

**PISA** Capacity Needs Assessment

# Tajikistan, Dushanbe

Programme for International Student Assessment



# **PISA CAPACITY NEEDS ASSESSMENT: TAJIKISTAN, Dushanbe**

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

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## *Acknowledgments*

The Australian Council for Educational Research (ACER) has been contracted by the OECD to undertake the Capacity Building and Implementation Support (CBIS) option. The Capacity Needs Assessment (CNA) presented in this report is an important element of the support. The CNA report for Tajikistan has been produced by ACER researcher, Ian Teo (Research Fellow and CBIS Liaison Officer for Tajikistan), with valuable input from Sophie Vayssettes, PISA Analyst, Directorate for Education and Skills at the OECD.

ACER and the OECD would like to thank the following stakeholders who contributed substantially to the establishment of a collaborative relationship between Tajikistan and ACER, and to the undertaking of the CNA for Tajikistan.

### National Testing Center (NTC)

- Jafarzoda Sabzali Fayzali, Director of the NTC & PISA 2025 National Consultant & PISA Governing Board representative
- Shodiniyo Abdulbosit Shodi, First Deputy Director of the NTC & PISA 2025 Data Manager
- Uktam Olimjonzoda, Second Deputy Director of the NTC & PISA 2025 Information Technology Coordinator
- Azimov Jamshed Asliddinzoda, Head of the Examination Materials Development Department & PISA 2025 Assessment Instrument Coordinator (Reading literacy)
- Khusrawbekov Loik Davlatbekovich, Deputy Head of the Examination Materials Development Department & PISA 2025 Assessment Instrument Coordinator (Science)
- Mirzoaminzoda Khayrullo Mirzorahim, Manager of Department of Planning, Monitoring, Research and Development Division & PISA 2025 Sampling Manager
- Mansurova Lola Boboevna, Senior Specialist of the Examination Materials Development Department & PISA 2025 National Project Manager (NPM)
- Zamira Abdusalomzoda, Press Secretary of the NTC & PISA 2025 Survey Operations and Logistics Manager

### European Union and Eductrade

- Diana Dimova, Programme Manager (European Union)
- Betül Boyar, Project Director (Eductrade)
- Zulfiya Veysova, Key Expert Assessment (Eductrade)
- Ganjina Khujanazarova, National Education Expert (Eductrade)
- Khadija Hamouchi, International Development Senior Professional (Eductrade)

A complete list of people who were consulted as part of the CNA is included in Annex C.

## Table of contents

<b>Acknowledgments</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.....	12
2.3. Rating criteria .....	12
<b>3. Methods</b> .....	<b>13</b>
<b>4. Capacity Needs Assessment for Dushanbe, Tajikistan</b> .....	<b>14</b>
4.1. CNA activities for Dushanbe, Tajikistan.....	14
4.2. Summary of key findings .....	14
<b>5. Conclusions</b> .....	<b>22</b>
<b>Annex A. Detailed findings of the CNA</b> .....	<b>24</b>
<b>Annex B. Stakeholder and document mapping</b> .....	<b>49</b>
<b>Annex C. Capacity Needs Assessment consultations</b> .....	<b>53</b>
<b>Annex D. CNA questionnaires</b> .....	<b>55</b>
Questionnaire for officials.....	55
Questionnaire for individuals .....	68

## FIGURES

Figure 1. CBIS Planning and Preparation Support for participants starting in 2022	10
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## TABLES

Table 1. Rating of the Capacity Needs Assessment for Dushanbe, Tajikistan	7
Table A A.1. Enabling environment	24
Table A A.2. Organisational level	32
Table A A.3. Individual level	45
Table A B.1. Stakeholder mapping table	49
Table A B.2. Document mapping table	51
Table A C.1. List of participants in the Capacity Needs Assessment consultations	53

## *List of acronyms*

ACER	Australian Council for Educational Research
CBA	Computer-based assessment
CBIS	Capacity Building and Implementation Support
CBP	Capacity Building Plan
CNA	Capacity Needs Assessment
EGMA	Early Grade Math Assessment
EGRA	Early Grade Reading Assessment
EMIS	Education Management and Information System
ICT	Information and Communication Technology
IT	Information Technology
ISCED	International Standard Classification of Education
MoES	Ministry of Education and Science
NC	National Centre
NSED	National Strategy for Education Development
NPM	National Project Manager
NTC	National Testing Center under the President of Tajikistan
OECD	Organisation for Economic Co-operation and Development
PBA	Paper-based assessment
PGB	PISA Governing Board
PIP	Project Implementation Plan
PISA	Programme for International Student Assessment
TIMSS	Trends in International Mathematics and Science Study
UIS	UNESCO Institute of Statistics

## *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.

A Capacity Needs Assessment (CNA) was subsequently carried out to assess CBIS participants' capacity to implement PISA. This assessment focused on Tajikistan's National Project Manager (NPM) and key PISA National Centre (NC) roles. The intent of the CNA was to gain information about their capacity assets and needs in relation to what is required to implement PISA successfully.

As PISA 2025 marks the first time that Tajikistan has ever participated in an international large-scale assessment program, the Ministry of Education and Science (MoES) made the decision to only sample students enrolled in schools located in the capital city Dushanbe. This decision was made following an in-country visit by MoES staff to the PISA 2025 National Centre in Baku, Azerbaijan. During this visit, MoES staff learned that Azerbaijan had only sampled school students in Baku for PISA 2022, rather than from across the whole country. A decision was subsequently made by the MoES to focus on schools in Dushanbe for a first participation in PISA to:

- Manage challenges associated with sampling;
- Reduce translation and adaptation workloads by focusing on the Tajik and Russian languages (no need to translate the PISA materials into Uzbek);
- Reduce workloads associated with field operations and logistics, and data collection, particularly in rural and remote areas of Tajikistan.

The focus of investigations and findings outlined in this CNA report are therefore relevant for Dushanbe, Tajikistan. Accordingly, the capacity assets and needs required to successfully implement PISA 2025 in Dushanbe are structured into three dimensions:

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

For each dimension, a number of capacity indicators are defined and rated according to the extent of a participant's capacity assets and needs. 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 Dushanbe, Tajikistan. Table 1 summarises the CNA ratings for each of the dimensions and indicators.

**Table 1. Rating of the Capacity Needs Assessment for Dushanbe, Tajikistan**

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		✓ (PBA)	✓ (CBA)
O5 IT infrastructure and support	✓ (PBA)		✓ (CBA)
O6 Security policies and procedures	✓ (PBA)		✓ (CBA)
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		✓	
I5 Data manager	✓		
I6 Data analyst*			✓
I7 Information Technology co-ordinator*	✓		
I8 Communication in English		✓	

Note: NC roles with \* indicate that that this position is currently vacant and has not been finalised.

The Government of the Republic of Tajikistan's decision to participate in PISA 2025 establishes its ongoing commitment to improve the status of the education system and improve student outcomes. As a first-time participant in PISA, however, challenges remain that may affect its successful implementation. These challenges primarily involve:

- The efficient and timely mobilisation of funds to support and adequately resource the PISA NC
- Providing suitable capacity building for the PISA NC team, e.g., to use advanced project management tools and approaches; engage with external stakeholders,

including those who may negatively impact the completion of PISA tasks; and build experience/expertise with sampling and data collection, analysis, and reporting for large-scale assessment programs

- Finalising the position of the Data analyst within the PISA NC team during the first half of 2024 to prepare for the PISA Field Trial and the interpretation of items statistics.

Finally, there may be a need to anticipate demands placed on the education system, and indeed all stakeholder groups, if participation in future PISA cycles involve a national CBA format. If the decision is made to transition towards a CBA format, funding will also be needed for infrastructure upgrades to the Education Management Information System (EMIS), as well as for stakeholder capacity building to use this system.

## 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. A range of capacity-building opportunities is available to all PISA participants. The OECD recognises that new participants can face particular challenges, and so has included capacity development in all PISA cycles to date.

Based on the experiences of the support programme provided in PISA for Development (PISA-D)<sup>3</sup> and PISA 2022 Core E, 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. The CBIS option is implemented by ACER.

CBIS consists of the following five components of activities:

- 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 features of the component are a Capacity Needs Assessment, a Capacity Building Plan (available to participants starting in 2022 only), and a Project Implementation Plan. See Figure 1.

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<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/)

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 was carried out to assess CBIS participants' capacity to implement PISA.

The assessment focused 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 were summarised in a brief 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 will be prepared for CBIS participants to assist with planning for strengthening their capacity to implement PISA. The CBP will list all the capacity building opportunities that will be offered to PISA participants throughout the PISA 2025 project, as well as those catered specifically for CBIS participants. The CBP will include 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 that are designed to assist CBIS participants with the preparation for and implementation of PISA 2025. The PIP Schedule, the main feature of PIP, is a tool that lists all the PISA tasks that PISA NCs are required to complete according to an agreed timeline. CBIS participants will be supported to adapt the PIP Schedule to suit their national requirements and context. The adapted PIP Schedule will be updated continuously throughout the PISA 2025 implementation period and will be used as a comprehensive planning and monitoring tool.

The sections that follow outline the CNA framework, methodology and report findings for Dushanbe, Tajikistan.

## 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 (OECD, 2016)<sup>4</sup> and the PISA 2022 Core E Capacity Needs Analysis Framework (unpublished). In addition, specific PISA materials were consulted to identify capacity required for the successful implementation of PISA 2025. These materials include drafts of the PISA 2025 Technical Standards, the 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 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.

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<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.

## 2.2. Indicators

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

- **Enabling environment:** 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
- **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 coordinator, I3 Sampling manager, I4 Survey operations and logistics manager, I5 Data manager, I6 Data analyst, I7 Information Technology coordinator, I8 Communication in English.

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

## 2.3. Rating criteria

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

Three major qualitative data collection methods were used to gain information on capacity assets and needs:

- **Online questionnaires:** The capacity indicators for each dimension were operationalised into the CBIS CNA questionnaires, which comprised two parts: a questionnaire for officials and a questionnaire for individuals. The former was designed to identify capacity assets and needs at the system and organisational levels, while the latter did so at the individual level. All participants in the questionnaires were identified by the National Testing Center (NTC). The questionnaire for officials was completed by senior staff located at the Ministry of Education and Science (MoES), the NTC, and the Research Institute of Education Development named after Abdurrahman Chomii of the Tajik Academy of Education. The questionnaire for individuals was completed by members of the PISA NC team, and staff from the Republican Institute of Professional Development and Retraining of Education Workers and the Institute of Education Development. A stakeholder mapping exercise was carried out prior to the in-country visit to assist with the identification of and consultations with key stakeholders.
- **In-country stakeholder consultations:** Stakeholder consultations were undertaken by a CBIS liaison officer during a one-week in-country visit. The purpose of this visit was to collect further information that could not be obtained through the online questionnaires. The NPM assisted the consultations by coordinating and scheduling the consultations and providing translations.
- **Document analysis:** Relevant documents indicating capabilities in large-scale assessments were also analysed. Where appropriate, the NTC was asked to identify and translate relevant documents into English based on a document mapping exercise. Other documents were also sourced by the CBIS liaison officer as needed to inform this can report.

The data obtained from the CNA Questionnaires, stakeholder consultations and documents were consolidated and assessed as they related to each dimension and capacity indicator. Each capacity indicator was then given:

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

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

## 4. Capacity Needs Assessment for Dushanbe, Tajikistan

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

### 4.1. CNA activities for Dushanbe, Tajikistan

The CNA stakeholder consultations and documents for analysis were prepared by the PISA 2025 NPM and NTC staff from August to September 2023. These staff were suitably qualified to prepare these consultations and documents as the NTC is the central body for overseeing assessment in Tajikistan. Specifically, the NTC manages centralised entrance exams for higher education in Tajikistan, monitors and evaluates education quality, and oversees participation in international programs that evaluate students' knowledge (National Testing Center, n.d.). The NTC also organises and conducts centralised entrance exams at secondary and higher professional education levels, and subsequently manages the allocation of successful applicants to higher professional education courses as a result of their exam results (National Testing Center, n.d.). The NTC's past and ongoing experience with managing large-scale assessments makes it a suitable host for the PISA 2025 NC and to support the implementation of PISA in Dushanbe, Tajikistan. Annex B outlines a complete list of stakeholders consulted and documents analysed for this CNA.

