questionnaires were administered to the key stakeholders nominated by the representatives from Kyrgyzstan. Valid responses were received from seven respondents for the questionnaire for officials, and from one respondent for the questionnaire for individuals over the period of approximately three weeks in September and October 2022.

Thirdly, stakeholder consultations were carried out during the in-country visit undertaken by Mrs. Jennifer Hong from ACER and Mr. Tue Halgreen from the OECD, between 3 and 7 October 2022 to obtain further information that was unable to be collected through the online questionnaires. The consultations took place in Bishkek, Kyrgyzstan, with representatives from various departments within the MES, and independent organisations. In addition to the consultations, two school visits where consultations took place with the school directors and a focus group with teachers was also carried out. A seminar where detailed information about the PISA project and its implementation process was conveyed to a group of representatives from Rayon and city departments. Consultations were also carried out with representatives from key development partners. The OECD representative engaged in a live-streamed Instagram and YouTube questions and answers interview about PISA at the MES press-centre. A closed recording of questions and answers relating to PISA was also undertaken. These recordings are to be used as promotional material at a later date. Annex C includes a complete list of participants in the stakeholder consultations.

All the information collected through the above activities was collated and analysed along with the relevant documents obtained through the document mapping exercise.

### 4.2. Summary of key findings

For each indicator area, a rating is provided together with a brief rationale and identified capacity needs. The details of the assessment are provided in Annex A.

#### 4.2.1. Enabling environment

##### *Assessment system structure (E1) – Established*

Large-scale assessment programmes at both the national and international levels form part of the assessment system structure of Kyrgyzstan. Over the past 15 years, Kyrgyzstan has engaged in the administration of several national (National Sample-Based Assessment (NSBA), Early Grade Reading Achievements (EGRA), Early Grade Maths Assessment

(EGMA), university entrance exams) and international (PISA, 2006, 2009) large-scale assessments. These assessments have provided the country with valuable performance data in key learning domains, such as reading comprehension, mathematics and science at grades 2, 4 (end of primary schooling), 8 (penultimate year of compulsory education) and 11 (final year of secondary education). The large-scale assessment programmes also provide relevant contextual data.

### *Legislation or policy (E2) – Emerging*

Kyrgyzstan's Strategy for Development of Education for 2021-2040 document and the decree of the Government of Kyrgyzstan dated 4 May 2021 No. 200 "On approval of the Education Development Program for 2021-2040" both mention the need to include a unified system of assessment both at the national and international level. However, which assessment programmes, the frequency to which these assessment programmes are implemented, and which grade levels should be targeted are not explicitly stated in policy. The integration of a more consistent schedule of implementation into policy (as voiced by stakeholders during the in-country consultations and CNA questionnaire responses) would raise the likelihood of large-scale assessment both at the national and international levels serving as a more consistent method of monitoring and assessing students' academic achievements and tracking the effectiveness of the many educational reforms currently in progress.

### *Leadership (E3) – Emerging*

There is little evidence to suggest that government demonstrates senior leadership and political will in support of large-scale assessments. This is exemplified by the absence of a clear strategy to promote PISA in the PISA road map or MES work plan. However, there is effort from donors and key stakeholders to promote and raise awareness of large-scale assessments to the wider group of stakeholders, who have strong influence in Kyrgyzstan.

### *Institutional arrangements (E4) – Emerging*

There are a number of government units within the MES that are responsible for specific areas of expertise relevant to large-scale assessments (e.g. co-ordination of the assessment programme, assessment design, item development, sampling, implementation of the assessment, analysis, reporting and dissemination of results). Additionally, a secretariat is formed on an ad hoc basis to ensure all areas are well covered. However, there are no clear accountability mechanisms outlined in the road maps pertaining to large-scale assessments (particularly the NSBA or PISA preparation) or in the MES official work plan. While these documents list the heads responsible for each area, they fall short of details pertaining to accountability mechanisms.

CNA responses and in-country consultations were varied with respect to the accountability mechanisms across organisations that are under MES, particularly the NACEQ and IT where conflicting views pertaining to accountability and autonomy suggests that clear accountability mechanisms need to be established to clarify the role of the MES in the co-ordination and support of PISA related activities.

### *Funding (E5a) – Latent*

Government funding for large-scale assessments is insufficient and unstable. Large-scale assessments both at the national and international levels are reliant on donor funds. Funding for large-scale assessments is not specified in the government budget.



### *Funding from donors (E5b) – Established*

The government of Kyrgyzstan receives funding from donors for both national and international large-scale assessments. The World Bank (WB) is the main donor, providing funding for four out of the five cycles of the NSBA. They are also funding Kyrgyzstan's entire PISA participation costs for the implementation and the CBIS component. Funding for other large-scale assessments have also been awarded by UNICEF and USAID in recent years.

### *Use of assessment data (E6) – Established*

Responses to the CNA questionnaires, in-country consultations, written road maps and work plans indicate that data from large-scale assessments have been used for evidence-based education policy and planning in Kyrgyzstan, specifically in the:

- Development of state educational standards/curricula.
- Development of new generation textbooks.
- Training of a new generation of teachers, school principals (e.g. qualifications and professional development).
- Improvement of the system of advanced training of teachers (e.g. focussed training on computer literacy skills, pedagogical methods).
- Planning, monitoring and evaluation of the education sector.
- Improvement of school infrastructure.
- Development of an early learning programme.

### *Educational Management Information System (E7) – Emerging*

The MES department for digital development in partnership with the WB and other donors developed Kyrgyzstan's Education Management Information System (EMIS). The EMIS is an online platform used for the collection, integration, processing, maintenance, and use of data and information related to schools, teachers, students and overall education data (this was a policy initiative that was outlined in the Strategy for education development (SED) 2020). Development began three years ago, and it currently stores data dating back two years. It is maintained and managed by the MES department of digital development.

This EMIS is fully functional, and while all schools have access to the system to upload real time data, according to different responses of stakeholders, only about 30% of data are uploaded into the system. There is a mandate from the MES to enforce schools to enter their data. However, schools find the EMIS not user-friendly and therefore, find it difficult to meet the data entry requirements. Private schools, which make up about 12% of the education system are reluctant to enter their data into the EMIS as they do not want to make their data public.

#### **4.2.2. Organisational level**

##### *Assessment team (O1) – Emerging*

The NACEQ and IT is the leading assessment centre within the MES. This unit is primarily responsible for the implementation of national large-scale assessments and supports the implementation of assessment projects funded by various donors. It will also be the unit from which core personnel will be drawn to form the NC for PISA 2025 implementation. While the NACEQ and IT team collectively are experienced in most areas of large-scale

assessment implementation, some areas, such as instrument development, translation and linguistic quality control, test design, sampling, survey operations and logistics, data management, data analysis (psychometrics on item functioning and reliability), reporting and dissemination, and computer-based assessment, may present challenges due to the rigorous standards of PISA compared to other large-scale assessments.

#### *Mobilisation of funding (O2) – Established*

PISA 2025 implementation will be fully funded by the WB. The work plans, road map for PISA preparation and donor financial agreements stipulate that funds would be mobilised to complete the diverse tasks associated with large-scale assessments. This funding will also be mobilised to provide for capacity-building of assessment centre staff.

#### *Temporary staff (O3) – Established*

PISA 2025 implementation will be fully funded by the WB. All staff will be sourced through the MES network of departments. However, should the need arise, the work plan for PISA preparation and implementation stipulate that provisions will be made for hiring temporary staff when needed through the WB funding.

#### *Physical infrastructure (O4) – Latent*

At the time of the in-country visit, the NACEQ and IT team were in temporary office accommodation. Staff appeared to have adequate workstations, office space and internet connection. However, there was a shortage of meeting rooms and no secure facilities for storage of assessment material. Given the confidentiality and security level requirements for the secure storage of PISA assessment materials, data, draft material and confidential data pertaining to schools and students (e.g. school and student lists), both physical and electronic form, this is a matter of urgency and one that must be given high priority.

#### *IT infrastructure and support (O5) – Latent*

At the time of the in-country visit, the NACEQ and IT team were in temporary office accommodation. There appeared to be computers running Windows with up-to-date Microsoft Office, high bandwidth internet connection, printers, copiers, scanners and email. IT personnel were available to support the assessment team in all IT related aspects. However, a secure networked environment, secure servers, or cloud access/storage was yet to be established. Whether the necessary specialised software licenses were identified, acquired, installed and maintained is unknown. The establishment of a secure networked environment, secure servers including secure cloud storage to ensure the confidentiality of all electronic assessment materials, data and draft materials must be addressed as a matter of urgency to ensure they meet the PISA technical standard of security and confidentiality.

#### *Security policies and procedures (O6) – Latent*

There are no security policies and procedures established to ensure material and data is kept secure and confidential. There are no legally binding measures in place to ensure compliance (e.g. confidentiality agreements). This is an area that was raised as a concern by CNA questionnaire responses and in-country consultations. Given the confidentiality and security level requirements for PISA assessment items, this is a matter of urgency and one that must be given high priority.

*Instrument development (O7) – Emerging*

While the NACEQ and IT team are specialists in testology and experienced in the development of assessment instruments for a broad range of national assessments and university entrance exams, there are no clear quality assurance mechanisms in place to ensure the test assessment instruments are reliable, valid and fair.

*Translation and linguistic quality control (O8) – Emerging*

There are no clear linguistic quality assurance guidelines in place to ensure items are linguistically and psychometrically equivalent across multiple languages. All large-scale assessment reports where multiple languages (for example, Kyrgyz, Russian, Uzbek) are used to assess and gather information do not undergo a rigorous process to ensure that the meaning and content of items and questions are the same across languages. In-country consultations identified this as a possible challenge. A capacity building opportunity in the area of translation and linguistic quality control will be beneficial to the PISA NC in Kyrgyzstan.

*Target population and sampling (O9) – Emerging*

Despite the development and partial functionality of the EMIS, the small proportion of data entered means that this data will not be a suitable source to create the PISA sampling frame, as it will not provide complete coverage of the defined target population. In-country consultations proffered an alternative data collection method will be used to ensure complete coverage of the PISA target population. Capacity may be required of the PISA NC staff to create a sample frame that provides complete coverage of the age-based target population with exclusions at the school and student levels, being clearly defined and documented. It is important to note that whatever data collection method is used, it should be from a reliable source and current.

*Survey operations and logistics (O10) – Emerging for PBA / Latent for CBA*

While the NACEQ and IT team are experienced in implementing national large-scale assessments using PBA, some of the PISA quality assurance mechanisms to ensure survey operations are standardised, monitored and documented will be new to the NACEQ and IT team. Support to carry out a PBA according to the PISA technical standards would further strengthen the teams existing experience.