The CNA questionnaires were administered to key stakeholders who were nominated by the NPM and NTC staff. Valid responses were received from five respondents for the questionnaire for officials, and from eight respondents for the questionnaire for individuals, over a period of approximately four weeks during August 2023.

Stakeholder consultations were carried out by Ian Teo from ACER during the in-country visit with Sophie Vayssettes from the OECD from the 18-22 September 2023. The consultations obtained further information based on initial analyses of stakeholders' responses to the online questionnaires and documents submitted by the NTC. These consultations took place in Dushanbe, the capital city of Tajikistan, with representatives of educational institutions, the NTC, key development partners, and other stakeholders. Annex C shows a complete list of participants in the stakeholder consultations.

All the information collected through the above activities were 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 (EI) – Emerging*

Large-scale assessment programs have steadily become a key feature of the assessment system structure in the Republic of Tajikistan. Most notably, the Centralised Entrance Examinations were formally implemented in 2014 to assess students' knowledge and understanding of subjects undertaken during their final year of secondary schooling. Tajikistan has also participated in various cycles of EGRA since 2011 and, more recently, implemented an annual National Learning Assessment of Grades 5 and 11 students since 2021. The decision to participate in PISA 2025, however, marks a turning point for Tajikistan's assessment system structure. As this will be the first time that this country will

contribute student data (Dushanbe only) towards an international large-scale assessment, there are clear opportunities to build and enhance local stakeholders' system-level capacities. These include building or enhancing their capacities to:

- Identify and manage budgetary structures for ongoing / future national and international large-scale assessment programs.
- Inform policy planning and implementation through the use of a broad evidence base, and learning from and applying a comparative approach with other assessment systems.
- Support other local stakeholders with implementing all tasks associated with large-scale assessment programs and relying less on the capabilities of external experts.

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

The National Testing Center (NTC) was established in 2014, under Decree of the President of Tajikistan and subsequent policies, to oversee tasks and activities associated with national and international large-scale assessment programs. Large-scale assessment programs are therefore an established component of the Republic of Tajikistan's assessment system.

### *Leadership (E3) – Established*

In addition to establishing the NTC, the government has demonstrated its support for large-scale assessments in its National Strategy for Education Development (NSED) of the Republic of Tajikistan for the period until 2030 document. Specifically, this strategy notes the need for reforms within the assessment system that include regularly assessing students, standardising national assessments and tools in primary and secondary grades, and greater consideration for participating in large-scale assessments like PISA.

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

The government, operating through the NTC, has well-established institutional arrangements for large-scale assessment programs. In particular, the NTC possesses the institutional authority to conduct such programs – including international programs – to monitor and evaluate the quality of education for assessing students' knowledge across primary (ISCED 1), general basic (ISCED 2), and general secondary education (ISCED 3) levels (UIS, 2008). As the NTC was decreed under the President of Tajikistan, it is directly accountable to the Executive Office of the President of Tajikistan and maintains independence from other ministries within the government; e.g., the MoES. Nevertheless, to further maintain accountability and transparency, the NTC publicly reports on the outcomes of national assessments and regularly engages with other government stakeholders, like the MoES.

### *Funding (E5a) – Emerging*

The NTC receives funding under the government's republican budget and special funds to support large-scale assessment activities, the maintenance of infrastructure, and the salaries of its employees (excluding service personnel). There may, however, be a need to diversify funding sources in response to an overreliance on sub-national government revenues that have previously been used to fund over 80% of Tajikistan's education spending. Consequently, capacity building may be needed to support how public spending is allocated across the education system and, where relevant, with respect to large-scale assessment programs.

*Funding from donors (E5b) – Established*

The Government of Tajikistan has established relationships with donor organisations that provide funding for education sector development projects. Within the context of assessment and large-scale assessment programs and initiatives, past and present donor organisations have included the European Union, the Global Partnership for Education, Islamic Development Bank, USAID, and the World Bank.

*Use of assessment data (E6) – Emerging*

The NTC possesses the capacity to collect and analyse national large-scale assessment data. This has been demonstrated by the implementation of the Centralised Entrance Examinations since 2014, and more recently, the National Learning Assessment program in 2021. Across both assessment programs, the NTC has been involved in data collection, analysis, and reporting processes, and has helped to inform education policy and planning developed by the MoES. However, it was noted during the in-country visit that international development partners played a crucial role in supporting and funding education-related activities for both the NTC and MoES. This has included the analysis and reporting of assessment data, as well as developing curriculum, pedagogy and education programs, and textbooks. Accordingly, further capacity building should be provided to local stakeholders so that they can become more experienced with independently using international large-scale assessment data across the program lifecycle. This will help ensure that they are less reliant on international development partners to develop and implement activities that use assessment data to inform education policy and planning.

*Educational Management Information System (E7) – Latent*

While embedded within the education system, the status of Tajikistan’s Education Management Information System (EMIS) is emerging and requires modernisation. Challenges include the need to upgrade infrastructure, hardware, and software, and to support schools to utilise the EMIS, as well as a limited capacity to integrate information across different platforms. These and other challenges collectively hinder the collection of credible student data relating to learning outcomes at the school level and for informing education policies. Funding is required to modernise infrastructure, hardware, and software, while capacity building is needed at school and system levels to build stakeholders’ familiarity and efficiencies with using the EMIS. Importantly, while these challenges are unlikely to negatively impact the PBA delivery of PISA 2025 in Dushanbe, the decision to undertake a national sampling of students and / or CBA for future PISA cycles will necessitate improvements to the EMIS.

**4.2.2. Organisational level***Assessment team (O1) – Established*

The NTC comprises various departments / directorates that oversee a diverse range of tasks and activities associated with large-scale assessment programs. In addition to the Director and two Deputy Directors providing senior management, other NTC departments/directorates have been tasked to manage the development of examination materials, printing and packaging of paper-based assessments, exam organisation and management, ICT requirements, data analysis and reporting, and staff capacity building.

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

The NTC has a dedicated finance department that manages all aspects of the Center’s financial operations, as well as those associated with large-scale assessment. It has the capacity and authority, subordinate to its accountant, to mobilise funds associated with large-scale assessment programs. With respect to the implementation of PISA 2025, it has been noted that there have been inefficiencies with managing European Union funds that were allocated to establishing the PISA NC; including the management of salaries for NC and temporary (e.g. translators and adaptors) staff, and payments for PISA-related travel (NPM and PGB meetings), computers for the PISA NC, and containers to be used as offices by PISA NC staff. There is therefore a need to closely monitor the administration and mobilisation of funds allocated for large-scale assessment programs to ensure the timely completion of operational tasks and the successful implementation of the overall assessment program. Monitoring these processes will help ensure that there is an established and shared understanding of how and when financial and human resources should be allocated to support all large-scale assessment activities and tasks, and provide greater assurance that these resources will be delivered on-time. Capacity building could be provided to NTC finance and accounting staff on issues involving accountability and transparency, and with respect to the efficient and timely mobilisation of funds for large-scale assessment programs.

### *Temporary staff (O3) – Emerging*

The Directorate of Personnel, Management and Information oversees human resourcing at the NTC, including the development of hiring procedures, criteria, and contracts for potential employees. This includes the timely formalisation of hiring, dismissing, and reassigning NTC employees who might be involved in large-scale assessment tasks and activities. Transparency and accountability are practiced via direct reports from this Directorate’s Board to the Director of the NTC. With regards to PISA 2025, employment contracts have been managed by Eductrade and not the Directorate of Personnel, Management and Information. This has been due to funding arrangements between Eductrade and the NTC, and the need to negotiate employment and taxation laws in Tajikistan. Accordingly, the process of drafting employment contracts for all PISA 2025 staff, including temporary staff, has been managed by Eductrade. Capacity building may be required to support the Directorate of Personnel, Management and Information with developing employment contracts and managing temporary staff involved in future international large-scale assessment programs.

### *Physical infrastructure (O4) – Emerging (PBA); Latent (CBA)*

The NTC building was established in 2014 using World Bank funds and provides sufficient infrastructure for implementing paper-based, large-scale assessment programs. Staff have access to office spaces, computer workstations, and other equipment (e.g., storage drawers, phones and printers) for completing their job requirements, and there is sufficient space to host stakeholder meetings. Physical infrastructure is also appropriately secured at the NTC. Security staff, equipment, and protocols are in place to ensure that NTC assets, resources, and data are secured, and that staff/visitors are monitored. At present, paper-based assessment data (e.g., student responses or question items) is not stored on a secure cloud storage platform. Instead, all data, hardcopy or transferred to a digital format, is secured onsite at the NTC. Accordingly, funding and capacity building is not needed for PBA. However, when Tajikistan transitions towards CBA for the next or future cycles of PISA, further funding will be required to establish necessary physical infrastructure and capacity building to familiarise staff with using new equipment and protocols. This includes using

software to design online examinations, and securing data on different platforms. With regards to PISA 2025, the NTC does not have the physical infrastructure to provide National Centre staff with dedicated offices / workspaces to work on PISA tasks. A temporary solution has been the decision to purchase two shipment containers to provide additional office and meeting room space.

#### *IT infrastructure and support (O5) – Established (PBA); Latent (CBA)*

IT infrastructure and support at the NTC is adequate for paper-based, large-scale assessment programs. This includes providing staff with access to wireless networks, an intranet, office hardware, and relevant computer software. NTC staff also have access to licensed versions of the basic Microsoft office suite (e.g., Word, Excel, and PowerPoint), though the use of cloud storage for working online, at the time of the in-country visit, was not utilised. IT infrastructure and support is also managed by the Department of Information and Communication Technologies (ICT). This department ensures that data and information processing is secured on workstations and databases, that ICT policies are in place, and that technical/program support are provided. Although funding and capacity building is not needed to support PBA, these will be required as Tajikistan seeks to implement PISA 2025 and when it transitions to CBA. Specifically, IT infrastructure funding will be needed, for example, for computer hardware and software, fast-speed internet / intranet, and capacity building to familiarise NTC staff with using secure cloud storage platforms and protocols for updating / developing assessments using software like OmegaT.

#### *Security policies and procedures (O6) – Established (PBA); Latent (CBA)*

Policies and procedures are in place to address the lifecycle of developing and implementing paper-based, large-scale assessments. This includes policies and procedures for the design and testing of assessment items, publishing assessment booklets, coordinating assessment activities at schools, scanning answer sheets, and securing data at the NTC. All NTC staff are also required to sign a legally binding confidentiality/privacy agreement as part of their full-time/part-time/casual employment contract. Should a transition to CBA take place, capacity building will be needed to ensure that relevant security policies and procedures are updated to reflect new demands and challenges.

#### *Instrument development (O7) – Emerging*

The Department of Development of Examination Materials is responsible for quality assuring assessment items and instruments. This department ensures the reliability, validity, and fairness of such items and instruments by aligning them with the national curriculum/textbooks, conducting confidential reviews of test items, and undertaking appropriate statistical and psychometric analysis. As the education system in the Republic of Tajikistan has been undergoing competency-based education reform since 2015, there may be scope to capacity build team members from this department with respect to developing competency-based assessment instruments that are aligned with international standards and best practices.

#### *Translation and linguistic quality control (O8) – Established*

The Department of Development of Examination Materials manages translation and linguistic requirements for large-scale assessments. Specifically, it oversees processes associated with translating and editing test items, and employs language specialists to support translation and linguistic quality control for Tajik, Russian, Uzbek, English, German, French, and Arabic languages.

### *Target population and sampling (O9) – Emerging*

The Department of Planning, Monitoring, Research and Development has broad oversight for this capacity indicator. Specifically, it is responsible for obtaining relevant statistical data / information from the MoES for use in sampling, organising and implementing a reliable system of assessment, and developing appropriate procedures and tools for data collection. Importantly, the in-country visit confirmed that only one NTC staff member is responsible for addressing sampling considerations, such as identifying target populations and defining exclusion criteria. There is therefore opportunity to build capacity in this individual, as well as other NTC staff, to increase institutional capacity to engage in sampling-related tasks for large-scale assessments.

### *Survey operations and logistics (O10) – Established (PBA); Latent (CBA)*

The NTC has established mechanisms and processes for PBA survey operations and logistics. Specifically, the Department of Exam Organisation and Management standardises, monitors, and documents PBA-related survey operations and logistics to ensure the efficient and timely management of large-scale assessments. While these processes are established for large-scale PBA, it will be necessary to provide appropriate funding for relevant infrastructure, assets, and capacity building when Tajikistan transitions towards large-scale CBA.

### *Data management (O11) – Established*

Two NTC departments provide coverage for this capacity indicator. First, the Department of Information and Communication Technologies oversees quality assurance processes and mechanisms for data management. This is achieved by ensuring that data is safely secured in databases, and that NTC hardware and software are used in accordance with processes outlined in documents produced by this department. Second, the Department of Planning, Monitoring, Research and Development further supports data management by performing and documenting checks for errors and discrepancies in datasets.

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

The Department of Planning, Monitoring, Research and Development is responsible for data analysis and reporting. At present, only one staff member from this department is primarily responsible for conducting all statistical analysis relating to assessment data. This staff member utilises statistical programs such as SPSS, WinStep, and ConQuest to perform descriptive and inferential statistical analyses, as well as statistical methods suited for surveys and large-scale assessment (e.g., item analysis and differential item functioning). Capacity building could be provided to other NTC staff to develop expertise / experience with managing data analysis and reporting protocols that are aligned with this capacity indicator.

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

Technical reports relating to large-scale assessments are managed by the Manager of the Department of Planning, Monitoring, Research and Development, and the First Deputy Director of the NTC. These reports are typically developed for the Director of the NTC, and are disseminated and communicated to government stakeholders, as required. The NTC also employs a dedicated Communication Specialist to manage engagements and communications with school directors and the school community. Information regarding NTC activities are disseminated and communicated using various platforms (e.g., the NTC's website, social media, television, radio, and print media). As PISA 2025 will be the

first time that Tajikistan is participating in an international large-scale assessment program, capacity building may be required to develop communicate strategies that, for example, address what PISA is and how PISA data might be used to enhance education system outcomes.

### *4.2.3. Individual level*

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

The NPM has previously established herself as an English language specialist for large-scale assessment programs. She has worked as a reviewer of assessment tools and test administrator trainer on various development partner projects from 2016 to the present. She has also received further professional training for developing examination materials (theory and practice), and quality assuring and using assessment data for national education policies. Altogether, she possesses a solid base of experience with large-scale assessment programs and is appropriately skilled within her area of expertise. Her capacity to serve successfully as the NPM could be further established by providing her with opportunities to grow her project management skills and experience with using project management tools. Crucially, capacity building is required to assist her (and other NC team members) with managing challenging stakeholders. This is apparent when individuals openly challenge her authority, choose to not actively support her, withhold decision making power from her to retain their own, and act in ways that hinder progress towards successfully implementing PISA 2025 in Tajikistan.

#### *Assessment instruments coordinator (I2) – Emerging*

This role and its responsibilities are carried out by the NPM and two Assessment Instrument Coordinators, one for Reading and one for Science. The coordinator responsible for Reading, and the coordinator responsible for Science, serve as the Head and Deputy Head of the Department of Development of Examination Materials. Altogether, all three PISA NC members have the potential to provide the coverage needed to manage the responsibilities of this role. Capacity building could, however, be provided to enhance their ability to use specialised software (e.g., OmegaT and project management platform protocols) for assessment instrument development, implement project planning protocols, and manage external / temporary staff roles and responsibilities.

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

The PISA 2025 Sampling Manager is also employed as a manager within the Department of Planning, Monitoring, Research and Development. Accordingly, he has experience in sample design and the use of sampling methods, having worked on assessment programs for international and national bodies. Capacity building may be required to support his engagement with PISA contractors in English, ability to complete PISA tasks within set timeframes, and understanding of sampling decisions and approaches suited for large-scale assessments like PISA.

#### *Survey operations and logistics manager (I4) – Emerging*

The Survey operations and logistics manager position has been filled by the Head of the Department of Public Relations and Information at the NTC. This position was allocated following the in-country visit in September 2023. This individual possesses previous and ongoing experience with preparing and managing communications between various stakeholder groups and the NTC, across languages spoken in Tajikistan, and has managed the implementation of promotional / informational activities relating to centralised entrance

exams. Where possible, capacity building should be provided to support the preparation and management of PISA school-level materials, assessment logistics, test administration and training, and national quality monitoring.

#### *Data manager (15) – Established*

This position has been filled by one of the two Deputy Directors of the NTC. As such, he possesses significant experience managing complex projects, having served as this Center’s data manager since 2014. He is experienced with conducting and managing the collection of data across different subject domains, as well as analysing and reporting assessment data for regions across Tajikistan. He has had prior experience using a range of statistical software (e.g., SPSS, WINSTEP, LERTAP, and Excel) for data analysis and reporting.

#### *Data analyst (16) – Latent*

At the time of writing, the NC has not allocated this role to a specific individual. This has occurred as a result of challenges associated with NC funding and management. Funding is required to employ a suitability qualified and experienced data analyst to manage the responsibilities associated with this role, and provide upstream reporting to the NPM.

#### *Information Technology coordinator (17) – Established*

The role of Information Technology Coordinator has been filled by one of the two Deputy Directors of the NTC. Prior to joining the Center, this individual worked as a senior engineer programmer, network administrator, Head of Department, and Dean of various information technology departments at the Technological University of Tajikistan. Upon joining the NTC in 2016, he worked as a specialist programmer in the Department of Information and Communication Technologies, before becoming a Deputy Director in 2022. Consequently, the Information Technology Coordinator possesses the institutional knowledge and professional skills needed to sufficiently fulfil the requirements of this role.

#### *Communication in English (18) – Emerging*

Two members of the PISA NC team possess the skills needed to successfully communicate in English across written and oral contexts. Capacity building – in the form of English language short-courses – could be provided to other PISA National team members to help facilitate efficient communication with the OECD and international contractors, and to aid successful completion of PISA tasks.

## 5. Conclusions

The implementation of national large-scale assessment programs is not a new feature within the assessment system structure in the Republic of Tajikistan. As seen previously, such programs have been implemented nationally for more than a decade, with students being assessed on their early years reading and mathematics capabilities, and their learning achievement across subjects at the end of their final year of secondary school. The National Learning Assessment of Grades 5 and 11 students has also taken place annually, since 2021, to provide government decisionmakers and policymakers with learning achievement and contextual data for key stages of schooling. Thus, the decision to participate in PISA 2025 further establishes the government's ongoing commitment to improve the status of the education system by gathering assessment data to inform education policies and reforms, and improve student outcomes.

As PISA 2025 will be the first time that the Republic of Tajikistan has participated in an international large-scale assessment program, there will be challenges that the PISA NC will have to address. Many of the challenges associated with assessing students in the capital city of Dushanbe involve adjusting to new assessment contexts and project demands, as a result of the PISA NC having to manage multiple concurrent and complex tasks.

The first of these challenges involves the mobilisation of funding. As the PISA NC exists within the NTC, it is necessary that European Union funds allocated for PISA 2025 are efficiently managed to complete salary payments, and enable the timely purchase of PISA assets and resources.

Second, there is a need to build the capacity of the PISA NC team across various contexts. These include ensuring that:

- The NPM and relevant team members receive advanced training to use project management tools and approaches
- The NPM and relevant team members are provided support to engage with a range of external stakeholders, including those who may impact progress with completing PISA tasks
- Relevant team members have the opportunity to build their experience / expertise with sampling and data collection, analysis, and reporting for large-scale assessment programs.

Third, the data analyst position needs to be filled to provide coverage for all tasks undertaken by the PISA NC team. It is recommended that this position be finalised during the first half of 2024 in preparation for the PISA Field Trial and the interpretation of item statistics.

Outside of these immediate challenges, considerations might also be made with respect to the impact that transitioning towards CBA might have for existing PBA policies and processes. The cultural and economic demands placed on this transition should also be considered. This issue has been highlighted in light of discussions that took place during the in-country visit that addressed:

- The aspiration that Tajikistan will one-day move entirely towards CBA
- Current ICT infrastructure and resource limitations
- A lack of readiness on the part of students, teachers, and school leaders in Tajikistan to engage in computerised assessment, and even more in the remote areas.

Should the Government of the Republic of Tajikistan seek to sample students from across the country – rather than just the capital city Dushanbe – in a CBA format for future PISA cycles, these considerations will need to be addressed, and funding provided to support infrastructure, resourcing, and capacity building requirements. Importantly, necessary infrastructure upgrades will need to be made to the EMIS, as well as capacity building for stakeholders so that they can successfully use this system.

The decision to participate in PISA 2025 marks an important milestone within the history of the Republic of Tajikistan’s education system. This participation provides an opportunity for valid and reliable data to be collected, as well as used to improve education and assessment system requirements. Tajikistan’s participation in PISA also communicates a shared international commitment to improve student learning and outcomes in the long term. Accordingly, the OECD and its international contractors stand ready to support the Government of the Republic of Tajikistan to achieve this important milestone and successfully implement all aspects of PISA 2025.