Considering that Kyrgyzstan intend to participate in CBA, it will entail more complex survey operations and logistics. For example, ensuring that all PISA participating schools have adequate and a sufficient number of computers, including schools in remote areas, can be challenging. In addition, training test administrators for CBA will be more complex than for PBA. Also, troubleshooting protocols during the test administration period should be well planned. Capacity will be needed for planning quality assurance mechanisms to ensure survey operations for CBA are standardised, monitored and documented.

*Data management (O11) – Emerging*

While the NACEQ and IT team have data management experience from the implementation of various large-scale assessments and university entrance exams, some of the PISA quality assurance mechanisms to ensure the final database is free from discrepancies and errors, appropriately structured and documented will be new to the NACEQ and IT team.

### *Data analysis and reporting (O12) – Emerging*

The NACEQ and IT team has experience in data analysis of national large-scale assessments, such as the NSBA and university entrance exams. However, data analysis techniques used for PISA data will be a new experience for the NACEQ and IT team. Capacity to analyse and interpret PISA data and apply it to their national context will be required.

### *Dissemination and communication (O13) – Emerging*

Results from large-scale assessments are widely disseminated to the public via specialised channels and media. Media outlets have commented on Kyrgyzstan's results in international assessments and have reported on the results of national large-scale assessments. However, there is a limited tailoring of results to suit the needs of the various stakeholders, and a lack of visible use of large-scale assessment data in policy.

Further capacity is required to improve the tailoring of results to meet the information needs of various stakeholder groups. A strategy is needed to improve the awareness of stakeholders and their understanding of the role that international large-scale assessments have in providing findings that relate to their areas of interest.

#### **4.2.3. Individual level**

### *National Project Manager (I1) – Emerging*

The role of NPM for Kyrgyzstan's PISA NC will be shared between two highly experienced personnel, Mrs. Onolkan Umankulova and Mrs. Baktygul Shamshidinova. Both co-NPMs have decision making authority. However, clarity in division of responsibility with respect to the tasks associated with PISA implementation, direction of NC staff and accountability with respect to PISA tasks would further strengthen this partnership. All communication from contractors, including meetings with CBIS team, has so far been with Mrs. Umankulova.

### *Assessment instruments co-ordinator (I2) – Emerging*

The likely NACEQ and IT staff who will be appointed this role has experience in national item review, organisation of translation and adaptations. She has co-ordinated projects and is the language expert for the NSBA. She has worked closely with CITO and is proficient in English, Russian and Kyrgyz.

### *Sampling manager (I3) – Emerging*

This role will likely be filled by the same staff undertaking the data management and data analysis role. She is highly experienced in sampling having worked on drawing the sample for the NSBA, PIAAC and other smaller national projects.

Capacity may be required of the PISA NC staff to create a sample frame that provides complete coverage of the age-based target population with exclusions at the school and student levels, being clearly defined and documented.

### *Survey operations and logistics co-ordinator (I4) – Emerging for PBA / Latent for CBA*

This role will likely be filled by an NACEQ and IT staff who has experience in co-ordinating assessments, liaising with schools and training of staff. The staff member will have experience in paper-based administration. Capacity building is needed as this will be

the first time this NC has undertaken international large-scale assessment, and the processes and procedures will be new to the staff member.

Should Kyrgyzstan opt for computer-based assessment delivery, capacity building will be needed as this will be the first time this NC has undertaken CBA as a delivery mode and to ensure the requirements for CBA delivery are met.

#### *Data manager (I5) – Emerging*

The NACEQ and IT staff will likely be the same person undertaking the sampling and data analyst role. She has data management experience from the implementation of various national large-scale assessments and university entrance exams. She is proficient in using SPSS and Excel.

#### *Data analyst (I6) – Emerging*

The NACEQ and IT staff will likely be the same person undertaking the sampling and data management role. She has data management experience from the implementation of various large-scale assessments and university entrance exams. She is proficient in using SPSS and Excel.

#### *Information Technology co-ordinator (I7) – Latent*

Kyrgyzstan has not identified any staff within the NACEQ and IT team to be appointed as the IT co-ordinator. The appointment of a suitable staff member with relevant skills and experience in computer-based assessment delivery will be crucial in ensuring that all PISA IT-related activities at the school level are successfully implemented. Capacity building will be needed to ensure the requirements for CBA delivery are implemented according to the PISA technical standards.

#### *Communication in English (I8) – Emerging*

The majority of NACEQ and IT staff who have been identified as potential personnel for PISA NC speak English. However, their English reading and writing skills may not be proficient enough to interpret and understand the contents without the direction of the officially appointed co-NPM, Mrs. Onolkan Umankulova. This could place additional pressure on the co-NPM. Since it is a requirement that the NPM speaks English fluently, it will be important for Kyrgyzstan to continuously assess the risk involved with depending on the co-NPM's English skills. It would be preferable to ensure there is a fluent English speaker as backup in case of absence of the co-NPM during certain periods of the project.

- Co-NPM, Mrs. Onolkan Umankulova, has proficient English verbal and written skills.
- Co-NPM, Mrs. Baktygul Shamshidinova, has no verbal English skills.
- Assessment instruments co-ordinator has sufficient verbal English skills.
- Sampling manager/Data analyst/Data manger has basic-to-medium-level verbal English skills.
- Survey operations and logistics manager has no verbal English skills.

## 5. Conclusions

While Kyrgyzstan have participated in two previous cycles of PISA (2006 and 2009), the organisation overseeing the implementation of PISA for those two cycles was carried out by the Center for Educational Assessment and Teaching Methods (CEATM), a non-government organisation (NGO). The implementation of PISA 2025 will be undertaken by NACEQ and IT team, a government department within the MES. While this department and its personnel are highly skilled, capacity building is still recommended to ensure the data collected meets PISA's rigorous technical standards.

## Annex A. Detailed findings of the CNA

Annex A presents the detailed findings of the CNA for Kyrgyzstan for each dimension:

- Table A A.1 Enabling environment
- Table A A.2 Organisational level
- Table A A.3 Individual level.

For each capacity indicator a rating is provided and the justification with a description of the capacity assets and needs. The identified capacity needs are stated in the last column.

Table A A.1. Enabling environment

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
E1 Assessment system structure	Large-scale assessment programmes form part of the assessment system to provide performance data in key learning domains and relevant context data at key stages of primary and secondary school education at relevant levels of the education system.	Established	<p>Kyrgyzstan have engaged in the administration of several large-scale assessments both at the national and international levels.</p> <p>The EGRA and EGMA projects are implemented by USAID with the support of the MES. Both projects target Grade 2 and Grade 4 students and aim to examine national-level trends in reading and mathematics across the three major languages of instruction over 2 testing periods: one in 2021 and one in 2024. The project involves a stratified sample of 276 schools with around 2500 students at each grade level. At the conclusion of data collection in 2024, comparisons will be made to assess the effectiveness of the two interventions.</p> <p>The NSBA, also locally known as NOODU, assesses the academic performance of students in reading comprehension, mathematics and homeland science. Student and school level contextual data is also collected. This assessment targets Grade 4 (the final year of primary education) and Grade 8 (penultimate year of lower secondary education) students and was administered in 2007, 2009, 2014, 2017 and 2021. Throughout these years NSBA was financially supported by different donors.</p> <p>The Republican Test, an annual national university entrance exam is administered to all Grade 11 students assesses how well students mastered the curriculum and the content of schooling after 11 years. The maximum score a student can achieve is 240 points (annually the maximum level varies) and the minimum required entrance score is 110 points. Almost half of those who finish secondary school do not achieve the minimum pass mark on this test and are therefore, ineligible for university.</p> <p>At an international level, Kyrgyzstan participated in PISA 2006 and 2009 cycles. This participation was implemented by the Center for Educational Assessment and Teaching Methods (CEATM), an NGO in partnership with the MES and mainly funded by the World Bank (WB).</p> <p>Large-scale assessment programmes at both the national and international levels form part of the assessment system structure of Kyrgyzstan. Over the past 15 years, Kyrgyzstan has engaged in the administration of several national (NSBA, EGRA, EGMA, university entrance exams) and international (PISA, 2006, 2009) large-scale assessments. These assessments have provided the country with valuable performance data in key learning domains, such as reading comprehension, mathematics and science at grades 2, 4 (end of primary schooling), 8 (penultimate year of compulsory education) and 11 (final year of secondary education). The large-scale assessment programmes also provide relevant contextual data.</p>	



Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
E2 Legislation or policy	The large-scale assessment programmes that form part of the assessment system are guided by legislation or policy.	Emerging	<p>The authorised state executive bodies in the field of education will form an educational policy based on the priorities outlined in the Strategy for Development of Education in Kyrgyzstan for 2021-2040 document, known as the SRO 2040. National large-scale assessments (NSBA or NOODU) are featured in the SRO 2040, specifically, "Regular conduct of the National Assessment of Students' Educational Achievements (NODU (sic)) at the expense of the republican budget".</p> <p>This suggests a commitment to assess and monitor student educational achievements at the national level using public funds. Indications to this effect were also proffered during the in-country consultations where a more consistent approach to administering the NSBA every two to three years was suggested.</p> <p>With respect to international large-scale assessments, the SRO 2040 identified the following as a priority area for the development of education "improvement of the results of the internal assessment of the effectiveness of the sector and significant progress in the international ranking of school education PISA". This also suggests that implementation of PISA in 2025 would be a priority. However, no additional details were available to ascertain if implementation of PISA beyond the 2025 cycle would be explicitly stated in policy</p> <p>The decree of the Government of Kyrgyzstan dated 4 May 2021 No. 200 "On approval of the Education Development Program for 2021-2040" includes the following statement: "learning outcomes creation of a unified system of assessment and quality of school education permanent participation in national and international research".</p> <p>This further suggests that large-scale assessment programmes will become a more stable feature in the future relating to the country's educational reforms. However, which large-scale assessments and the frequency to which these will be undertaken are not explicitly stated. Until these are clearly defined, the document only serves as an indicator that there is an awareness about the importance of embedding large-scale national and international assessments in the assessment system structure.</p>	Integrate the implementation of international large-scale assessments into official legislation and policies.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
E3 Leadership	The government demonstrates senior leadership and political will in support of large-scale assessments. A strategy is in place to promote participation, effective implementation, and dissemination of results amongst all relevant national stakeholders.	Emerging	<p>Promotion of large-scale assessments to stakeholders from the government does not appear to be a high priority. Promotional information (what PISA is, what it tests, etc.), is not featured in the PISA road map or MES work plan. However, requests for promotional material (brochures, general information about what PISA is and what it tests) was sought after by donors with the intent to produce and distribute materials to schools, teachers and parents to raise awareness of the broader community to Kyrgyzstan's impending PISA participation.</p> <p>Additionally, during the in-country visit, closed recordings of a series of questions and answers pertaining to the implementation of PISA 2025 was undertaken. These recordings are intended to be used as promotional material at a later date.</p> <p>An internet search of PISA in Kyrgyzstan social media listed several interviews broadcast in August 2021 given by the then minister of education. In August this year, an interview with Kyrgyzstan's PISA NPM was broadcasted on the main 24.kg news site.</p> <p>While there are efforts to promote and raise the awareness of stakeholders to Kyrgyzstan's participation in PISA, this effort is mainly exerted from donors and key stakeholders. Further leadership is required from the government to embed large-scale assessments in the education system and raise awareness about their role as indicators of education system quality.</p>	Support is required to embed international large-scale assessments into the education system.
E4 Institutional arrangements	The government has well-established institutional arrangements for large-scale assessments with clear accountability mechanisms.	Emerging	<p>There are a number of government units within the MES that are responsible for specific areas of expertise relevant to large-scale assessments (e.g. co-ordination of the assessment programme, assessment design, item development, sampling, implementation of the assessment, analysis, reporting and dissemination of results). Additionally, secretariates are formed on an ad hoc basis to ensure all areas are well covered. However, there are no clear accountability mechanisms outlined in the road maps pertaining to large-scale assessments (particularly the NSBA or PISA preparation) or in the MES official work plan. While these documents list the heads responsible for each area, they fall short of details pertaining to accountability mechanisms, such as performance indicators to assess the efficiency of the work plan.</p> <p>CNA responses and in-country consultations were varied with respect to the accountability mechanisms across MES departments, particularly the NACEQ and IT, where conflicting views pertaining to accountability and autonomy suggests that clear accountability mechanisms need to be established.</p>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
E5a Funding	The government provides sufficient and stable funding for large-scale assessments.	Latent	<p>Government funding for large-scale assessments is insufficient and unstable. Implementation of all 5 cycles of NSBA (see E5b justification) has been largely funded by donors. While the MES has been listed as the main supporting entity, it is unclear whether this includes budgetary support. The NSBA was only administered to Grade 4 students in 2014 due to lack of funding.</p> <p>Opinions varied among stakeholders as to why continued participation in PISA beyond 2009 ceased. Some stakeholders pointed to the disappointment of ranking last in both cycles while others said lack of funding was the main reason for Kyrgyzstan's non-participation.</p> <p>Large-scale assessments both at the national and international levels are reliant on donor funds. Funding for large-scale assessments is not specified in the government budget.</p>	
E5b Funding from donors	The government receives funding from donors for large-scale assessments.	Established	<p>All data collected to date suggest that large-scale assessments both nationally and internationally have largely been funded by donors.</p> <ul style="list-style-type: none"> <li>• NSBA <ul style="list-style-type: none"> <li>○ 2007: Grade 4 and Grade 8 (UNICEF supported by MES)</li> <li>○ 2009: Grade 4 and Grade 8 (WB Rural Education project supported by CEATM)</li> <li>○ 2014: Grade 4 (WB Rural Education project supported by CEATM)</li> <li>○ 2017 and 2021: Grade 4 and 8 (WB supported by MES)</li> <li>○ 2021: Grade 4 and Grade 8 (WB supported by MES)</li> </ul> </li> <li>• EGRA <ul style="list-style-type: none"> <li>○ 2021-2024: Grade 2 and Grade 4 (USAID supported by MES)</li> </ul> </li> <li>• EGMA <ul style="list-style-type: none"> <li>○ 2021-2024: Grade 2 and Grade 4 (USAID supported by MES)</li> </ul> </li> <li>• PISA <ul style="list-style-type: none"> <li>○ 2006 and 2009: 15-year-olds (WB supported by CEATM)</li> <li>○ 2025: 15-year-olds (WB supported by MES)</li> </ul> </li> </ul> <p>The WB is the major donor, investing around USD\$50million to various education reforms but mainly in the preparation of Kyrgyzstan's education system for their participation in PISA 2025. A large proportion of this funding is dedicated to the preparation of PISA, namely the following as listed in the plan for MES 2022-2026 and specifically in preparation for the PISA implementation:</p> <ul style="list-style-type: none"> <li>• Internet access to all public schools.</li> <li>• Provision of 20 computers and 6 projectors, 1 MFP, UPS and 2 switches to 1200 public schools.</li> <li>• Development and implementation of training programmes to raise computer literacy skills for teachers.</li> <li>• Development of multilingual education programs (Kyrgyz, Russian, English).</li> <li>• Programmes to upgrade textbooks and provide schools and students with access to e-libraries.</li> <li>• Develop PISA-like test/items using digital technology.</li> <li>• Development of teacher training programmes to improve and raise teacher qualifications.</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul style="list-style-type: none"> <li>• Development of PISA-like tests to be administered digitally.</li> <li>• Development of educational and methodological materials on the formation of functional literacy.</li> <li>• Updating of national standards/curricula.</li> </ul>	
E6 Use of assessment data	Government and key stakeholders have capacity to use data from large-scale assessments for evidence-based education policy and planning.	Established	<p>Responses to the CNA questionnaires, in-country consultations and written road maps and work plans indicate that data from large-scale assessments have been used for evidence-based education policy and planning in Kyrgyzstan, specifically in the:</p> <ul style="list-style-type: none"> <li>• Development of state educational standards/curricula.</li> <li>• Development of new generation textbooks.</li> <li>• Training of a new generation of teachers, school principals (e.g. qualifications and professional development).</li> <li>• Improvement of the system of advanced training of teachers (e.g. focussed training on computer literacy skills, pedagogical methods).</li> <li>• Planning, monitoring and evaluation of the education sector.</li> <li>• Improvement of school infrastructure.</li> <li>• Development of an early learning programme.</li> </ul>	
E7 Educational Management Information System	The government has developed a system for the collection, integration, processing, maintenance and use of data and information related to school, teachers and students.	Emerging	<p>The MES Information Technology department in partnership with the WB developed Kyrgyzstan's Education Management Information System (EMIS). The EMIS is an online system for the collection, integration, processing, maintenance and use of data and information related to schools, teachers and students (this was a policy initiative that was outlined in the SRO2020). Development began three years ago, and it currently stores data dating back two years. It is maintained and managed by the MES Information Technology department. The website address: <a href="https://open.edu.gov.kg/index.php">https://open.edu.gov.kg/index.php</a>.</p> <p>There are two interfaces to the online EMIS: public and private. The public interface is available to the public. It is an interactive website that allows the user to select and filter Kyrgyzstan's school, teacher and student level data in aggregated form. The private interface is accessed through a unique username and password. All schools (public and private), educational institutions and some organisations (including the Ministry of Internal Affairs, the military institute, etc.) have been given their own login details. Data is collected and entered by schools by a designated staff member assigned to the task. The data is checked at the Rayon level and is also checked by the Ministry of Management periodically. Data is updated daily.</p> <p>As of this year, a new enrolment feature has been added. Parents can enrol their children directly into this EMIS.</p> <p>Assessment data or grades are not yet collected in this system but there are plans to launch this function in the next year. Currently and historically, assessment data or grades are collected in aggregate form at the grade level by school and are reported as a percentage to Rayon officials who then send the information to the MES.</p>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>This EMIS system is fully functional and while all schools have access to the system to upload real time data, only about 30% of data are uploaded into the system. There is a mandate from the MES to enforce schools to enter their data. However, schools find the EMIS not user-friendly and therefore, find it difficult to meet the data entry requirements. Private schools, which make up about 12% of the education system are reluctant to enter their data into the EMIS as they do not want to make their data public.</p>	

Table A A.2. Organisational level

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O1 Assessment team	There is a dedicated and skilled assessment team to complete the diverse tasks associated with large-scale assessments, including management, instrument development, translation and linguistic quality control, test design, sampling, survey operations and logistics, data management, data analysis, reporting and dissemination. Capacity-building is provided for assessment centre staff.	Emerging	<p>The National Center for Evaluation of Quality of Education and Information Technologies (NACEQ and IT) is the leading assessment centre within the MES. It will be the unit from which core personnel will be drawn to form the National Centre (NC) for PISA 2025 implementation.</p> <p>The NACEQ and IT team are responsible for:</p> <ul style="list-style-type: none"> <li>• Conducting assessments by order of the MES.</li> <li>• Voluntary testing of students in grades 8-11.</li> <li>• Testing of Altyn Tamga medalists.</li> <li>• External assessment of the quality of education when accrediting schools, testing applicants to medical colleges, foreign military universities.</li> <li>• Testing ethnic Kyrgyz for admission to universities in the country.</li> <li>• Testing in the competition of directors.</li> <li>• Supporting the implementation of various assessment projects funded by various donors (WB, USAID, UNICEF, Aga Khan and MERCICO).</li> </ul> <p>NACEQ and IT personnel have experience in:</p> <ul style="list-style-type: none"> <li>• Development of assessments for teachers and students</li> <li>• Sampling</li> <li>• Survey operations and logistics</li> <li>• Translation and linguistic quality control</li> <li>• Data management and analysis</li> <li>• Instrument development</li> <li>• Some computer-based assessment.</li> </ul> <p>While the NACEQ and IT team collectively are experienced in most areas of large-scale assessment implementation, some areas such instrument development, translation and linguistic quality control, test design, sampling, survey operations and logistics, data management, data analysis (psychometrics on item functioning and reliability), reporting and dissemination, and computer-based assessment, may present as challenges due to the rigorous standards of PISA compared to large-scale assessments.</p>	<p>Capacity building is required in psychometrics, specifically item functioning and reliability.</p> <p>Capacity to carryout CBA according to the technical standards.</p>