## Annex A. Detailed findings of the CNA

Annex A presents the detailed findings of the CNA for Dushanbe, Tajikistan for each dimension: 1) enabling environment, 2) organisational level, and 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 programs 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.	Emerging	<p>The Republic of Tajikistan has previously implemented large-scale assessment programs to provide data on student performance across domains and learner contexts during key stages of schooling. Large-scale assessment programs are, thus, a key feature of the assessment system structure in the Republic of Tajikistan.</p> <p>Most notably, national university entrance examinations were piloted in 2013 and formally introduced across the country in 2014 as the Centralised Entrance Examinations. This national assessment continues to the present and is conducted annually during July. It assesses students' knowledge and understanding of subjects they undertook during their final year of secondary schooling. Subjects include mathematics, languages (e.g., Tajik, Russian, English, and French), legal studies, and science (e.g., biology, chemistry, and physics).</p> <p>Outside of this content, the first National Learning Assessment was implemented for Grades 5 and 11 in 2021 (MoES, 2022a). These annual assessments have focused on:</p> <ul style="list-style-type: none"> <li>• Domains: Reading/literacy/language; Mathematics/numeracy</li> <li>• Performance data measured using: Scale scores; Performance levels on a scale; Described proficiency levels</li> <li>• Contextual data: Gender; Socio-economic status; Language spoken at home; School structures and resources (e.g., public/private status, location of school, school and class sizes).</li> </ul> <p>Additionally, large-scale assessments have also been implemented within this education system by development partners. USAID has played a lead role in this area by implementing large-scale assessments, as well as analysing and reporting data for the Ministry of Education and Science.</p>	Build local capacity to implement all aspects of national and international large-scale assessments; including design, delivery, data collection and analysis, and reporting for different stakeholder groups.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>This has included the delivery of:</p> <ul style="list-style-type: none"> <li>• The Early Grade Reading Assessment (EGRA) – 2011, 2017, 2021 (2025 planned)               <ul style="list-style-type: none"> <li>○ Grades: 2 and 4</li> <li>○ Domains assessed: Reading/literacy/language</li> <li>○ Performance data measured using: Percentage of students attaining minimum grade-level proficiency</li> <li>○ Contextual data: Gender; Region</li> </ul> </li> <li>• The Early Grade Math Assessment (EGMA) – 2022 (2024 and 2025 planned)               <ul style="list-style-type: none"> <li>○ Grades: 2 and 4</li> <li>○ Domains assessed: Mathematics/numeracy</li> <li>○ Performance data measured using: Percentage of students attaining minimum grade-level proficiency</li> <li>○ Contextual data: Gender; Region</li> </ul> </li> <li>• Social-Emotional Learning assessments – 2022 (2024 and 2025 planned)               <ul style="list-style-type: none"> <li>○ Grades: 2 and 4</li> <li>○ Domains assessed: Relationships; Stress Management; Empathy; Perseverance; Conflict Resolution; Self-concept; Interactions with Schoolchildren</li> <li>○ Performance data measured using: Percentage of students attaining minimum grade-level proficiency</li> <li>○ Contextual data: Gender; Region (USAID, 2022).</li> </ul> </li> </ul> <p>While the examples above provide evidence of this capacity indicator, there remains scope to further establish the role of large-scale assessments within the assessment system. This is particularly with regard to standardising the ongoing collection of performance data through the recently implemented (2021) National Learning Assessment of Grades 5 and 11. As seen below, this system-level challenge has been noted in statements outlined in the National Strategy for Education Development of the Republic of Tajikistan for the period until 2030 (Approved by Resolution of the Government of the Republic of Tajikistan, 29 September 2020, #526):</p> <ul style="list-style-type: none"> <li>• 112. The lack of a standardized national assessment of learning outcomes and the minimal participation of the Republic of Tajikistan in international assessments of learning outcomes inevitably affects the quality of general secondary education (p. 34).</li> <li>• 113. At present, there is no systematic methodology for assessing learning outcomes nationally and internationally in the Republic of Tajikistan, which makes it difficult to measure the learning outcomes of school children in general secondary educational institutions. In this regard, the Ministry of Education and Science of the Republic of Tajikistan, in cooperation with development</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>partners, is currently developing a National Standardized Assessment of Learning Outcomes, which will be the basis for assessing student learning outcomes in general secondary education. (p. 34).</p> <p>Additionally, the GPE (2019) has previously noted that:</p> <ul style="list-style-type: none"> <li>Tajikistan currently does not have a systematic method to assess learning outcomes, which makes measuring student achievement a difficult task. Complicating this task further is the country's low participation in international learning assessments such as PISA, PIRLS, and TIMSS (p. 69).</li> </ul> <p>Capacity building could also be provided to support local stakeholders in terms of managing and reporting assessment data. In-country consultations with stakeholders revealed that, at times, there is an over-reliance on external experts to design and implement assessments, as well as collect, analyse, and report data.</p> <p>Finally, the decision to participate in PISA 2025 marks a turning point in Tajikistan's assessment system structure. As this will be the first time that this country will contribute student data (Dushanbe only) towards an international large-scale assessment, there are opportunities to build the system-level capacities. Specifically, local stakeholders' capacities could be developed or further enhanced to:</p> <ul style="list-style-type: none"> <li>Identify and manage budgetary structures for ongoing / future national and international large-scale assessment programs.</li> <li>Inform policy planning and implementation in response to learning from and applying a comparative approach to other assessment systems.</li> <li>Support other local stakeholders with implementing all tasks associated with large-scale assessment programs and relying less on the capabilities of external experts.</li> </ul>	
E2 Legislation or policy	The large-scale assessment programs that form part of the assessment system are guided by legislation or policy.	Established	<p>Large-scale assessment programs have been decreed under the President of the Republic of Tajikistan. Specifically, the government body overseeing the implementation of such assessments is the NTC, which operates independently of the MoES. As outlined in Presidential Decree No. 511 (June 24, 2015), the NTC was established in accordance with Article 69 of the Constitution of the Republic of Tajikistan. A key task for this Center is to ensure the transparent and fair assessment of student knowledge during national assessments, such as the centralised entrance examinations for entry into secondary and higher professional education. Other key Center goals and tasks relating to large-scale assessment programs include:</p> <ul style="list-style-type: none"> <li>Conducting research and assessing the level of knowledge of primary, general basic, and general secondary students through testing.</li> <li>Distributing applicants to educational institutions of secondary and higher professional education based on the results of exams</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul style="list-style-type: none"> <li>Monitoring and evaluating the quality of education and participation in international programs for assessing students' knowledge.</li> </ul> <p>Accordingly, large-scale assessment programs have been planned for and implemented since the establishment of the NTC in 2014.</p>	
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.	Established	<p>The Government of the Republic of Tajikistan has demonstrated senior leadership and the political will to support large-scale assessment programs. This has been evidenced by the implementation of assessment programs seen in capacity indicator E1 Assessment system structure, and the establishment of the NTC as described in capacity indicator E2 Legislation or policy. Additionally, the government is in the process of implementing its National Strategy for Education Development (NSED) of the Republic of Tajikistan for the period until 2030. The NSED outlines the direction of education reforms for Tajikistan by setting medium and long-term goals, objectives, guidelines, and priorities (Government of the Republic of Tajikistan, 2020; The World Bank, 2021). This includes broad strategies for promoting large-scale assessment participation, effective implementation, and dissemination of results amongst all relevant national stakeholders. In particular, Statement 133 in the NSED notes that a key area of reform involves the implementation of an effective system and institutional mechanisms for assessing the quality of education, based on a competency-based approach. This is supported by:</p> <ul style="list-style-type: none"> <li>Developing and implementing a national assessment framework that standardises national assessments for measuring student learning outcomes and competency standards, in the primary and secondary grades;</li> <li>Developing and testing standardized national assessment tools of acquired knowledge, skills and competencies;</li> <li>Conducting regular literacy and numeracy assessments for primary and secondary grades;</li> <li>Ensuring that the data and results of national assessments will be made publicly available to ensure transparency and accountability, and to inform decision-making by policymakers, donors, parents, and other stakeholders;</li> <li>Expressed considerations for <b>participating in international large-scale assessments</b>, such as PISA. (Government of the Republic of Tajikistan, 2020).</li> </ul> <p>Altogether, the combination of the Government of Tajikistan's openness to consider participation in international large-scale assessments (e.g., PISA 2025), the establishment of the NTC, and the country's engagement in national assessments (i.e., EGRA and EGMA), demonstrates the established will of its senior leadership to support the implementation of large-scale assessment.</p>	
E4 Institutional arrangements	The government has well-established institutional arrangements for large-scale assessments with clear accountability	Established	<p>The NTC possesses the institutional authority to conduct large-scale assessments as its role relates to the "organization of monitoring and <b>evaluation of the quality of education and participation in international programs for assessing students' knowledge</b>" (p. 2) across primary (ISCED 1), general basic (ISCED 2), and general secondary education (ISCED 3) levels (Presidential Decree, 24 June 2015, No. 511; UIS, 2008).</p> <p>Institutional arrangements provided under this decree establish the NTC as a legal entity that reports directly to the President of the Republic of Tajikistan. Accordingly, the NTC maintains independence from other government ministerial bodies (e.g., MoES),</p>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
	mechanisms.		<p>and has established arrangements that include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Being housed on a separate government property</li> <li>• Maintaining an independent balance sheet and an account in the Main Department of the Central Treasury of the Ministry of Finance of the Republic of Tajikistan</li> <li>• The ability to use an official seal with the image of the State Emblem and the name of the Center in the state, Russian and English languages, letterheads, stamps, emblem, publishing and trademarks, and other necessary paraphernalia</li> <li>• Carrying out its activities in accordance with the Constitution of the Republic of Tajikistan, the laws of the Republic of Tajikistan, acts of the President of the Republic of Tajikistan, this Charter, other regulatory legal acts of the Republic of Tajikistan, as well as international legal acts recognized by Tajikistan.</li> </ul> <p>The NTC's institutional arrangements for accountability reside with the Director of the NTC. The Director (as well as the NTC Deputy Directors) is appointed and dismissed by the President of Tajikistan. Specifically, the Director is accountable to the Executive Office of the President of Tajikistan on issues that include:</p> <ul style="list-style-type: none"> <li>• The management of the NTC</li> <li>• Being "personally responsible for the implementation of the state policy in the field of activity entrusted to the Center" (Presidential Decree, 24 June 2015, No. 511, p. 3)</li> <li>• The management structure of the NTC and staff list.</li> </ul> <p>Accountability to the Executive Office of the President of Tajikistan has been established "to strengthen activities related to the analysis in the field of education... to coordinate measures to promote state policy in the upbringing and education of youth..." (Decree of the President of the Republic of Tajikistan, July 15, 2015, No. 523, p. 1). Outside of this context, accountability mechanisms for large-scale assessment also include:</p> <ul style="list-style-type: none"> <li>• Regular engagement with the MoES, international development partners, and other stakeholders, on issues relating to the management and communication of assessment outcomes, student and school data, and reporting;</li> <li>• Public reporting of the outcomes of national large-scale assessments.</li> </ul> <p>Altogether, there appears to be sufficient institutional arrangements at the legislative and government stakeholder levels to provide evidence of established accountability mechanisms for large-scale assessments. However, it should be noted that comments provided by two international development partners indicated that greater efforts may be needed to ensure accountability with respect to:</p> <ul style="list-style-type: none"> <li>• Appropriately proctoring students during assessments;</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul style="list-style-type: none"> <li>The need for government authorities to abide by large-scale assessment technical standards that aim to enhance validity and reliability.</li> </ul>	
E5a Funding	The government provides sufficient and stable funding for large-scale assessments.	Emerging	<p>As decreed by the President of the Republic of Tajikistan, the NTC receives government funding to support large-scale assessment activities and maintain the infrastructure needed to execute these activities. This funding includes the salaries of approximately 60 NTC employees (excluding service personnel) under the “republican budget and special funds” (Presidential Decree, 24 June 2015, No. 511, p.1). Where appropriate, additional income and unused funds are returned to the republican budget, and the NTC maintains the right to conduct its own independent financial and technical audits (Presidential Decree, 24 June 2015, No. 511). These policies and practices suggest that the government provides baseline and stable funding for large-scale assessments.</p> <p>Contextually, however, funding for large-scale assessments may be impacted by broader issues within the education sector. For example, while education sector funding is acquired from various sources, including all levels of the state budget, grants, state loans, and extra-budgetary resources (e.g., family contributions, donor organisations, businesses, and fees paid to education institutions) (see Statement 215 in the NSED (2020)), there is potential overreliance on sub-national government revenues to fund education spending. In 2020, these sub-national government revenues provided funding for over 80% of Tajikistan’s education spending, despite revenue being low and negatively affecting the quality of expenditure planning and execution (The World Bank, 2021). This has resulted in the Government of Tajikistan acknowledging that there is a need to diversify funding sources and develop more “effective public expenditure mechanisms (NSED, Statement 217, p. 78), and, thus, strengthen the education sector’s financial status (The World Bank 2021). It is expected that doing so will also serve to provide sufficient and stable government funding for large-scale assessment.</p>	Capacity building may be required to support how public spending is allocated across the education system, and – where relevant – with respect to large-scale assessment programs.
E5b Funding from donors	The government receives funding from donors for large-scale assessments.	Established	<p>The Government of Tajikistan has established relationships with donor organisations that provide funding for education sector development projects (MoES, 2022a). Within the context of assessment and large-scale assessment programs and initiatives, past and present donor organisations have included:</p> <ul style="list-style-type: none"> <li>The Islamic Development Bank and the Global Partnership for Education. This funding aimed to support the implementation of the NSED of the Republic of Tajikistan. Specifically, this funding supports the development and implementation of learning assessments that provide direct feedback to teaching and learning across the Competency Based Education curriculum (Islamic Development Bank, 2020).</li> <li>The World Bank. Funds have been provided to enhance the quality of general school teaching and learning environments up June 2029. This includes setting intermediate indicators that aim to enhance Tajikistan’s capacity to collect and analyse data from PISA and national and comparative assessments. Additionally, funds have also been allocated to support the use of data from large-scale assessments to inform teaching and learning policies, and monitor student learning outcomes (MoES, 2022b; The World Bank, 2023a; 2023b).</li> </ul>	
E6 Use of assessment	Government and key stakeholders have capacity to use data	Emerging	The NTC possesses the capacity to collect and analyse national large-scale assessment data. This has been evidenced by the implementation of the Centralised Entrance Examinations since 2014, and more recently, the National Learning Assessment program in 2021. Across both large-scale assessment programs, the NTC has been involved in data collection, analysis, and	Support local stakeholders to develop greater

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
data	from large-scale assessments for evidence-based education policy and planning.		<p>reporting processes. These organisational experiences, as well as assessment outcomes, have then been used by the MoES to inform education policy and planning, such as the NSED.</p> <p>More broadly, while Tajikistan has been involved in large-scale comparative assessments like EGRA and EGMA, processes relating to data collection, analysis, and reporting have been predominately managed and funded by international development partners. In turn, the outcomes associated with these assessments have been used to inform education policies and planning requirements, like teacher training and professional development. These observations were made during in-country stakeholder interviews.</p> <p>Altogether, while the NTC has the capacity to use national large-scale assessment data, there remain capacity building opportunities to support local stakeholders with independently managing the collection, analysis, and reporting of international large-scale assessment data. As PISA 2025 will be the first time that Tajikistan will participate in an international assessment program, capacity building could focus on ensuring that local stakeholders:</p> <ul style="list-style-type: none"> <li>• Are less reliant on development partners</li> <li>• Capable of using international assessment data to inform education policy and planning.</li> </ul>	experience and expertise with using international large-scale assessment data from the beginning to the end of the program lifecycle, and informing education policy and planning.
E7 Educational Management Information System (EMIS)	The government has developed a system for the collection, integration, processing, maintenance and use of data and information related to schools, teachers and students.	Latent	<p>The status of the EMIS in Tajikistan is emerging and requires modernisation. Challenges associated with the current EMIS include:</p> <ul style="list-style-type: none"> <li>• <b>The need to upgrade infrastructure, hardware, and software.</b> The EMIS was implemented in 2007 to provide the MoES with data to develop, implement, and monitor administration and operational policies in the education sector. While EMIS policies initially outlined the roles and responsibilities of different departments/units to collect, analyse, and manage education data, they did not specify the technical specifications, infrastructure, hardware, and software requirements needed to support such a system. This has led to infrastructure, hardware, and software gaps in the EMIS.</li> <li>• <b>A lack of school-level utilisation.</b> Many schools do not make efficient use of the EMIS, and are reliant on sub-national government bodies to enter EMIS data. Data entry is also paper-based and systemic data validation processes are largely absent or nascent. There is therefore limited use of EMIS data for school monitoring and decision making at sub-national levels.</li> <li>• <b>Limited access to actionable data.</b> The current EMIS contains an abundance of administrative data and a lack of key data relating to school finances and learning outcomes. This subsequently limits how EMIS data can be used to support education sector planning, policy formulation, and monitoring and evaluation.</li> <li>• <b>Limited capacity to integrate information across platforms.</b> The current EMIS has limited capacity to integrate with other MoES information systems, such as finance and human resourcing systems, and thus, limits the potential for further decision making. School-level budgetary information is also managed through a separate financial management system (i.e., SGB.net) and is not used efficiently by school accountants (i.e., school accountants do not have sufficient capacity to use the system and enter budgetary information).</li> </ul>	Funding is required to modernise infrastructure, hardware, and software, while capacity building is needed at school- and system-levels to build stakeholders' familiarity and efficiencies with using the EMIS.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul style="list-style-type: none"> <li>• <b>Geographical considerations.</b> As 73.6% of Tajikistan’s population is located in rural areas, the current lack of educational infrastructure for gathering data limits what types of information can be collected and included in the EMIS for further analysis and reporting (Global Partnership for Education, 2019).</li> </ul> <p>Importantly, the MoES (2022a) has echoed these concerns by acknowledging the inability to collect, via the EMIS, “credible and high frequency data on students’ learning outcomes at school level” (p. 11) and to inform policy designs. The MoES has also acknowledged the following examples of challenges relating to the EMIS. That:</p> <ul style="list-style-type: none"> <li>• School and system stakeholders are reliant on an EMIS that is largely paper-based, outdated, and, where relevant, reliant on software that is no longer supported.</li> <li>• The EMIS is currently providing only limited data coverage and is missing important performance indicators linked to learning outcomes and internal/external efficiencies.</li> <li>• The EMIS is not being utilised efficiently for decision making by central government and sub-national level stakeholders (MoES, 2022a).</li> </ul> <p>Finally, improvements to the EMIS will be required if key stakeholders decide to sample students nationally and / or implement a CBA delivery mode for future PISA cycles. While the current decision to implement a PBA of PISA 2025 in Dushanbe only is unlikely to be negatively impacted by the current status of the EMIS, the shortcomings of the current system will require overhaul / improvement if students from outside of Dushanbe are also sampled (particularly in rural and remote areas), and if computers / laptops are used collect data.</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.	Established	<p>As outlined in the capacity indicator E2 Legislation or policy, the NTC was decreed under the President of the Republic of Tajikistan to:</p> <p><i>“ensure a transparent and fair assessment of the knowledge of applicants [and] ... admission to educational institutions of higher professional education of the Republic of Tajikistan”</i></p> <p><i>“[conduct] research and assessing the level of knowledge of students in educational institutions of primary, general basic and general secondary education through testing”</i> (Decree of the President of the Republic of Tajikistan, June 24, 2015, No. 511, p. 3).</p> <p>Accordingly, the NTC comprises of various departments / directorates that oversee a diverse range of tasks associated with large-scale assessment programs. These include:</p> <p><b>Management of the NTC.</b> This task is the responsibility of the Director of the NTC, and is supported by two Deputy Directors.</p> <p><b>Instrument development and Translation and linguistic quality control.</b> These duties are typically overseen by the Department of Development of Examination Materials. This department is responsible for the preparation of exam materials. Its responsibilities include the:</p> <ul style="list-style-type: none"> <li>• Preparation of test items in Tajik for each subject</li> <li>• Translation and editing of test questions</li> <li>• Implementation of confidential reviews and revisions of test questions/problems</li> <li>• Selection and development of questions/items, including alternative options.</li> </ul> <p><b>Test design and Sampling.</b> The Department of Development of Examination Materials also oversees test design and sampling. Regarding test design, this department’s activities include determining criteria for scoring tests and conducting statistical and psychometric analysis of test questions. Sampling is practiced within the context of</p>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>developing sample questions to help prepare students/schools for exams.</p> <p><b>Survey operations and logistics.</b> The Printing and Packaging Department manages the preparations of printed and pre-packed exam materials. This includes centralised entrance exams and materials for exam-related advertising and instructions. The Department of Exam Organisation and Management then oversees processes relating the administration and management of examinations. This includes the selection and preparation of registration points and examination centres in cities and districts of the republic, as well as registering students to undertake exams.</p> <p><b>Data management.</b> Data management is overseen by the Department of Information and Communication Technologies. Its activities and responsibilities include: data processing and ensuring information security; ensuring the improvement of information systems and introduction of technological tools; and securely storing data across databases and workstations.</p> <p><b>Data analysis.</b> Analysis of assessment data is primarily the responsibility of the Department of Planning, Monitoring, Research and Development. Its responsibilities include:</p> <ul style="list-style-type: none"> <li>• Conducting statistical and psychometric analysis of the obtained data.</li> <li>• Evaluating students' educational achievements.</li> <li>• Developing procedures and tools for research and data collection.</li> <li>• Contributing to the implementation of a reliable system for assessing the level of students' knowledge in accordance with recognized international standards.</li> </ul> <p><b>Reporting and dissemination.</b> The Directorate of Personnel, Management and Information is involved in the preparation of information and analytical reports developed by the NTC for public dissemination via mass media. It is also responsible for preparing and</p>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>distributing official messages, press releases, and other materials that fall within the scope of this Center's activities.</p> <p><b>Capacity building.</b> The Directorate of Personnel, Management and Information is tasked with capacity building staff so that they receive appropriate professional training and retraining, professional development, and internships.</p>	
<p>O2 Mobilisation of funding</p>	<p>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.</p>	<p>Latent</p>	<p>The NTC has a dedicated Finance Department that manages all aspects of the Center's financial operations, as well as those associated with large-scale assessment. It has the capacity and authority – subordinate to the NTC's accountant – to mobilise funds that might be associated with large-scale assessment programs. This includes the:</p> <ul style="list-style-type: none"> <li>• Center's overall financial management and purchasing activities.</li> <li>• Preparation of accurate accounting reports and records, and submission of these to relevant authorities.</li> <li>• Implementation of internal audits relevant to large-scale assessment programs and departments overseeing these programs.</li> <li>• Management of salaries and payments to staff.</li> <li>• Provision of funds for capacity-building; this is managed in partnership with the Directorate of Personnel, Management and Information, which oversees the Center's professional training, retraining, and professional development for staff.</li> </ul> <p>With respect to the implementation of PISA 2025, it has been noted that there have been inefficiencies with managing European Union funds that were allocated to establishing the PISA NC; including the management of salaries for NC and temporary (e.g. translators and adaptors) staff, and payments for PISA-related travel (NPM and PGB</p>	<p>Capacity building could be provided to NTC finance and accounting staff on issues relating accountability and transparency, and with respect to the efficient and timely mobilisation of funds for large-scale assessment programs.</p>

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>meetings), computers for the PISA NC , and containers to be used as offices by PISA NC staff. There is therefore a need to closely monitor the administration and mobilisation of funds allocated for large-scale assessment programs to ensure the timely completion of operational tasks and the successful implementation of the overall assessment program.</p> <p>Monitoring these processes will help ensure that there is an established and shared understanding of how and when financial and human resources should be allocated to support all large-scale assessment activities and tasks, and provide greater assurance that these resources will be delivered on-time.</p>	
<p>O3 Temporary staff</p>	<p>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.</p>	<p>Emerging</p>	<p>The Directorate of Personnel, Management and Information oversees human resourcing at the NTC, including the development of hiring procedures, criteria, and contracts for potential employees. This includes the timely formalisation of hiring, dismissing, and reassigning NTC employees who might be involved in large-scale assessment tasks and activities. For example, translation and reconciliation, test administration, quality monitors, coding of item responses and data, data entry, and data management.</p> <p>This work is clear and transparent to the extent that the Board of this Directorate is accountable to the Director of the NTC. This Board comprises of the Head of the Board, Deputy Head, Chief Public Relations Specialist, and a Press Secretary.</p> <p>With regards to PISA 2025, employment contracts have been managed by Eductrade and not the Directorate of Personnel, Management and Information. This has been due to funding arrangements between Eductrade and the NTC, and the need to negotiate employment and taxation laws in Tajikistan. Specifically, government workers – like NTC staff undertaking PISA NC roles – cannot be paid additional salaries without incurring income tax.</p> <p>This clarification was provided by Eductrade regarding employment and taxation laws in Tajikistan. Accordingly, it was decided by Eductrade and the NTC that the process of drafting of employment contracts for all PISA 2025 staff, including temporary staff, would be managed by Eductrade.</p>	<p>Capacity building may be required to support the Directorate of Personnel, Management and Information with developing employment contracts and managing temporary staff involved in future international large-scale assessment programs.</p>