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O2 Mobilisation of funding	The large-scale assessment centre is able to mobilise the allocated funds to complete the diverse tasks associated with large-scale assessments. Funding is also mobilised to provide for capacity-building of assessment centre staff.	Established	PISA 2025 implementation will be fully funded by the WB. The work plans and road map for PISA preparation stipulate that funds would be mobilised to complete the diverse tasks associated with large-scale assessments. This funding will also be mobilised to provide for capacity-building of assessment centre staff.	
O3 Temporary staff	Clear and transparent criteria and procedures are in place for recruiting and remunerating temporary staff, including translators and reconcilers, test administrators, quality monitors, coders of constructed response items, coders of occupational data, and data entry and data management support staff.	Established	PISA 2025 implementation will be fully funded by the WB. All staff will be sourced through the MES network of departments. However, should the need arise, the work plan for PISA preparation and implementation stipulate that provisions will be made for hiring temporary staff when identified and needed through the WB funding.	
O4 Physical infrastructure	The physical infrastructure of the large-scale assessment centre is adequate, i.e. there is sufficient and secure office space, meeting rooms, telephones with international access, secure facilities for data processing, coding operations and storage of assessment material.	Latent	At the time of the in-country visit, the NACEQ and IT team were in temporary office accommodations. Staff appeared to have adequate workstations, office space and internet connection. However, there was a shortage of meeting rooms and no secure facilities for storage of assessment material. Given the confidentiality and security level requirements for the secure storage of PISA assessment materials, data, draft material and confidential data pertaining to schools and students (e.g. school and student lists), both physical and electronic form, this is a matter of urgency and one that must be given high priority.	
O5 IT infrastructure and support	The IT infrastructure of the large-scale assessment centre is adequate, i.e. there are computers running Windows with up-to-date Microsoft Office, high bandwidth internet connection, secure networked environment, secure servers, cloud access/storage, printers, copiers, scanners and email. Necessary specialised software licenses are identified, acquired, installed and maintained. IT personnel is available to support the assessment team in all IT related aspects.	Latent	At the time of the in-country visit, the NACEQ and IT team were in temporary office accommodations. There appeared to be computers running Windows with up-to-date Microsoft Office, high bandwidth internet connection, printers, copiers, scanners and email. IT personnel were available to support the assessment team in all IT related aspects. However, the status of access to a secure networked environment, secure servers, or cloud access/storage, necessary specialised software licenses are identified, acquired, installed and maintained is unknown. The establishment of a secure networked environment, secure servers including secure cloud storage to ensure the confidentiality of all electronic assessment materials, data and draft materials must be addressed as a matter of urgency to ensure they meet the PISA technical standard of security and confidentiality.	
O6 Security policies and procedures	Security policies and procedures are established to ensure assessment material and data is kept secure and confidential. Legally binding measures are in place to ensure compliance (e.g. confidentiality agreements).	Latent	There are no security policies and procedures established to ensure material and data is kept secure and confidential. There are no legally binding measures in place to ensure compliance (e.g. confidentiality agreements). This is an area that was raised as a concern by CNA questionnaire responses and in-country consultations.	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O7 Instrument development	Quality assurance mechanisms are in place to ensure the assessment instruments (tests and contextual questionnaires) are reliable, valid and fair.	Emerging	While the NACEQ and IT team are specialists in testology and experienced in the development of assessment instruments for a broad range of national assessments and university entrance exams. There are no clear quality assurance mechanisms in place to ensure the test assessment instruments are reliable, valid and fair.	Further capacity is required to implement quality assurance mechanisms to ensure the assessment instruments are reliable, valid and fair.
O8 Translation and linguistic quality control	Where assessment instruments are developed in multiple languages, linguistic quality assurance procedures are in place to ensure the items are linguistically and psychometrically equivalent across multiple languages.	Emerging	There are no clear linguistic quality assurance guidelines in place to ensure items are linguistically and psychometrically equivalent across multiple languages. All large-scale assessment reports where multiple languages (for example, Kyrgyz, Russian, Uzbek) are used to assess and gather information do not undergo a rigorous process to ensure that the meaning and content of items and questions are the same across languages. In-country consultations identified this as a possible challenge. For example, there were issues with finding a suitably trained expert in the Uzbek and Tajik languages. However, this may not be an issue as it was conveyed that these are minority languages that will not be part of the test languages.	Further capacity is required to carry out translation/adaptation tasks according to the PISA linguistic quality assurance procedures.
O9 Target population and sampling	The sample frame provides complete coverage of the defined target population. Practicalities for assessing the target population are considered in the sampling design. Exclusions are clearly defined and documented.	Emerging	<p>Despite the development and partial functionality of the EMIS, the small proportion of data entered means that this data will not be a suitable source to create the PISA sampling frame as it will not provide complete coverage of the defined target population. Using the experience of other national large-scale assessments, an alternative method to collect the data was proposed whereby:</p> <ul style="list-style-type: none"> <li>• Rayons (districts) will collect data at the school and student level.</li> <li>• Data would be sent to Oblast departments (regions) where the data would be checked and then sent to MES.</li> <li>• The data would be checked again by MES. Once it is all checked, the MES would approve it by adding a seal of approval, and this data would then be released to the PISA NC for processing according to the PISA technical standards.</li> </ul> <p>Capacity may be required of the PISA NC staff to create a sample frame that provides complete coverage of the age-based target population with exclusions at the school and student levels, being clearly defined and documented.</p>	Some support maybe required to create a sample frame that provides complete coverage of the age-based target population with exclusions being clearly defined and documented.



Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O10 Survey operations and logistics	Quality assurance mechanisms are in place to ensure survey operations are standardised, monitored and documented. Measures are in place to ensure participation and to monitor response rates.	Emerging for PBA Latent for CBA	<p>While the NACEQ and IT team are experienced in implementing national large-scale assessments using PBA, some of the PISA quality assurance mechanisms to ensure survey operations are standardised, monitored and documented will be new to the NACEQ and IT team. Support to carry out a PBA according to the PISA technical standards would further strengthen the teams existing experience.</p> <p>Considering that Kyrgyzstan intends to participate in CBA, it will entail more complex survey operations and logistics. For example, ensuring that all PISA participating schools have adequate and a sufficient number of computers, including schools in remote areas, can be challenging. In addition, training test administrators for CBA will be more complex than for PBA. Also, troubleshooting protocols during the test administration period should be well planned. Capacity will be needed for planning quality assurance mechanisms to ensure survey operations for CBA are standardised, monitored and documented.</p>	<p>Support to carry out a PBA according to the PISA technical standards.</p> <p>Capacity to carry out a CBA according to the PISA technical standards.</p>
O11 Data management	Quality assurance mechanisms are in place to ensure the final database is free from discrepancies and errors, appropriately structured and documented.	Emerging	While the NACEQ and IT team have data management experience from the implementation of various large-scale assessments and university entrance exams, some of the PISA quality assurance mechanisms to ensure the final database is free from discrepancies and errors, appropriately structured and documented will be new to the NACEQ and IT team.	
O12 Data analysis and reporting	Technically sound and appropriate data analysis techniques are used to provide analytical results that permit valid and useful inferences about the population(s) of interest. Analytical results are fully documented and reproducible.	Emerging	The NACEQ and IT team has experience in data analysis of national large-scale assessments, such as the NSBA and university entrance exams. However, data analysis techniques used for PISA data will be a new experience for the NACEQ and IT team. Capacity to analyse and interpret PISA data and apply it to their national context will be required.	Capacity to analyse and interpret PISA data and apply it to their national context.
O13 Dissemination and communication	Appropriate products and approaches to reporting and dissemination are tailored to the different stakeholder groups and promote appropriate and effective use of the assessment data and results by those groups.	Emerging	<p>Results from large-scale assessments are widely disseminated to the public via specialised channels and media. Media outlets have commented on Kyrgyzstan's results in international assessments and have reported on the results of national large-scale assessments. However, there is a limited tailoring of results to suit the needs of the various stakeholders and a lack of visible use of large-scale assessment data in policy.</p> <p>Further capacity is required to improve the tailoring of results to meet the information needs of various stakeholder groups. A strategy is needed to improve the awareness of stakeholders and their understanding of the role that international large-scale assessments have in providing findings that relate to their areas of interest.</p>	Capacity is required to improve the tailoring of results to meet the information needs of various stakeholder groups.