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
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.	Emerging (PBA); Latent (CBA)	<p>The NTC building was established in 2014 using World Bank funds and provides sufficient infrastructure for implementing paper-based large-scale assessment programs. Regarding office infrastructure and furniture, it was noted that all NTC staff have access to computer workstations and office equipment (e.g., storage drawers, phones, and printers) for completing their job requirements. Perhaps notably, while informal and formal meetings can be held in staff offices and a large meeting room, there are times when there is insufficient space to host concurrent stakeholder meetings.</p> <p>Security at the NTC is also established for implementing, managing, and storing PBA materials and data. Security is managed by staff located at the external gate and internal checkpoints, and in rooms monitoring 24-hour video footage. Security protocols (e.g., use of staff access cards and temporary surrender of mobile devices) are also in place to ensure that all infrastructure assets and resources, and employees, are appropriately secured / monitored. Some NTC building areas can also only be accessed by certain staff members. For example, staff from the Department of Development of Test Instruments have offices, common areas, and access to an intranet, that is only accessible to them for completing assessment item writing tasks.</p> <p>The infrastructure at the NTC for developing assessments, however, is focused on PBA and has not yet transitioned towards CBA. Storage of hardcopy assessment materials (e.g., answer sheets and past exam papers) is therefore maintained onsite in staff offices or in a secured basement area at the NTC.</p> <p>These materials may also be stored at these locations in secured storage briefcases (e.g., exam papers) and safes (e.g., response data and assessment items stored on USB storage devices). Where specified, security protocols (e.g., unlocking a safe using two separate keys) are in place that require at least two members of the NTC to gain access to exam-related materials.</p> <p>At present, the NTC does not store any assessment data (e.g., student responses or question items) on the cloud. All data – hardcopy or transferred to a digital format – is secured onsite at the NTC. Accordingly, when the Government of the Republic of Tajikistan makes the decision to transition from PBA to CBA, there will be a need for</p>	Funding and capacity building are not needed for PBA. However, if a transition towards CBA is made, there may be a need for further physical infrastructure funding and capacity building to familiarise staff with using new equipment and protocols; e.g., transitioning from printing assessment materials to designing online examinations, and securing data on different platforms.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>further physical infrastructure funding and capacity building to familiarise staff with using new equipment and protocols.</p> <p>With respect to PISA 2025, the NTC does not have the physical infrastructure to provide National Centre staff with dedicated offices / workspaces to work on PISA tasks. National Centre staff therefore work on PISA tasks in their current NTC offices / workspaces, which at times, need to be shared with other NTC staff who are / are not working on PISA 2025. A temporary solution for this infrastructure challenge has been the decision to purchase two shipment containers to provide additional office and meeting room space for National Centre staff to work on PISA tasks.</p>	
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.	Established (PBA); Latent (CBA)	<p>IT infrastructure and support at the NTC is adequate for supporting paper-based, large-scale assessment programs. This includes providing staff with access to office hardware and software resources like email, printers, scanners, and copiers. Specialised software – e.g., SPSS and ConQuest – is also available to specialised staff.</p> <p>While NTC staff have access to licensed versions of the basic Microsoft Office suite (e.g., Word, Excel, and PowerPoint), it is not clear if licenses for the most recent versions of these programs are accessible to all staff. The use of cloud storage for working online – at the time of the in-country visit – was also not utilised. This is due, in part, to unreliable internet infrastructure across Tajikistan, which gives rise to connectivity issues across urban and rural areas, including in Dushanbe where the NTC is located. Further organisational funding and capacity building would be required to support the NTC's transition towards using cloud storage for work.</p> <p>The NTC's IT network is managed by the Department of Information and Communication Technologies (ICT). Its duties include:</p> <ul style="list-style-type: none"> <li>• Ensuring the security of data and information processing across the Center.</li> <li>• Developing ICT policies and providing technical and program support across the network, information systems, and at workstations.</li> </ul>	Funding and capacity building are not needed for PBA. However, the process of implementing PISA and transitioning towards CBA will necessitate further infrastructure funding and capacity building to familiarise staff with new processes and protocols; e.g., using secure cloud storage platforms and becoming familiar with protocols for updating / developing assessments using software like OmegaT.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul style="list-style-type: none"> <li>• Ensuring the secure storage of electronic data in databases and workstations.</li> <li>• Providing the NTC with ICT system improvements and introducing new technologies.</li> </ul> <p>When the decision to transition to CBA is made, it will be necessary to adequately fund the NTC so that staff have access to necessary IT infrastructure, resources / assets, and support. This may include funding for additional computers / laptops, printers, relevant office software suites, reliable fast-speed internet / intranet connections, and access to secure cloud storage and file sharing platforms. A lack of funding and resourcing for CBA, and when undertaking additional obligations like PISA 2025, was noted during the in-country visit and over the course of 2023.</p> <p>Specifically, funding for secure and fast-speed internet / intranet will be needed to prepare the NTC for implementing CBA, as well as for capacity building activities like transitioning away from flash / USB drive storage practices to using cloud storage and file transfer. Additionally, the NTC did not have adequate IT infrastructure and resources to initially undertake PISA 2025 tasks. For example, funding for additional internet routers and laptops needed to be sourced from EU funds and managed by Eductrade before they could be made available to NC staff.</p>	
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).	Established (PBA); Latent (CBA)	<p>Security policies and procedures are in place to address the lifecycle of developing and implementing large-scale PBA. This includes policies and procedures for:</p> <ul style="list-style-type: none"> <li>• Designing and testing assessment items.</li> <li>• Publishing assessment booklets.</li> <li>• Managing the dissemination of assessment to schools and collection of answer sheets.</li> <li>• Procedures for scanning answer sheets.</li> <li>• Securing student data on private servers and storing answer sheets in</li> </ul>	Funding and capacity building are not needed for PBA. Should a transition to CBA take place, capacity building will likely to be needed to ensure that security policies and procedures are updated to reflect new demands and challenges.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>secured areas and storage boxes at the NTC.</p> <ul style="list-style-type: none"> <li>• Handling student data for statistical analysis.</li> </ul> <p>Additionally, staff from the Department of Development of Examination Materials design, test, and store assessment items on a local, secure private server that cannot be accessed by other NTC staff.</p> <p>All NTC staff are also required to sign a legally binding confidentiality/privacy agreement as part of their full-time/part-time/casual employment contract.</p> <p>It was noted during the in-country visit that while there were aspirations to transition to cloud storage and computing, the NTC does not currently have the infrastructure or expertise to support this move. Accordingly, should this transition take place, it will be necessary to ensure that relevant policies and procedures are updated/developed to adequately secure the Center's data and assets, and manage human resourcing.</p>	
O7 Instrument development	Quality assurance mechanisms are in place to ensure the assessment instruments (tests and contextual questionnaires) are reliable, valid and fair.	Emerging	<p>The Department of Development of Examination Materials is responsible for quality assuring assessment items and instruments. This department ensures the reliability, validity, and fairness of such items and instruments by:</p> <ul style="list-style-type: none"> <li>• Aligning test items – apart from those relating to Russian language and literature, Uzbek language and literature, and Arabic, English, German and French languages – with the national curriculum and approved textbooks.</li> <li>• Performing confidential reviews of test questions and problems, and selecting and developing subtest options across school subjects.</li> <li>• Conducting statistical and psychometric analysis of assessment items.</li> </ul> <p>Situationally, it should be noted that Tajikistan's education system has been undergoing a process of competency-based education reform</p>	Build capacity to develop competency-based assessment instruments that are aligned with international standards and best practices.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>since 2015. This has involved multiple international development partners, including the Aga Khan Foundation, the European Union, UNICEF, and USAID (MoES, 2022a; Sokol, 2021).</p> <p>One of the primary Theory of Change outputs of this competency-based education reform – and with respect to PISA and large-scale assessment programs – has been to update the competency-based curriculum by embedding formative assessment and “employing an evidence-based approach to assess progression in students’ competence development...” (MoES, 2022a, p. 7). Accordingly, there may be scope to capacity build the Instrument Development team to develop assessment instruments – with item types similar to PISA – that are aligned with international standards and practices for assessing student competencies across key domains.</p>	
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.	Established	Translation and linguistic quality control requirements are overseen by the Department of Development of Examination Materials. In particular the Department manages the “translation and editing of test questions” and the use of statistical and psychometric analysis to establish item reliability, validity, and fairness. Language specialists are also employed within this department to support translation and linguistic quality control as they relate to the Tajik, Russian, Uzbek, English, German, French, and Arabic languages.	
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>The Department of Planning, Monitoring, Research and Development has broad oversight for this capacity indicator. Specifically, issues relating sampling and assessing a sampled population are broadly addressed or implied by statements describing this department’s duties on the NTC’s website. They include the:</p> <ul style="list-style-type: none"> <li>• “organization and implementation of a reliable system for assessing the level of students’ knowledge in accordance with recognized international standards”.</li> <li>• “development of procedures and tools for research (questionnaire) and data collection (questionnaire)”.</li> <li>• Use of “statistical and psychometric analysis of the obtained data”.</li> </ul> <p>Additionally, and as noted during the in-country visit, only one</p>	Further opportunities could be provided to the staff member in charge of sampling, as well as other NTC staff, to increase their capacity to engage in sampling-related tasks for large-scale assessments. The latter would also assist with growing the NTC’s overall institutional capacity to conduct such sampling tasks.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>individual from this department is responsible for addressing sampling considerations at the NTC. This includes gathering statistical data / information from the MoES for sampling, identifying target populations and defining exclusion criteria. This individual also serves as the Sampling Manager for PISA 2025. Accordingly, there is an opportunity to develop overall organisational knowledge and experience with regard to this capacity indicator, and especially for international large-scale assessment programs.</p>	
<p>O10 Survey operations and logistics</p>	<p>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.</p>	<p>Established (PBA); Latent (CBA)</p>	<p>The NTC has established mechanisms and processes for PBA survey operations and logistics. Specifically, the Department of Exam Organisation and Management standardises, monitors, and documents PBA-related survey operations and logistics that include conducting training seminars and courses to introduce short-term employees to system processes across the republic, city / district, and educational institution levels. <i>Standardised</i> processes have been instituted for:</p> <ul style="list-style-type: none"> <li>• <i>Monitoring</i> via exam proctors, security staff at examination centres, and the use of CCTV cameras at key locations.</li> <li>• <i>Documenting</i> the sorting / placing of different versions of examination booklets in proctored rooms, students' photo ID at registration, and transportation, scanning, and security of answer sheets / booklets.</li> <li>• Selecting and preparing student registration points and examination centres across cities and districts of the republic.</li> <li>• Organising and conducting registration and re-registration of students undertaking examinations using fingerprint scanners, computer IDs, and an exam room ticketing system.</li> <li>• Monitoring and troubleshooting survey operations and logistics during examination periods, and</li> </ul>	<p>Funding and capacity building are not needed for PBA. When the transition to CBA is made, however, funding will be required for implement / upgrade relevant infrastructure, assets, and capacity building, as they relate to this indicator.</p>

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>making improvements for the following year.</p> <ul style="list-style-type: none"> <li>Managing student feedback questionnaires that address the registration and examination process, whether exam instructions were clearly communicated, and providing feedback on the performance of proctors and centre administrators.</li> </ul> <p>Accordingly, there is scope to build the capacity of the NTC to develop and implement corresponding survey operations and logistics for large-scale CBA. Over the course of the in-country visit, NTC and non-NTC stakeholders (e.g., The World Bank and Republican Institute of Professional Development and Retraining of Education Workers) indicated that students and schools across Tajikistan were not yet ready to participate in CBA due to ICT infrastructure challenges, teacher shortages, and a lack of student and teacher experience to undertake and support CBA, respectively.</p> <p>The aspiration for Tajikistan to engage in large-scale CBA is consistent with goals outlined in the NSED that emphasise the need to modernise the education sector (i.e., Articles 127, 137, and 229). Therefore, building the capacity of the NTC to develop and implement large-scale CBA programs across Tajikistan will require survey operations and logistics that are suitable for online delivery and administration.</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.	Established	Two NTC departments provide coverage for this capacity indicator. First, the Department of Information and Communication Technologies oversees quality assurance processes and mechanisms for data management. This is achieved by ensuring the security of electronic data in databases, and directing the correct use of hardware and software as outlined by this department's documents / instructions. Second, the Department of Planning, Monitoring, Research and Development supports data management quality assurance by performing and documenting checks for errors and discrepancies in datasets.	
O12 Data analysis and reporting	Technically sound and appropriate data analysis	Emerging	The Department of Planning, Monitoring, Research and Development is responsible for data analysis and reporting. At present, only one staff	Capacity building could be provided to other NTC staff to

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
	<p>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.</p>		<p>member from this department is primarily responsible for conducting all statistical analysis relating to assessment data. This staff member utilises statistical programs such as SPSS, WinStep, and ConQuest to perform descriptive and inferential statistical analyses, as well as statistical methods suited for surveys and large-scale assessment (e.g., item analysis and differential item functioning). He is also supported by the NTC's Department of Information and Communication Technologies to analyse, for example, distractor items and the validity and reliability of items. Quarterly and annual reports are developed by this staff member and this department for the Director of the NTC.</p> <p>Opportunities for capacity building include providing training opportunities for other NTC staff to develop expertise / experience with data analysis and reporting protocols aligned with this capacity indicator. Developing greater staff capacity would also spread responsibilities and manage risks relating to data analysis and reporting, so that they are not all managed through one NTC staff member.</p>	<p>develop their expertise / experience with data analysis and reporting protocols.</p>
O13 Dissemination and communication	<p>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.</p>	Emerging	<p>Technical reports relating to large-scale assessments – including data analysis protocols and results – are managed by the Manager of the Department of Planning, Monitoring, Research and Development, and the First Deputy Director of the NTC. The technical reports are developed for the Director of the NTC, and disseminated and communicated to government stakeholders, as required.</p> <p>The NTC also employs a dedicated Communication Specialist who manages engagements and communications with school directors and the school community. Information disseminated and communicated includes NTC activities like planned examination dates and exam locations, and outputs like student results and answers for examinations. Platforms used to disseminate and communicate NTC-related information include:</p> <ul style="list-style-type: none"> <li>• The NTC's webpage (<a href="https://ntc.tj/tj/">https://ntc.tj/tj/</a>)</li> <li>• Social media, such as Facebook, Instagram, and Viber.</li> <li>• Television, radio, and print media (e.g., newspapers and handouts).</li> </ul> <p>Capacity building may be required to support the dissemination and</p>	<p>Capacity building could be provided to develop effective PISA-related communication strategies.</p>

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<p>communication of results relating to international large-scale assessment programs. This is important as PISA 2025 will be the first time that Tajikistan is participating in an international large-scale assessment program. Assistance may therefore be required to develop dissemination and communication strategies that might focus on:</p> <ul style="list-style-type: none"> <li>• Helping students, their families, teachers, and school administrators to understand how to interpret and use PISA data.</li> <li>• How policymakers can use PISA data to inform their policy and decision-making process.</li> </ul>	

Table A A.3. Individual level

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
I1 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 NPM has previously established herself as an English language specialist for large-scale assessment programs. In particular, she has worked as a reviewer of assessment tools, and test administrator / test administrator trainer, on various USAID projects from 2016 to the present, as well as for the Tajik Aga Khan Foundation beginning in 2023. She has also received further professional training for developing examination materials (theory and practice), and quality assuring and using assessment data for national education policies. Altogether, the NPM possesses sufficient prior experience with large-scale assessment programs and is appropriately skilled within her area of expertise. As an English language assessment specialist, she also possesses the skills needed to communicate effectively in English, both orally and in writing.</p> <p>That said, while the NPM technically possesses the decision-making authority to manage and oversee all PISA assessment tasks, it has become apparent that her authority has – and continues to – be affected by actors outside of the PISA Team. These actors have directly and openly challenged her authority as the NPM, chosen to not actively support her, withheld decision making power from her to retain their own, and worked actively and passively to hinder the completion of PISA tasks. While the NPM is employed on a full-time basis to oversee PISA tasks, the challenges posed by other actors decreases the likelihood that she will be able to support the implementation of PISA 2025 to the best of her ability.</p> <p>Additionally, as the decision to participate in PISA 2025 was made late in the PISA cycle, the NPM has had to manage and complete the same number of tasks with less time. This has revealed opportunities to build her capacity with respect to project management skills (e.g., risk management and leadership) and the use of project management tools (e.g., project management spreadsheets).</p>	<p>Support the NPM by building her capacity to:</p> <ul style="list-style-type: none"> <li>• Manage large-scale education and assessment projects.</li> <li>• Use project management tools.</li> <li>• Engage with challenging actors.</li> </ul>
I2 Assessment instruments coordinator	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	<p>In addition to the NPM, this role and its responsibilities are carried out by two Assessment Instrument Coordinators, one for Reading and one for Science.</p> <p>The Coordinator responsible for Reading serves as the NTC's Head of the Department of Development of Examination Materials. He is an experienced manager who has been involved in research involving language (Tajik) and mathematics assessment, and the development of national-level assessment tools for Tajikistan. He has also completed professional development training focused on psychometrics, the production of test materials, psychological measurement, and assessment monitoring.</p> <p>The Coordinator responsible for Science is the NTC's Deputy Head of the Department of Development of Examination Materials. He is an experienced researcher in Science assessment, focusing on the development of examination materials and test items. He has also participated in professional development opportunities involving the development of national assessment instruments for students.</p> <p>Altogether, all three PISA NC members have the potential to provide the coverage needed to oversee processes involved in reviewing, translating, adapting, and verifying assessment items, as well as coding operations for item responses. They can also, if needed, provide subject matter expertise for assessing languages (English and Tajik) mathematics, and science.</p>	<p>Project management capacity building is needed to help manage multiple concurrent tasks and staffing requirements associated with instrument development and implementation. This includes developing the knowledge / skills needed to use specialised software (e.g. OmegaT and project management platform protocols), implement project planning protocols, and manage external / temporary staff roles and responsibilities</p>

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			However, it is not clear that this team possesses the experience needed to manage multiple complex and concurrent tasks associated with instrument development for international large-scale assessments. As PISA 2025 marks the first time that Tajikistan will be participating in such an assessment program, there are opportunities to capacity build these individuals with respect to project and people (e.g., translators, adaptors, and coders) management skills.	.
I3 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	The PISA 2025 Sampling Manager is also employed as a manager within the Department of Planning, Monitoring, Research and Development. Accordingly, he has experience in sample design and the use of sampling methods, having worked on assessment programs for international (e.g., German Federal Ministry for Economic Cooperation and Development, and the European Union) and national (e.g., the MoES) bodies. While he maintains sufficient knowledge and skills to manage sampling tasks for PISA 2025, further capacity building may be required. These opportunities might aim to support his English language skills so that he can better communicate with PISA contractors. Capacity building might also be provided to enhance his understanding of sampling protocols suited for large-scale assessments (e.g., uses for contextual data sets and how to address potentially inaccurate data sets), and ability to manage project requirements (e.g., completing tasks to set timelines and upstream reporting).	Opportunities should be provided to support the Sampling Manager with respect to: <ul style="list-style-type: none"> <li>Improving his English language skills.</li> <li>Receiving one-on-one training opportunities / engagements to better understand sampling decisions and approaches for large-scale assessments like PISA.</li> </ul>
I4 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 coordination, 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	The NC allocated this role to the Head of the Department of Public Relations and Information Provision at the NTC following the in-country visit in September 2023. This individual possesses previous and ongoing experience with preparing and managing communications between various stakeholder groups (e.g., the general public, media, school leaders, and teachers) and the NTC, and across languages (e.g., Tajik, Russian, and English). She has also managed the planning and implementation of promotional / informational activities relating to centralised entrance exams and other school-level statutory activities of the NTC. Prior to become the head of this department, this individual also served as the Chief Press Secretary of the NTC. Capacity building might be provided, however, with respect to managing tasks associated with the preparation of school-level materials for large-scale assessments, assessment logistics, test administration and training, and national quality monitoring. As Tajikistan is undertaking a PBA, a good understanding of the security and requirements, and the technical support requirements for computer-based delivery is not needed. This requirement will change when a CBA approach is taken for future PISA cycles.	Capacity building should be provided to support the preparation and management of PISA school-level materials, assessment logistics, test administration and training, and national quality monitoring.
I5	The data manager is appropriately	Established	This position has been filled by one of the two Deputy Directors of the NTC. As such, he possesses	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
Data manager	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.		<p>significant experience managing complex projects, having worked in this Center since 2011, and within the Department of Information and Communication Technologies at the Tajik State National University from 2005-2011.</p> <p>Since 2014, he has served as the NTC's data manager. In this role, he has conducted and managed the collection of data across different subject domains, as well as been involved in data analysis and reporting for regions across Tajikistan. He is also experienced in using quantitative methods of analysis and software (e.g., SPSS, WINSTEP, LERTAP, and Excel) for data analysis and reporting. He is appropriately qualified and experienced to oversee and manage all data-related activities for large-scale assessment programs.</p>	
I6 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.	Latent	<p>At the time of writing, the NC has not allocated this role to a specific individual. This has occurred as a result of challenges associated with NC funding and management.</p> <p>In addition to the Sampling Manager, who is the most likely candidate for this role, there is also capacity to fill this position by using other NTC or PISA NC staff members, or by identifying an individual from outside of the NTC.</p>	Urgent funding is required to employ a suitably qualified and experienced Data analyst to manage the responsibilities associated with this role, and provide upstream reporting to the NPM. This position should be finalised during the first quarter of 2024 to prepare for the PISA Field Trial and the interpretation of item statistics.
I7 Information Technology coordinator	The team has a full-time IT coordinator 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).	Established	<p>The role of Information Technology Coordinator has been filled by one of the two Deputy Directors of the NTC. Prior to becoming a Deputy Director in 2022, he worked as a specialist programmer in the NTC's Department of Information and Communication Technologies for six years (since 2016). Accordingly, he possesses the institutional knowledge and experience needed to manage the implementation of paper-based assessments within schools, and execution of ICT protocols for ensuring the secure uploading and storage of assessment data on local servers.</p> <p>This individual's capacity to fulfil the requirements of the Information Technology Coordinator position is further enhanced by previous professional experiences working at the Technological University of Tajikistan from 2000-2016. It is noted that his previous roles have included being:</p> <ul style="list-style-type: none"> <li>• Dean of the Faculty of System and Branch Information Technology.</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul style="list-style-type: none"> <li>• Head of Department of System and Information Technology.</li> <li>• Head of the Department of Informatics and Information Security.</li> <li>• Network Administrator of the Center for Development and Introduction of Information Security.</li> <li>• Senior Engineer Programmer of the Center for Development and Introduction of Information technologies.</li> <li>• Engineer Programmer at the University Computer Center.</li> </ul>	
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 two NC staff capable of communicating effectively in English – across written and oral contexts – are the NPM and the Assessment Instrument Coordinator (Science). Other members of the NC team possess less-proficient levels of English communication skills.</p> <p>Accordingly, capacity building might be provided to those staff who wish to improve their English language skills to facilitate effective communication and to aid successful completion of PISA tasks.</p>	Capacity building in the form of English language short courses could be provided to PISA NC staff members.

## 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	<p>Abdulzoda Ziyodullo Nazar – Deputy Minister of Education and Science of the Republic of Tajikistan</p> <p>Asomiddinzoda Sharofiddin – Head of General Secondary Education Department</p> <p>Badriddin Muzaffarzoda – Head of Planning of the Ministry of Education and Science of the Republic of Tajikistan</p> <p>Khaliqzoda Ainiddin – Head of the Education Quality Department of the Ministry of Education and Science of the Republic of Tajikistan</p> <p>Saidzoda Muhammadtoir Said – Director of the Agency for Control in the Field of Education and Science under the President of the Republic of Tajikistan</p>		
Organisational level		<p>Salomiyon Muhammaddavud – President of the Academy of Education of Tajikistan</p> <p>Irina Kholovna Karimova – Academician of the Academy of Education of Tajikistan</p> <p>Asadullo Najmiddinian – Director of the Institute of Education Development, Academy of Education of Tajikistan</p> <p>Davlatnazar Imomnazarov – Deputy Head of the Department of Expertise and Review of Educational Literature of the Institute of Education Development, Academy of Education of Tajikistan</p> <p>Rajabov Saidnemon – Advisor to the Director of the Institute of Education Development, Academy of Education of Tajikistan</p>	<p>Diana Dimova – European Union, Programme Manager</p> <p>Betül Boyar, Eductrade , Project Director</p> <p>Zulfiya Veysova, Eductrade, Key Expert Assessment</p> <p>Ganjina Khujanazarova, Eductrade, National Education Expert</p> <p>Khadija Hamouchi, Eductrade, International Development Senior Professional</p> <p>Phillip Butterfield – USAID Learn Together Activity, Chief of Party</p> <p>Kasimova Adiba – USAID Program Chief Specialist</p>

Dimensions	Government (national or sub-national)	Education or assessment institutions, organisations, agencies	Representatives in education development partner/ donor organisations
		<p>Namozzoda Jamshed – Rector of the Republican Institute of Professional Development and Retraining of Education Workers</p> <p>Najmiddiniyon Abdusattor – Deputy Rector of the Republican Institute of Professional Development and Retraining of Education Workers</p> <p>Mirzozoda Rahmonali – Director of the Republican Educational and Methodical Center</p> <p>Navruzov Hamza Ahrorovich – Advisor of the Director of the Republican Educational and Methodical Center</p>	<p>Tigran Shmis – The World Bank, Senior Education Specialist</p> <p>Almira Zakiyeva – The World Bank, Education Consultant</p>
Individual level	<p>Jafarzoda Sabzali Fayzali, Director of the NTC &amp; PISA 2025 National Consultant &amp; PISA Governing Board representative</p> <p>Shodiniyo Abdulbosit Shodi, First Deputy Director of the NTC &amp; PISA 2025 Data Manager</p> <p>Uktam Olimjonzoda, Second Deputy Director of the NTC &amp; PISA 2025 Information Technology Coordinator</p> <p>Azimov Jamshed Asliddinzoda, Head of the Examination Materials Development Department &amp; PISA 2025 Assessment Instrument Coordinator (Reading literacy)</p> <p>Khusrawbekov Loik Davlatbekovich, Deputy Head of the Examination Materials Development Department &amp; PISA 2025 Assessment Instrument Coordinator (Science)</p> <p>Mirzoaminzoda Khayrullo Mirzorahim, Manager of Department of Planning, Monitoring, Research and Development Division &amp; PISA 2025 Sampling Manager</p> <p>Mansurova Lola Boboevna, Senior Specialist of the Examination Materials Development Department &amp; PISA 2025 NPM</p>		<p>Bakhtdavalatova Aziza – Specialist of Tajik Aga Khan Fund on education</p> <p>Saodatsayorov Eraj – UNICEF specialist in education</p>