Table A A.3. Individual level

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
11 National Project Manager	There is an appropriately skilled and experienced National Project Manager (NPM) with decision-making authority within the assessment centre to lead the assessment team and to oversee all assessment activities. The NPM is able to communicate effectively, orally and in writing, in English. The NPM is employed on a full-time basis for the duration of the assessment cycle.	Emerging	<p>The role of NPM for Kyrgyzstan's PISA NC will be shared between two highly experienced personnel: Mrs. Onolkan Umankulova and Mrs. Baktygul Shamshidinova.</p> <p>Mrs. Umankulova is the officially appointed NPM for Kyrgyzstan and will oversee all aspects of PISA implementation. She is proficient in English (orally and written). She will be the main point of contact. She has decision-making authority within the PISA NC team. She will be available to work on PISA part-time.</p> <p>Mrs. Shamshidinova is the director of the NACEQ and IT and will also oversee the PISA NC team. She has limited English skills. She has decision-making authority within the PISA NC team and the NACEQ and IT unit.</p> <p>Both co-NPMs have decision-making authority. However, clarity with respect to division of responsibility with respect to the tasks associated with PISA implementation, direction of NC staff and accountability with respect to PISA tasks would further strengthen this partnership.</p> <p>All communication from contractors, including meetings with CBIS team, has so far been with Mrs. Umankulova.</p>	
12 Assessment instruments co-ordinator	The national-level tasks related to the assessment instruments are overseen by an appropriately skilled and experienced team member, including national item review, organisation of translation, adaptation and verification, coding of constructed response items, and coding of occupational data. If needed, domain and contextual experts are engaged to assist with national item review, linguistic and contextual adaptation, supervising coders and interpretation of findings.	Emerging	The likely NACEQ and IT staff who will be appointed this role has experience in national item review, organisation of translation and adaptations. She has co-ordinated projects and is the language expert for the NSBA. She has worked closely with CITO and is proficient in English, Russian and Kyrgyz.	Further capacity is required to carry out translation/adaptation tasks according to the PISA linguistic quality assurance procedures, coding of constructed response items and coding of occupational data.
13 Sampling manager	The sampling manager is appropriately skilled and experienced in sample design and in the use of scientific sampling methods, to oversee and manage all sampling-related activities at the national level.	Emerging	<p>This role will likely be filled by the same staff undertaking the data management and data analysis role. She is highly experienced in sampling having worked on drawing the sample for the NSBA, PIAAC and other smaller national projects.</p> <p>Capacity may be required of the PISA NC staff to create a sample frame that provides complete coverage of the age-based target population with exclusions at the school and student levels, being clearly defined and documented.</p>	Some support maybe required to create a sample frame that provides complete coverage of the age-based target population with exclusions being clearly defined and documented.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
14 Survey operations and logistics manager	The survey operations and logistics tasks are organised and overseen by an appropriately skilled and experienced team member, including preparation of school-level materials, school contact and co-ordination, assessment logistics, test administration and training, and national quality monitoring (including monitoring response rates at school and student levels). A good understanding of the security and confidentiality requirements, and the technical support requirements for computer-based delivery (as applicable) is critical.	Emerging for PBA  Latent for CBA	This role will likely be filled by an NACEQ and IT staff who has experience in co-ordinating assessments, liaising with schools and training of staff. The staff member will have experience in paper-based administration. Capacity building is needed as this will be the first time this NC has undertaken International large-scale assessment, and the processes and procedures will be new to the staff member.  Should Kyrgyzstan opt for computer-based assessment delivery, capacity building will be needed as this will be the first time this NC has undertaken CBA as a delivery mode and to ensure the requirements for computer-based delivery are met.	Capacity building for either PBA or CBA will be required to ensure procedures associated with either delivery method is well understood and implemented according to the technical standards.
15 Data manager	The data manager is appropriately skilled and experienced in data management, data processing, quantitative data analysis and using statistical packages such as SPSS, SAS, STATA or R, to oversee and manage all data-related activities at the national level.	Emerging	The NACEQ and IT staff will likely be the same person undertaking the sampling and data analyst role. She has data management experience from the implementation of various large-scale assessments and university entrance exams. She is proficient in using SPSS and Excel. Support will be needed in the use of the Maple data management tool.	Support will be needed in the use of the Maple data management tool.
16 Data analyst	There is a senior data analyst who is appropriately skilled and experienced in quantitative data analysis and using statistical packages (e.g. SPSS, SAS, STATA or R), to assist with national-level data analysis and reporting. The senior data analyst is familiar with Item Response Theory and is able to interpret item statistics. The senior data analyst is familiar with methods for calculating appropriate standard errors of statistics in complex survey designs to support interpretation of assessment results.	Emerging	The NACEQ and IT staff will likely be the same person undertaking the sampling and data management role. She has data management experience from the implementation of various large-scale assessments and university entrance exams. She is proficient in using SPSS and Excel.  Capacity to analyse and interpret PISA data and apply it to their national context will be required.	Capacity to analyse and interpret PISA data and apply it to their national context.
17 Information Technology co-ordinator	The team has a full-time IT co-ordinator for PISA's IT-related activities for the implementation of the computer-based survey within schools in their country/economy (if this option is taken).	Latent	Kyrgyzstan has not identified any staff within the NACEQ and IT team to be appointed as the IT co-ordinator. The appointment of a suitable staff member with relevant skills and experience in computer-based assessment delivery will be crucial in ensuring that all PISA IT-related activities at the school level are successfully implemented. Capacity building will be needed to ensure the requirements for CBA delivery are implemented according to the PISA technical standards.	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
I8 Communication in English	The National Centre ensures that qualified staff are available to respond to requests in English by the OECD and international contractors during all stages of the project.	Emerging	<p>The majority of NACEQ and IT staff who have been identified as potential personnel for PISA NC speak English. However, their English reading and writing skills may not be proficient enough to interpret and understand the contents without the direction of the officially appointed co-NPM, Mrs. Onolkan Umankulova. This could place additional pressure on the co-NPM.</p> <p>The English-speaking skills of the NACEQ and IT staff who have been identified as potential personnel for PISA NC:</p> <ul style="list-style-type: none"> <li>• The first co-NPM has proficient English verbal and written skills.</li> <li>• The second co-NPM has no verbal English skills.</li> <li>• Assessment instruments co-ordinator has sufficient verbal English skills.</li> <li>• Sampling manager/Data analyst/Data manger has basic to medium level verbal English skills.</li> <li>• Survey operations and logistics manager has no verbal English skills.</li> </ul> <p>Since it is a requirement that NPMs speak English fluently, it will be important for Kyrgyzstan to continuously assess the risk involved with depending on the co-NPM's English skills. It would be preferable to ensure there is a fluent English speaker as backup in case of absence of the co-NPM during certain periods of the project.</p>	

## Annex B. Stakeholder and document mapping

**Table A B.1. Stakeholder mapping table**

Dimensions	Government (national or sub-national)	Education or assessment institutions, organisations, agencies	Representatives in education development partner/donor organisations
Enabling environment	<ul style="list-style-type: none"> <li>• Onolkan Umankulova</li> <li>• PISA Governing Board Representative (Beyshehaliev Almazbek Beyshehalievich)</li> <li>• Deputy Minister (Djusupbekova Nadira Syntashevna, deputy minister – previous)</li> <li>• Deputy Minister (Mambetkunov Ulanbek Esenbekovich, deputy minister – newly appointed)</li> <li>• Rasul Abazbek uulu – deputy minister for higher education</li> <li>• Minister of Education and Science (Boyko Evgeniya Vladimirovna – the head of the department for monitoring and strategic development of the MES KR)</li> <li>• Organisation who is in charge of EMIS (State enterprise "Infokom" under the Ministry for digital development)</li> <li>• <b>Expert Council for PISA</b>, Kaldybaev Salidin Kadyrkulobich, the head of the expert council</li> <li>• <b>Republican Institute for Advanced studies and retraining of pedagogical workers under the Ministry of education and science of KR</b> - Toktomametov Almazbek Datkabekovich – director</li> <li>• <b>Oblast Education departments</b> – 1 or 2 persons</li> <li>• <b>Rayon Education departments</b> – 1 or 2 persons</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Center for assessment in education and learning methods</b> – Batrakeeva Chinara Ebishovna, director</li> </ul>	<ul style="list-style-type: none"> <li>• <b>The World Bank</b> (Sultanova Gulmira Keneshovna – specialist for education of the World Bank; Mykyeva Mira Rasabekovna, specialist for assessment from "Education for the future" of the PIU World Bank)</li> <li>• Asian Development Bank</li> <li>• UNICEF</li> <li>• USAID (Khamzina Saule Askarovna, regional coordinator of USAID project "Reading together")</li> <li>• European Union (Eduard Turdaliev)</li> </ul>

Dimensions	Government (national or sub-national)	Education or assessment institutions, organisations, agencies	Representatives in education development partner/donor organisations
Organisational level	<ul style="list-style-type: none"> <li>• Dusheeva Nazira Kubanychbekovna – president of Kyrgyz Academy for Education (KAE)</li> <li>• National Centre (<b>National center for assessment of the quality of education and informative technologies</b> – Shamshidinova Baktygul Sabyrjanovna, director)</li> </ul>		
Individual level	<ul style="list-style-type: none"> <li>• National Centre (National center for assessment of the quality of education and informative technologies - Shamshidinova Baktygul Sabyrjanovna, director)</li> </ul>		

Table A B.2. Document mapping table

Dimensions	Documents
Enabling environment	<ul style="list-style-type: none"> <li>• Education development strategy up to 2040.docx</li> <li>• Структура коммуникаций по ПИЗА (1).docx (Communication plan for PISA)</li> <li>• Analyses about state of the art in regards to PISA.docx</li> <li>• Action Plan for preparation for PISA 26.01.22.docx</li> <li>• FA_Learning for the Future Project.pdf</li> <li>• UNESCO Institute for Statistics: Kyrgyzstan <a href="https://data.worldbank.org/indicator/SE.SEC.ENRR?locations=KG">https://data.worldbank.org/indicator/SE.SEC.ENRR?locations=KG</a></li> <li>• Action document for education sector reform performance contract in Kyrgyzstan by the EU <a href="http://www.gtai.de/resource/blob/781792/fd8466314ab05ee06714790fd8e2328a/PRO20211117757190%20-%20Annex.PDF">www.gtai.de/resource/blob/781792/fd8466314ab05ee06714790fd8e2328a/PRO20211117757190%20-%20Annex.PDF</a></li> <li>• План МОН 3 квартал обновленный.docx (MES work plan, 3rd quarter, updated)</li> <li>• March 23, 2012 Resolution No. 201 of the Government of Kyrgyzstan - On strategic directions of development of the education system in the Kyrgyz.docx</li> <li>• May 4, 2021 Resolution No. 200 of the Government of Kyrgyzstan - On Approving the Education Development Program in Kyrgyzstan in 2021-2040.docx</li> </ul>
Organisational level	<ul style="list-style-type: none"> <li>• Функции по PISA.doc (PISA functions)</li> <li>• Окуу Керемет! Baseline EGMA 2021 Report_APPROVED.pdf</li> <li>• Окуу Керемет! Baseline EGRA 2021 Report_APPROVED.pdf</li> <li>• Scheme for preparation for PISA.docx</li> <li>• Education action plan till 2026.docx</li> <li>• KGZ_pressreleases_PISA.docx</li> <li>• NSBA2014_Report_Engl.pdf</li> <li>• NSBA.Presentation.ppt</li> </ul>
Individual level	<ul style="list-style-type: none"> <li>• Order of the Ministry of education for NPM and NC.pdf</li> <li>• ToR_PISA_coordinator_pycc.docx</li> <li>• T3_PISA_ENG_NC_20.04.pdf</li> </ul>

## Annex C. Capacity Needs Assessment consultations

**Table A C.1. List of in-country stakeholder consultations conducted during in-country visit from 3-7 October 2022**

Name	Position	Organisation
Mykyeva Mira Rasabekovna	Assessment specialist	WB
Guljan Kojobekovna	Project coordinator	WB
Alimbayev Doron	IT coordinator	WB
Yarmukhamedov Ramil Faridovich	IT specialist	MES
Kalkanov Kadyrbek	Project coordinator	European Commission
Eduard Turdaliev	Education trainer	European Commission
Samara Kydyrmaevna	Head of the department for education and extracurricular work	MES
Chynara Ebishevna Batrakeeva	Director of the Center for Educational Assessment and Teaching Methods	CEATM
Salidin Kadyrkulovich	Chair of the Secretary for PISA 2025	MES
Baktygul Shamshidinova	Director of the NACEQ and IT	MES
Dinara Dautova	sampling and data manager	NACEQ and IT
Ryskul Madanbekova	Survey operations and logistics manager	NACEQ and IT
Tologon Amatov	Head of “Jany Kitep”	MES
Bryzgalova Olga Alexandrovna	Specialist of the department for education and extracurricular work	MES
Saule Khamzina	School education expert	USAID
Nazira Dusheeva	President	KAE
	Director of the Republican Institute for advanced training and retraining	MES
Jyldyz Satarovna	Project Implementation Unit director	ADB