Table A B.2. Document mapping table

Dimensions	Documents
Enabling environment	<p>Decree of the President of the Republic of Tajikistan. (June 24, 2015, No. 511). Establishment of the National Testing Center under the President of the Republic of Tajikistan.</p> <p>Decree of the President of the Republic of Tajikistan. (April 5, 2018, No. 1043). Improvement of structure of executive bodies of the Government of the Republic of Tajikistan.</p> <p>Decree of the President of the Republic of Tajikistan. (July 15, 2015, No. 523). Restructuring of the Executive Office of the President of the Republic of Tajikistan.</p> <p>Government of the Republic of Tajikistan. (29 September 2020, #526). National Strategy for Education Development of the Republic of Tajikistan for the period until 2030. <a href="https://planipolis.iiep.unesco.org/sites/default/files/ressources/tajikistan-education-sector-plan_2021-2030pdf.pdf">https://planipolis.iiep.unesco.org/sites/default/files/ressources/tajikistan-education-sector-plan_2021-2030pdf.pdf</a></p> <p>MoES. (2022a). Tajikistan 2022-2025 Partnership Compact. Pursuing an Inclusive and Transformative Reform Agenda for Competency-Based Education in Tajikistan. <a href="https://assets.globalpartnership.org/s3fs-public/document/file/2022-03-Tajikistan-Partnership-Compact.pdf?VersionId=cvQ5Jz14or53mRvzl0cxSCSTrBmYVVUt">https://assets.globalpartnership.org/s3fs-public/document/file/2022-03-Tajikistan-Partnership-Compact.pdf?VersionId=cvQ5Jz14or53mRvzl0cxSCSTrBmYVVUt</a></p> <p>MoES. (2022b). Final environmental and social management framework (ESMF) for 'Learning environment – Foundation of Quality Education (LEARN). Author.</p> <p>Sokol, A. (2021). Stocktaking of materials supporting competency-based education reform in Tajikistan. Report commissioned by UNICEF Tajikistan. UNICEF.</p> <p>UIS. (2008). Tajikistan ISCED mapping. <a href="https://uis.unesco.org/sites/default/files/documents/tajikistan_isced_mapping_0.xls">https://uis.unesco.org/sites/default/files/documents/tajikistan_isced_mapping_0.xls</a></p>
Organisation level	<p>Global Partnership for Education. (March 2019). Tajikistan Education Sector Analysis. <a href="https://resources.norrag.org/resource/589/tajikistan-education-sector-analysis">https://resources.norrag.org/resource/589/tajikistan-education-sector-analysis</a></p> <p>Islamic Development Bank. (2020). The Joint IsDB/GPE Project for Support to Implementation of the National Education Development Strategy of the Republic of Tajikistan. <a href="https://www.isdb.org/project-procurement/tenders/2020/gpn/joint-isdbgpe-project-support-implementation-national-education-development">https://www.isdb.org/project-procurement/tenders/2020/gpn/joint-isdbgpe-project-support-implementation-national-education-development</a></p> <p>National Testing Center. (n.d.). National Testing Center under the President of the Republic of Tajikistan. <a href="https://ntc.tj/tj/">https://ntc.tj/tj/</a></p> <p>USAID. (2018). Early Grade Reading Assessment, Baseline Report. <a href="https://pdf.usaid.gov/pdf_docs/PA00XX28.pdf">https://pdf.usaid.gov/pdf_docs/PA00XX28.pdf</a></p> <p>USAID. (2021). Early Grade Reading Assessment, Endline Report. <a href="https://pdf.usaid.gov/pdf_docs/PA00Z5ST.pdf">https://pdf.usaid.gov/pdf_docs/PA00Z5ST.pdf</a></p> <p>USAID. (2022). USAID Learn together activity baseline report: reading, mathematics, and social emotion learning. <a href="https://pdf.usaid.gov/pdf_docs/PA00ZVKZ.pdf">https://pdf.usaid.gov/pdf_docs/PA00ZVKZ.pdf</a></p> <p>World Bank. (2021). Tajikistan. Public Expenditure Review. Strategic issues for the medium -term reform. <a href="https://documents1.worldbank.org/curated/en/099205106242240623/text/P172237055d557050b3d502de92e8761c2.txt">https://documents1.worldbank.org/curated/en/099205106242240623/text/P172237055d557050b3d502de92e8761c2.txt</a></p> <p>The World Bank. (2023a). Tajikistan's Education Outcomes to Improve with Support from a New World Bank Project. <a href="https://www.worldbank.org/en/news/press-release/2023/02/23/tajikistan-education-outcomes-to-improve-with-support-from-new-world-bank-project">https://www.worldbank.org/en/news/press-release/2023/02/23/tajikistan-education-outcomes-to-improve-with-support-from-new-world-bank-project</a></p> <p>The World Bank. (2023b). Learning Environment – Foundation of Quality Education. <a href="https://projects.worldbank.org/en/projects-operations/project-detail/P177475">https://projects.worldbank.org/en/projects-operations/project-detail/P177475</a></p>
Individual level	<p>NTC responses to the PISA 2025 CBIS Capacity Needs Assessment Questionnaire for Officials and Individuals</p> <p>Curriculum Vitae for NTC staff appointed to the PISA 2025 National Centre</p> <ul style="list-style-type: none"> <li>• Jafarzoda Sabzali Fayzali, Director of the NTC &amp; PISA 2025 National Consultant &amp; PISA Governing Board representative</li> <li>• Shodiniyo Abdulbosit Shodi, First Deputy Director of the NTC &amp; PISA 2025 Data Manager</li> <li>• Uktam Olimjonzoda, Second Deputy Director of the NTC &amp; PISA 2025 Information Technology Coordinator</li> <li>• Azimov Jamshed Asiddinzoda, Head of the Examination Materials Development Department &amp; PISA 2025 Assessment Instrument Coordinator (Reading literacy)</li> </ul>

Dimensions	Documents
	<ul style="list-style-type: none"><li data-bbox="517 285 1895 336">• Khusrawbekov Loik Davlatbekovich, Deputy Head of the Examination Materials Development Department &amp; PISA 2025 Assessment Instrument Coordinator (Science)</li><li data-bbox="517 347 1850 371">• Mirzoaminzoda Khayrullo Mirzorahim, Manager of Department of Planning, Monitoring, Research and Development Division &amp; PISA 2025 Sampling Manager</li><li data-bbox="517 383 1547 406">• Mansurova Lola Boboevna, Senior Specialist of the Examination Materials Development Department &amp; PISA 2025 NPM</li><li data-bbox="517 418 1458 442">• Zamira Abdusalomzoda, Press Secretary of the NTC &amp; PISA 2025 Survey Operations and Logistics Manager</li></ul>

## Annex C. Capacity Needs Assessment consultations

**Table A C.1. List of participants in the Capacity Needs Assessment consultations**

Name	Title	Organisation
Jafarzoda Sabzali Fayzali	Director	National Testing Center under the President of the Republic of Tajikistan
Shodiniyo Abdulbosit Shodi	First Deputy Director	
Uktam Olimjonzoda	Second Deputy Director	
Azimov Jamshed Asliddinzoda	Head of the Examination Materials Development Department	
Khusrawbekov Loik Davlatbekovich	Deputy Head of the Examination Materials Development Department	
Mirzoaminzoda Khayrullo Mirzorahim	Manager of Department of Planning, Monitoring, Research and Development Division	
Mansurova Lola Boboevna	Senior Specialist of the Examination Materials Development Department	
Zamira Abdulalomzoda	Press Secretary	
Abdulzoda Ziyodullo Nazar	Deputy Minister of Education and Science	Ministry of Education and Science of the Republic of Tajikistan
Asomiddinzoda Sharofiddin	Head of General Secondary Education Department	
Khaliqzoda Ainiddin	Head of the Education Quality Department	
Badriddin Muzaffarzoda	Head of Planning	
Saidzoda Muhammadtoir Said	Director	Agency for Control in the Field of Education and Science under the President of the Republic of Tajikistan
Salomiyon Muhammaddavud	President	Academy of Education of Tajikistan
Irina Kholovna Karimova	Academician	
Asadullo Najmiddinian	Director of the Institute of Education Development	
Davlatnazar Imomnazarov	Deputy Head of the Department of Expertise and Review of Educational Literature of the Institute of Education Development	
Rajabov Saidnemon	Advisor to the Director of the Institute of Education Development	
Najmiddinian Asadullo	Director	
Imomnazarov Davlatnazar	Deputy Head of the Department of Evaluation and Review of Educational Literature	Institute of Education Development
Namozzoda Jamshed	Rector	Republican Institute of Professional Development and Retraining of Education Workers
Najmiddiniyon Abdusattor	Deputy Rector	
Mirzozoda Rahmonali	Director	Republican Educational and Methodical Center
Navruzov Hamza Ahrorovich	Advisor of the Director	
Diana Dimova	Programme Manager	European Union
Betül Boyar	Project Director	Eductrade
Zulfiya Veysova	Key Expert Assessment	
Ganjina Khujanazarova	National Education Expert	

Name	Title	Organisation
Khadija Hamouchi	International Development Senior Professional	Eductrade
Bakhtdavlatova Aziza	Specialist in Education	Tajik Aga Khan Fund on Education
Phillip Butterfield	Chief of Party	USAID Learn Together Activity
Kasimova Adiba	Chief Specialist	USAID Program
Saodatsayorov Eraj	Specialist in Education	UNICEF
Tigran Shmis	Senior Education Specialist	The World Bank
Almira Zakiyeva	Education Consultant	

## 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
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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
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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
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*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)

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

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<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:

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<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
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*If you have answered “Yes” of “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
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*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
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*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
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**B6.** Can you describe the office space available for the PISA assessment team?

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<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
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*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
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**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.

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

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<b>C6.</b>	Are there any key stakeholders who oppose large-scale assessment programs? (please circle your answer)	Yes	No	Not sure
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**C6.a.** If you answered ‘yes’ to C6, what are their main reasons for opposition?

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<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

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**Section D: Funding**

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

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<b>D2.</b>	In your opinion, is there adequate funding for the implementation of PISA 2025? (please circle your answer)	Yes	No	Not sure
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**D2.a.** If you answered “no” to D2, please specify why.

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

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

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<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:

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### *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
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<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?

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**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:

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### *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.

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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.

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

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<b>A3.</b>	Are you a regular employee of the assessment centre <sup>7</sup> ? (please circle your answer)	Yes	No	Not sure
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<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
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<b>A5.</b>	Do you have a written job description for your roles in PISA 2025? (please circle your answer)	Yes	No	Not sure
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*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
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**A6.a.** If you answered "No" or "Not sure" to A6, please explain why.

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<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.

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<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
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**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?

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

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### *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?

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

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### *Translation/ Adaptation Coordinator*

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

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

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### *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.

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

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### *Data manager*

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

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<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)			

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

<b>e</b>	Perform regression analyses depending on the research questions			
<b>f</b>	Calculate standard errors to provide information about the spread or variability of a sample statistic around its mean			
<b>g</b>	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

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

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Thank you for completing this Capacity Needs Assessment questionnaire!

## **PISA**

### **Capacity Needs Assessment: Tajikistan, Dushanbe**

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 Tajikistan (Dushanbe). The results are being used to design a capacity building plan for Tajikistan (Dushanbe) that will be implemented by the OECD, its contractors, the Ministry of Education and Science of Tajikistan, and the National Testing Center under the President of Tajikistan.