**Table A C.2. List of the participants from school №53 who attended the PISA seminar on 5 October 2022**

Name	Position
Abdyjaparova J.K.	Director - Chemistry teacher
Aymanbetova B.A.	Russian language teacher
Duyshekeeva A.N.	Mathematician
Isisrailova A.K.	Chemistry teacher
Kazakova G.O.	Mathematician
Kazakbaeva E.T.	English language teacher
Almazbekov u B.	A person and the society subject teacher
Temirbekova A.T.	English language teacher
Abasova A.A.	Russian language teacher
Akylbekova A.	Informatics teacher
Sagynbekova B.T.	Physics teacher

**Table A C.3. List of the participants from a school named after Kychan Jakypov. Jeek village, Ysyk-Atinskiy Rayon on 5 October 2022**

Name	Position
Adjigulova K.S	Primary school teacher
Akjoltoeva J.M.	Physics teacher
Alieva K.S.	History and social teacher
Alybaeva K.B.	Native language teacher
Alymkulova A.A.	Primary school teacher
Amanbek k.Jazgul	Primary school teacher
Anarbekova E.K.	Primary school teacher
Asanbaeva G.B.	Geography teacher
Ashimova E.T.	Mathematician teacher
Ashirbekova D.J.	Kyrgyz language teacher
Dolotbaeva A.J.	Primary school teacher
Jumakadyrova T.S.	Primary school teacher
Karipov M.Z.	Religion studies teacher
Kulmurzaeva B.K.	Chemistry, biology
Makeeva Ch.A.	Informatics, biology
Muratov T.N.	Kyrgyz language teachers
Musaeva G.A.	Home-based tutoring teacher
Moldokdyrova M.Sh.	Primary school teacher Russian language teacher
Ryspaev N. B.	History teacher
Sadykova G.D.	Native language teacher
Sadykova E.D.	Primary school teacher Kyrgyz language teacher
Samudinova S.M.	Primary school teacher
Sydykov I.S.	Mathematician teacher
Talaybekov B.T.	Director

**Table A C.4. List of the participants of the seminar at the Ministry of Education and Science of Kyrgyzstan on 6 October 2022**

Name	Position	Organisation
Umralieva S.K.	Head of the department	MES
Bryzgalova O.A.	Leading specialist	MES
Soltogulova F.T.	Leading specialist	MES
Asanalieva A.	Kut Bilim specialist	MES
Kaldybaev S.K.	Vice-rector	Ala-Too University
Umankulova O.A.	President National Project management for PISA	Agency for quality assurance in the field of education «EdNet»
Asakeeva R.A.	Vice-president	Sapat school
Dusheeva N.K.	President	KAE
Toktomametov A.D.	Director	Republican Institute for advanced training and retraining under the MES
Shamshidinova B.S.	Director	National Learning Quality Assessment and Information Technologies Center
Ashymbaeva T.A.	Vice-president	KAE
Niyazova A.M.	Director of the center for pre-school and school education	KAE
Talantbek k.Alina	Leading specialist	KAE
Artykbaeva G.E.	Head of the Center	Republican center for upskilling of teachers and education workers
Omorova A.A.	Senior teacher	Republican center for upskilling of teachers and education workers
Azimova M.L.	Senior teacher	Republican center for upskilling of teachers and education workers
Jamakeeva Z.E.	Deputy director	NACEQ and IT
Dautova D.S.	Analytical specialist	NACEQ and IT
Aynekenova A.R.	Director	WB
Mamytova G.K.	Training coordinator	WB
Mykyeva M.R.	Assessment coordinator	WB
Jamansariyev A.	Monitoring specialist	WB

## Annex D. CNA questionnaires

### Questionnaire for officials

#### *Participant information*

Please enter your information.

Name	
Job title	
Organisation	
Role in PISA 2025	

#### *Introduction*

[Country] is participating in the OECD Programme for International Student Assessment – PISA 2025. ACER has been engaged by the OECD to support [country] in preparing and implementing PISA 2025. One part of this support is to conduct a Capacity Needs Assessment (CNA). The aim of this CNA is to identify capacity assets and needs of [country’s] assessment system for the successful implementation of PISA 2025.

This CNA questionnaire asks you about the capacity assets and needs at the system and organisational levels. We have around [number] questions to ask you and the questionnaire is expected to take approximately 30 minutes.

#### *Voluntary participation and informed consent:*

Your participation in this questionnaire is entirely voluntary and explained in the consent form that is provided separately.

#### *Section A: Experience in large-scale assessments*

<b>A1.</b>	Has your country implemented a large-scale <b>national</b> assessment before? (please circle your answer)	Yes	No	Not sure
------------	--------------------------------------------------------------------------------------------------------------	-----	----	----------

If you have answered “No” or “Not sure”, proceed to A9 {these will be automatically routed online}

<b>A2.</b>	Please list, up to three, most recent <b>national</b> large-scale assessment(s) your country implemented and tell us about when, and with whom it was implemented.	<b>A3.</b> In which year(s) was it implemented?	<b>A4.</b> What were the targeted grades of school education?
#1	[Enter the name of the national large-scale assessment]		
#2	[Enter the name of the national large-scale assessment]		
#3	[Enter the name of the national large-scale assessment]		

Please answer the following questions about the **national** large-sale assessment you listed as #1 in A2.

<b>Name of the national large-scale assessment</b> (this will be populated by the answers above)	
<b>A5.</b> What learning domains were included?	(drop down menu of: <ul style="list-style-type: none"> <li>• Reading/literacy/language</li> <li>• Mathematics/numeracy</li> <li>• Sciences</li> <li>• Social sciences</li> <li>• Computing/information literacy/IT/ICT</li> <li>• 21<sup>st</sup> century skills/global citizenship/civics)</li> </ul>

<b>A6.</b>	How was the performance data measured?	(Please tick all that apply)
<b>a</b>	Raw scores (or averages of raw scores)	
<b>b</b>	Percent correct (per learning domain)	
<b>c</b>	Scale scores	
<b>d</b>	Performance levels on a scale	
<b>e</b>	Described proficiency levels	
<b>f</b>	Linked performance data (to monitor changes over time/between grades)	

<b>A7.</b>	What type of contextual information was collected?	(Please tick all that apply)
<b>a</b>	Gender	
<b>b</b>	Socio-economic status	
<b>c</b>	Language spoken at home	
<b>d</b>	School structures and resources (e.g., public/private status, location of school, school and class sizes)	
<b>e</b>	Teaching and learning practices (e.g. teaching methods, classroom management)	

<b>A8.</b>	What areas of the large-scale national assessment was led by your country? (Please tick all that apply)	(Please tick all that apply)
<b>a</b>	Coordination of the assessment program	
<b>b</b>	Design of the assessment	
<b>c</b>	Item development	

<b>d</b>	Sampling	
<b>e</b>	Implementation of the assessment	
<b>f</b>	Analysis	
<b>g</b>	Reporting	
<b>h</b>	Dissemination of results	

{Questions A5 to A8 will be repeated for each of the national assessments listed in A2.}

<b>A9.</b>	Has your country implemented a large-scale <b>international</b> assessment before? (please circle your answer)	Yes	No	Not sure
------------	----------------------------------------------------------------------------------------------------------------	-----	----	----------

If you have answered “No” or “Not sure”, proceed to A20 {these will be automatically routed online}

<b>A10.</b>	Please list, up to three, most recent <b>international</b> large-scale assessment(s) your country implemented and tell us about when, and with whom it was implemented.	<b>A11.</b> In which year(s) was it implemented?	<b>A12.</b> What were the targeted grades of school education?
#1	[Enter the name of the international large-scale assessment]		
#2	[Enter the name of the international large-scale assessment]		
#3	[Enter the name of the international large-scale assessment]		

Please answer the following questions about the **international** large-sale assessment you listed as #1 in **A10**.

<b>Name of the international large-scale assessment</b> (this will be populated by the answers above)	
<b>A13.</b> What learning domains were included?	(drop down menu of: <ul style="list-style-type: none"> <li>• Reading/literacy/language</li> <li>• Mathematics/numeracy</li> <li>• Sciences</li> <li>• Social sciences</li> <li>• Computing/information literacy/IT/ICT</li> <li>• 21<sup>st</sup> century skills/global citizenship/civics)</li> </ul>

<b>A14.</b>	How was the performance data measured?	(Please tick all that apply)
<b>a</b>	Raw scores (or averages of raw scores)	
<b>b</b>	Percent correct (per learning domain)	
<b>c</b>	Scale scores	
<b>d</b>	Performance levels on a scale	
<b>e</b>	Described proficiency levels	
<b>f</b>	Linked performance data (to monitor changes over time/between grades)	

<b>A15.</b>	What type of contextual information was collected?	(Please tick all that apply)
<b>a</b>	Gender	
<b>b</b>	Socio-economic status	
<b>c</b>	Language spoken at home	
<b>d</b>	School structures and resources (e.g. public/private status, location of school, school and class sizes)	
<b>e</b>	Teaching and learning practices (e.g. teaching methods, classroom management)	

<b>A16.</b>	What areas of the international large-scale assessment were led by your country? (Please tick all that apply)	(Please tick all that apply)
<b>a</b>	Coordination of the assessment program	
<b>b</b>	Design of the assessment	
<b>c</b>	Item development	
<b>d</b>	Sampling	
<b>f</b>	Implementation of the assessment	
<b>g</b>	Analysis	
<b>h</b>	Reporting	
<b>i</b>	Dissemination of results	

{Questions A13 to A16 will be repeated for each of the international assessments listed in A10.}

<b>A17.</b>	Is there currently an established centre that is responsible for implementing PISA 2025? (please circle your answer)	Yes	No	Not sure
-------------	----------------------------------------------------------------------------------------------------------------------	-----	----	----------

*If you have answered “Yes” please continue to question A18.*

*If you have answered “No”, please continue to Section B.*

**A18.** What is the name of the centre and where does this centre sit? (For example, a unit or department within the Ministry of Education or external to the ministry and/or government)

---



---



---

<b>A19.</b>	Is the assessment centre widely recognised in your country as an authority in student assessment? (please circle your answer)	Yes	No	Not sure
-------------	-------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

**A19.a.** Please explain the reason for your answer in A19?

---



---



---

<b>A20.</b>	Which body is the assessment centre accountable to?	(Please tick the most accurate answer)
<b>a</b>	An autonomous board or committee that is institutionally separate from the assessment centre (e.g. the centre is within the MoE and reports to a board not within the jurisdiction of the MoE)	
<b>b</b>	A board or committee that belongs to the same institution as the assessment centre (e.g. the centre is within MoE and reports to a board from within MoE)	
<b>c</b>	An internal board or committee that sits within the assessment centre unit	
<b>d</b>	Other	

**A20.e** If you ticked “Other” in A20, please specify:

---



---



---

<b>A21.</b>	How much autonomy does the assessment centre have?	(Please tick the most accurate answer)
<b>a</b>	Has complete autonomy. It can make decisions regardless of political party or matters.	
<b>b</b>	It has some autonomy. Some decisions can be made, but decisions may be reversed due to political matters.	
<b>c</b>	It does not have any autonomy at all. It is completely affected by political matters	

### **Section B: Implementation of PISA 2025**

<b>B1.</b>	Has an assessment team been established that is primarily responsible for implementing PISA 2025 in your country? (Please circle your answer)	Yes	In progress	No	Not sure
------------	-----------------------------------------------------------------------------------------------------------------------------------------------	-----	-------------	----	----------

*If you have answered “Yes” or “In progress” please continue to question B2.*

*If you have answered “No”, or “Not sure” please continue to Section C.*

<b>B2.</b>	Is there an organisation chart of the PISA assessment team? (Please circle your answer)	Yes	In progress	No	Not sure
------------	-----------------------------------------------------------------------------------------	-----	-------------	----	----------

*If you have answered yes to B2, please provide a copy of the organisation chart to your liaison officer.*

<b>B3.</b>	What is the availability of the PISA assessment team members to fill the following key roles to work on PISA 2025? (Please tick that apply)	Full-time	Part-time	Not sure
<b>a</b>	National Project Manager			
<b>b</b>	Survey operations and logistics manager			
<b>c</b>	Administrative Officer			
<b>d</b>	Sampling Manager			
<b>e</b>	Assessment instruments coordinator			
<b>f</b>	Data Manager			
<b>g</b>	Data analyst			
<b>h</b>	IT Coordinator			
<b>i</b>	Translation/Adaptation coordinator			



<b>B4.</b>	Are there written job descriptions for each of the key roles for each of the core assessment team members? (please circle your answer)	Yes	In progress	No	Not sure
------------	-------------------------------------------------------------------------------------------------------------------------------------------	-----	-------------	----	----------

*If you answered “Yes” or “In progress” to B4, please provide a copy (in English) of any of the available job descriptions to your liaison officer*

<b>B5.</b>	Are there processes and procedures in place to secure extra permanent or temporary staff if needed? (Please circle your answer)	Yes	No	Not sure
------------	---------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

**B6.** Can you describe the office space available for the PISA assessment team?

---



---



---



---

<b>B7.</b>	Are there adequate and secure (i.e. safe from unauthorised access, theft, fires, floods): (Please tick the relevant box in each row)	Yes	No
<b>a</b>	Workstations		
<b>b</b>	Meeting rooms		
<b>c</b>	Facilities for data processing		
<b>d</b>	Facilities for coding operations		
<b>e</b>	Storage rooms for assessment material		

<b>B8.</b>	Is there adequate: (Please tick the relevant box in each row)	Yes	No
<b>a</b>	Number of computers running Windows with up-to-date Microsoft Office (one per assessment team member)?		
<b>b</b>	High bandwidth internet connection? (e.g. at least 50mbits/sec)		
<b>c</b>	Secure network and servers? (e.g. requires password to access)		
<b>d</b>	Secure cloud access/storage? (e.g. requires password to access)		
<b>e</b>	Number of printers, copiers and scanners?		
<b>f</b>	Email accounts specific for PISA 2025?		

<b>B9.</b>	Do you have security policies and procedures in place to ensure all PISA 2025 assessment material and data is kept secure and confidential at all times? (please circle your answer)	Yes	No	Not sure
------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

*If you answered “Yes” to B9, please provide a copy (in English) of the security policies and procedures to your liaison officer*

<b>B10.</b>	Are confidentiality agreements in place with all relevant staff and contractors who have access to assessment materials and data? (please circle your answer)	Yes	No	Not sure
-------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

*If you answered “Yes” to B10, please provide a copy (in English) of the confidentiality agreement to your liaison officer*

<b>B11.</b>	In your opinion, do all relevant individuals understand the security and confidentiality requirements? (please circle your answer)	Yes	No	Not sure
-------------	---------------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

**B12.** What measures are in place to ensure assessment material and data are kept secure from unauthorised access, theft, fire and flood? Please also consider factors such as storage and transportation/delivery in your answer.

---



---



---

### **Section C: Legislation and engagement**

<b>C1.</b>	Are there national policies and/or guidelines for the implementation of large-scale assessments? (please circle your answer)	Yes	No	Not sure
------------	---------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

*If you answered “Yes” to C1, please provide a copy (in English) of the policies or guidelines to your liaison officer*

<b>C2.</b>	Is there official documentation that outlines:	(Please tick all that apply)
<b>a</b>	The purpose of large-scale assessments	
<b>b</b>	How large-scale assessments inform education policy and practice	
<b>c</b>	The intended uses of assessment data	

<b>C3.</b>	Are large-scale assessments in your country enacted by legislation? (please circle your answer)	Yes	No	Not sure
------------	----------------------------------------------------------------------------------------------------	-----	----	----------

*If you answered “Yes” to C3, please provide a copy (in English) of the legislation to your liaison officer*

<b>C4.</b>	Is the participation in large-scale assessments of schools and students enacted by this law or regulation? (please circle your answer)	Yes	No	Not sure
------------	-------------------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

**C5.** How do senior government officials promote large-scale assessments?

---



---



---

<b>C6.</b>	Are there any key stakeholders who oppose large-scale assessment programs? (please circle your answer)	Yes	No	Not sure
------------	-----------------------------------------------------------------------------------------------------------	-----	----	----------

**C6.a.** If you answered ‘yes’ to C6, what are their main reasons for opposition?

---



---



---



---

<b>C7.</b>	What kinds of products will be developed to communicate the assessment results to stakeholders?	(Please tick all that apply)
<b>a</b>	Reports	
<b>b</b>	Policy briefs	
<b>c</b>	Assessment database	
<b>d</b>	Press releases	
<b>e</b>	Media reports	
<b>f</b>	Other	

**C7.f.** If you answered ‘other’ to C7, please specify

---



---

### Section D: Funding

**D1.** How is the implementation of PISA 2025 going to be funded?

---



---



---



---

<b>D2.</b>	In your opinion, is there adequate funding for the implementation of PISA 2025? (please circle your answer)	Yes	No	Not sure
------------	----------------------------------------------------------------------------------------------------------------	-----	----	-------------

**D2.a.** If you answered “no” to D2, please specify why.

---



---



---



---

<b>D3.</b>	Has funding been fully secured to participate in PISA 2025 international meetings and trainings? (please circle your answer)	Yes	No	Not sure
------------	------------------------------------------------------------------------------------------------------------------------------	-----	----	-------------

**D3.a.** If funding has not yet been fully secured, do you expect to secure the funding, and by when?

---



---



---

<b>D4.</b>	What is the main source of funding for the implementation of PISA 2025? (please circle your answer)	Internal sources	Donors or sponsors	Equal contribution of internal sources and donors/ sponsors	Not sure
------------	-----------------------------------------------------------------------------------------------------	------------------	--------------------	-------------------------------------------------------------	----------

<b>D5.</b>	Which development partners/donors (if any) have been actively supporting/funding the development of education in your country?	
------------	--------------------------------------------------------------------------------------------------------------------------------	--

<b>D6.</b>	Please list below the current and planned education assessment projects/programs funded by the development partners/donors:
<b>a</b>	
<b>b</b>	
<b>c</b>	

### *Section E: Use of large-scale assessment data*

**E1.** If assessment data is used to inform educational policy and practice in your country, please provide examples of how this happens. For example:

- Education policy processes, including education sector planning, monitoring and evaluation
- Resourcing/funding allocation
- Curriculum development
- School development
- School education workforce development (e.g., qualification and professional development of teacher trainers, teachers, school principals)

---



---



---



---

<b>E2.</b>	Do you expect to face any of these challenges when using large-scale assessment data in your country?	(please tick all that apply)
<b>a</b>	Lack of confidence in the reliability and validity of assessment results	
<b>b</b>	Inability to analyse and interpret assessment data	
<b>c</b>	Your own difficulty in understanding the purpose, intent and findings of the assessment	
<b>d</b>	Wider stakeholders have difficulty in understanding the purpose, intent and findings of the assessment	
<b>e</b>	Difficulty in using the results to inform decision making in education policies and practices	
<b>f</b>	Difficulty in dissemination of the results widely to engage wider stakeholders	
<b>g</b>	Fear of reprisal in light of poor assessment results	
<b>h</b>	Other	

**E2.i.** If you answered "Other" to E2, please specify:

---



---

### *Section F: Educational Management and Information System*

<b>F1.</b>	Has an Educational Management and Information System (EMIS <sup>6</sup> ) been developed within the Ministry of Education? (please circle your answer)	Yes	No	Not sure
------------	--------------------------------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

---

<sup>6</sup> EMIS is a centralised system for the collection, integration, processing, maintenance and use of data and information related to schools, teachers, and students.

**F2.** If you answered “Yes” to F1, which department or unit of the Ministry of Education or agency/institution is responsible for managing EMIS in your country?

---



---



---



---

**F3.** If you answered “No” to F1, please explain how data and information related to schools, teachers and students are currently collected, integrated, processed, maintained, and used:

---



---



---



---

### *Section G: Training*

<b>G1.</b>	Please select the opportunities (if available) to build capacity of core assessment team members outside of PISA international meetings and trainings. For the areas selected, what form will the capacity building take place (For example, formal qualification, workshop, short course)?	(Please tick all that apply)
<b>a</b>	No opportunities are available	
<b>b</b>	Test development	
<b>c</b>	Translation and adaptation	
<b>d</b>	Test design	
<b>e</b>	Item writing	
<b>f</b>	Sampling	
<b>g</b>	Field operations	
<b>h</b>	Data management	
<b>i</b>	Data analysis	
<b>j</b>	Project management	
<b>k</b>	IT	
<b>l</b>	Other	

G2. If you ticked any of the options in G2, please comment on what form the capacity building will take place.

---

---

---

---

Thank you very much for completing this Capacity Needs Assessment questionnaire!

## Questionnaire for individuals

### *Participant information*

Name	
Job title	
Organisation	
Role in PISA 2025	

### *Introduction*

[Country] is participating in the OECD Programme for International Student Assessment – PISA 2025. ACER has been engaged by the OECD to support [country] in preparing and implementing PISA 2025. One part of this support is to conduct a Capacity Needs Assessment (CNA). The aim of this CNA is to identify capacity assets and needs of [country's] assessment system for the successful implementation of PISA 2025.

This CNA questionnaire asks you about the capacity assets and needs at the individual level. We have around [number] questions to ask you and the questionnaire is expected to take approximately 30 minutes.

#### *Voluntary participation and informed consent:*

Your participation in this questionnaire is entirely voluntary and explained in the consent form that is provided separately. If you agree to participate, please sign the second page of the form.

### *Section A: Your role*

**A1.** Which title best describes your role in PISA 2025?

{Drop down menu for}:

- National Project Manager
- Survey operations and logistics manager
- Administrative officer
- Sampling manager
- Assessment instruments coordinator
- Data manager
- Data analysis
- IT coordinator
- Translation/ Adaptation coordinator
- Other

**A1.a.** If you selected “Other” in A1, please specify your role.

---



---



---



**A2.** What previous work experience have you had that has helped you to prepare for your role in PISA 2025?

---



---



---



---



---

<b>A3.</b>	Are you a regular employee of the assessment centre <sup>7</sup> ? (please circle your answer)	Yes	No	Not sure
------------	------------------------------------------------------------------------------------------------	-----	----	----------

<b>A4.</b>	Are you aware of processes and procedures in place to secure extra permanent or temporary staff if needed? (please circle your answer)	Yes	No	Not sure
------------	----------------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

<b>A5.</b>	Do you have a written job description for your roles in PISA 2025? (please circle your answer)	Yes	No	Not sure
------------	------------------------------------------------------------------------------------------------	-----	----	----------

*If you answered "Yes" to A5, please provide a copy (in English) of your job description to your liaison officer*

<b>A6.</b>	Will you be available to attend the NPM meetings and international training if required? (please circle your answer)	Yes	No	Not sure
------------	----------------------------------------------------------------------------------------------------------------------	-----	----	----------

**A6.a.** If you answered "No" or "Not sure" to A6, please explain why.

---



---



---



---

<b>A7.</b>	Which aspects of PISA 2025 do you anticipate will be most challenging for your country?	(please tick all that apply)
<b>a</b>	Developing a sampling frame	
<b>b</b>	Translation of materials	
<b>c</b>	Engaging schools to participate	
<b>d</b>	Coordination of participating schools	
<b>e</b>	Training test administrators	
<b>f</b>	Data management	

<sup>7</sup> By "assessment centre" we are referring to the centre which is responsible for the implementation of PISA 2025 in your country

<b>g</b>	Data entry (if paper-based option is taken)	
<b>h</b>	Data analysis	
<b>i</b>	Dissemination and reporting of data	
<b>j</b>	Other, please specify	

**A7.k** Please explain why you have chosen those aspects in A7.

---



---



---



---

<b>A8.</b>	Do you have: (please tick all that apply)	Yes	No	Not sure
<b>a</b>	Your own work computer running Windows with up-to-date Microsoft Office			
<b>b</b>	High bandwidth internet connection (e.g. at least 50mbits/sec)			
<b>c</b>	Access to a secure work network and server (e.g. requires a password for access)			
<b>d</b>	Access to secure cloud access/storage for work (e.g. requires a password for access)			
<b>e</b>	Access to professional printers for school materials			
<b>f</b>	Access to a work email account specific for PISA 2025?			
<b>g</b>	Your own workstation/desk cubicle			
<b>h</b>	Access to meeting rooms that you can book and freely use			
<b>i</b>	Access to video-conferencing software that you can freely use			

<b>A9.</b>	Have you signed a confidentiality agreement to ensure all PISA 2025 assessment material and data is always kept secure and confidential? (please circle your answer)	Yes	No	Not sure

*If you answered "Yes" to A9, please provide a copy (in English) of the confidentiality agreement to your liaison office*

{Depending on what role was selected at the drop-down menu, selected questions for the following roles will appear on screen.}

**Section B: Specific aspects of implementing PISA 2025**

*National Project Manager*

<b>B1.</b>	Do you have authority to make decisions regarding the implementation of PISA 2025 for:	Yes	No	Not sure	If no, please state who has the authority
<b>a</b>	Budgeting				
<b>b</b>	Personnel				
<b>c</b>	Infrastructure				

<b>B2.</b>	Have you been responsible for any of the following for other large-scale surveys (e.g. TIMSS, other national assessments)?	Yes	No	Not sure
<b>a</b>	Establishing an assessment team			
<b>b</b>	Using promotional materials to raise awareness of the assessment			
<b>c</b>	Supervising staff to complete tasks			
<b>d</b>	Maintaining ongoing communication with international contractors			
<b>e</b>	Distribution of assessment materials electronically			
<b>f</b>	Distribution of paper-based assessment materials			
<b>g</b>	Contacting schools			
<b>h</b>	Informing schools of assessment requirements			
<b>i</b>	Recruiting test administrators			
<b>j</b>	Training test administrators in standardised material and delivery			
<b>k</b>	Monitoring the quality of test administration			
<b>l</b>	Ensuring security policies and procedures are always followed (including test administrators, schools)			
<b>m</b>	Developing national reports to summarise all data			
<b>n</b>	Developing national dissemination strategy to communicate key findings			
<b>o</b>	Implementing national dissemination strategy to communicate key findings			

*If you have any written plans/procedures (in English) relating to any of the above measures, please provide a copy to your liaison officer*

<b>B3.</b>	Will you be available to work on PISA 2025 in a full-time capacity from 2023 onwards? (please circle your answer)	Yes	No	Not sure
------------	-------------------------------------------------------------------------------------------------------------------	-----	----	----------

**B4.** What challenges do you anticipate that you could face in ensuring that you have sufficient staff in your assessment centre to implement PISA 2025?

---



---



---

**B5.** In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

---



---



---

### *IT Coordinator*

<b>B1.</b>	In your opinion, do you have the IT personnel available to support the assessment team in these IT-related aspects of implementing large-scale assessments?	Yes	No	Not sure
<b>a</b>	Troubleshooting problems with hardware			
<b>b</b>	Troubleshooting problems with networks and internet services			
<b>c</b>	Maintaining data and communications security			

**B2.** What challenges do you anticipate you could face in ensuring that you have sufficient staff to support the assessment team in the IT-related aspects?

---



---



---

**B3.** In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

---



---



---

### *Translation/ Adaptation Coordinator*

**B1.** Please describe your experience in translating and/or adapting tests or questionnaires for large-scale assessments to the national context.

---



---



---

<b>B2.</b>	Will domain experts and contextual experts be available for assisting with national adaptations of items and questionnaires? (please circle your answer)	Yes	No	Not sure
------------	----------------------------------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

<b>B3.</b>	Will the PISA 2025 assessment items and questionnaires need to be translated for the national context? (please circle your answer)	Yes	No	Not sure
------------	------------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

<b>B4.</b>	Will domain experts and contextual experts be available for:	Yes	No	Not sure
<b>a</b>	Reviewing the translated science test items			
<b>b</b>	Reviewing the translated mathematics test items			
<b>c</b>	Reviewing the translated reading test items			
<b>d</b>	Reviewing the translated questionnaire items			
<b>e</b>	Reviewing the translated items from the innovative domain "Learning in the Digital World"			

<b>B5.</b>	Are you aware that translation of the PISA instruments will require at least three professional translators to work individually on every element of the translation? (please circle your answer)	Yes	No	Not sure
------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----	----	----------

**B6.** In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

---



---



---

### *Sampling manager*

<b>B1.</b>	In relation to sampling activities, do you have access to:	Yes	No	Not sure
<b>a</b>	A central database such as an education Management Information System (EMIS)?			
<b>b</b>	A database that provides full details about every school in your country			
<b>c</b>	A database that provides the number of students per age and grade in each school in your country			
<b>d</b>	Accurate and up-to-date enrolment and attendance data for each school in your country			

<b>e</b>	Accurate data for children and youth that are out-of-school <sup>8</sup>			
<b>f</b>	A complete list of the number of students with special needs in each school			

**B2.** Please describe any potential challenges in assessing the target population in the sampling design, including students with special needs, students in areas that are difficult to reach (e.g. as a result of conflict, remoteness), and students with a minority language or specific ethnic background.

---



---



---

**B3.** In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

---



---



---

### *Data manager*

**B1.** In previous large-scale assessments, how have you monitored school participation and student response rates?

---



---



---



---

<b>B2.</b>	Do you have previous experience from large-scale assessments to:	Yes	No
<b>a</b>	Validate data collected from students		
<b>b</b>	Train and supervise data entry and data management support staff		

<b>B3.</b>	Will the assessment centre be able to:	Yes	No	Not sure
<b>a</b>	Undertake national-level data analysis			
<b>b</b>	Use statistical packages (e.g. SPSS, SAS, STATA, or R)			
<b>c</b>	Interpret scale scores and performance levels			
<b>d</b>	Perform descriptive analysis (e.g. frequencies, comparison of mean scores and variances)			
<b>e</b>	Perform regression analyses depending on the research questions			

<sup>8</sup> Children and youth who are not enrolled or not attending school

f	Calculate standard errors to provide information about the spread or variability of a sample statistic around its mean			
g	Use correction techniques in the form of sampling weights to adjust the sample and account for biases			

**B4.** Please describe your previous experience in recording and reporting statistical analysis from national-level data

---



---



---

**B5.** In which areas of PISA or large-scale assessment more broadly, would you like to develop more expertise?

---



---



---

Thank you for completing this Capacity Needs Assessment questionnaire!

## PISA

### Capacity Needs Assessment: Kyrgyzstan

The Organisation for Economic Co-operation and Development (OECD)'s Programme for International Student Assessment (PISA) measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges.

Based on the experiences of the support programmes provided in PISA previously, PISA 2025 offers new participants the Capacity Building and Implementation Support (CBIS) option. CBIS aims at providing new participants with specific and targeted support for their successful implementation of PISA 2025.

At the outset of CBIS, a Capacity Needs Assessment is carried out to assess the participants' capacity to implement PISA. The assessment provides information about their capacity assets and needs in relation to what is required to implement PISA successfully. This report presents detailed findings of the assessment for the Kyrgyzstan. The results are being used to design a capacity building plan for the Kyrgyzstan that will be implemented by the OECD, its contractors, and the National Learning Quality Assessment and Information Technologies Center of the Kyrgyzstan's Ministry of Education and Science.

Supported by the



Federal Ministry  
for Economic Cooperation  
and Development