# **Ecuador**Capacity Needs Assessment

Programme for International Student Assessment



# PISA CAPACITY NEEDS ASSESSMENT: ECUADOR



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

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

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# List of acronyms

ACER Australian Council for Educational Research
CBIS Capacity Building and Implementation Support

CBP Capacity Building Plan

CNA Capacity Needs Assessment

DAACT Directorate of Territorial Analysis, Application and Coverage

ERCE Estudio Regional Comparativo y Explicativo Ineval Instituto Nacional de Evaluación Educativa

IT Information technology

NC National Centre

NPM National Project Manager

OECD Organisation for Economic Co-operation and Development

PIAAC Programme for the International Assessment of Adult Competencies

PIP Project Implementation Plan

PISA Programme for International Student Assessment

PISA-D PISA for Development

SEST Ser Estudiante

## **Executive Summary**

The Organisation for Economic Co-operation and Development (OECD)'s Programme for International

Student Assessment (PISA) measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges.

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

At the outset of CBIS, a Capacity Needs Assessment (CNA) was carried out to assess CBIS participants' capacity to implement PISA. The assessment focused on key dimensions and corresponding indicator areas to gain information about Ecuador's capacity assets and needs to implement PISA 2025 successfully.

The capacity assets and needs to successfully implement PISA 2025 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 capacity assets and needs a participant has. The ratings are as follows:

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

This report presents detailed findings of the CNA for Ecuador. Table 1 summarises the CNA ratings for Ecuador in each of the dimensions and indicators. Key considerations when reviewing Table 1 and the goal of successfully implementing PISA 2025, involve a possible change in government by the end of 2023 and changes to staff working at Ineval (the PISA NC) and the Ministry of Education. Accordingly, the CNA ratings, findings, and recommendations outlined in this report should be considered in light of Ecuador's emerging political context and the 2023 general election results. To assist with managing these considerations, it is noted that a corporate agreement between Ineval and the Ministry of Education has been drafted to help ensure that work continues with implementing and reporting outcomes for PISA 2025 in the years to come. Other considerations include the need to manage PISA 2025 communication strategies across schools and communities, and supporting planning efforts, resourcing and support, and administrating how students located in rural and remote regions will be assessed using online and offline modalities.

Table 1. Rating of the Capacity Needs Assessment for Ecuador

Indicator area		Rating	
	Established	Emerging	Latent
Enabling Environn	nent dimension		
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 Le	evel dimension		
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 Leve	el dimension	'	
I1 National Project Manager	✓		
I2 Assessment instruments co-ordinator		✓	
13 Sampling manager		✓	
14 Survey operations and logistics manager	✓		
I5 Data manager	✓		
I6 Data analyst*		<b>✓</b>	
17 Information Technology co-ordinator*	✓		
18 Communication in English	✓		

In summary, the CNA suggests that many of the identified capacity indicators are largely established across the enabling environment, organisational, and individual level dimensions. Where opportunities for capacity building exist, they are likely to refer to the implementation of education management information systems and targeting specific staff skill sets. There is strong evidence to suggest, therefore, that Ineval has the capacity to successfully implement PISA 2025 and support the use of assessment data to transform the National Education System in Ecuador. While this capacity has been built on a relatively short history of implementing large-scale assessment programs since 2013, the experience and expertise gained from implementing PISA 2025 will further enhance Ineval's capabilities to conduct its mandated research activities and report on educational evaluations. Ecuador has previously participated in PISA for Development (PISA-D) and in the Programme for the International Assessment of Adult Competencies (PIAAC), which are extremely relevant experiences for the capacity needs assessment as Ineval was the NC for both PISA-D and PIAAC. While most of the individuals who worked on those assessments are no longer with Ineval, there remains in place an institutional memory of

these assessments and the organisation's practices and procedures have been enhanced by these experiences. However, because most of the individuals working on PISA 2025 at Ineval do not have previous experience with OECD assessments, Ecuador chose to participate in the CBIS program to ensure the successful implementation of PISA 2025. Accordingly, it is recommended that capacity building provided by the OECD and its contractors should be taken up by Ineval staff. This will help to ensure the successful implementation of PISA for the current and future cycles, and grow this organisation's ability to lead education research and evaluation in Ecuador and across the region.

#### 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.

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

<sup>&</sup>lt;sup>2</sup> www.oecd.org/pisa/innovation/learning-digital-world/

<sup>&</sup>lt;sup>3</sup> 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 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 was prepared for CBIS participants starting in 2022, to assist with planning for strengthening their capacity to implement PISA. The CBP lists 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 includes details of the PISA meetings and trainings, and CBIS-specific activities.

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

The PIP is a set of resources and tools 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 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.

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

#### 2. Framework

The PISA 2025 CNA aims to identify capacity assets and needs of CBIS participants to implement PISA 2025 successfully. The framework for the PISA 2025 CBIS CNA was developed based on the PISA-D Capacity Needs Analysis (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 include drafts of the PISA 2025 Technical Standards, PISA 2025 NPM manual, and the PISA 2025 NPM and NC Roles and Responsibilities document<sup>5</sup>.

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

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

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

#### 2.1. Dimensions

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

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

#### 2.2. Indicators

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

<sup>&</sup>lt;sup>4</sup> PISA -D Capacity Needs Analysis reports were produced for the eight participating countries. For more information see: <a href="www.oecd.org/pisa/pisa-for-development/pisa-for-development-documentation.htm">www.oecd.org/pisa/pisa-for-development/pisa-for-development-documentation.htm</a>

<sup>&</sup>lt;sup>5</sup> All documents are forthcoming.

- 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: Detailed findings of the CNA.

#### 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 the capacity assets and needs:

- Online questionnaires: The capacity indicators for each dimension were operationalised into the CBIS CNA questionnaires, which comprised of 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 Ineval, the PISA 2025 NC. The questionnaire for officials was completed by senior executives at Ineval, while the questionnaire for individuals was completed by Ineval directors and key PISA 2025 staff (e.g., coordinators and managers). Ministry of Education officials did not undertake either the questionnaire for officials or individuals.
- In-country stakeholder consultations: A stakeholder mapping exercise was carried out by Ineval prior to the in-country visit to identify stakeholders who would participate in consultations with a CBIS Liaison Officer during a one-week incountry visit. These consultations aimed to collect further information that could not be obtained through the online questionnaires. The NPM assisted with consultations by coordinating and scheduling these meetings with stakeholders and sourcing an interpreter where needed.
- **Document analysis**: Relevant documents that indicated capabilities in large-scale assessments were also analysed (i.e., Ineval policy documents, manuals, and public documents). The NPM was asked to identify and translate relevant documents into English based on a document mapping exercise.

The data obtained from the CBIS 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 assessment for Ecuador. To ensure accuracy and completeness of the findings presented, and to gain broad stakeholder agreement and engagement, the NPM for Ecuador was encouraged to invite key stakeholders to review the report.

#### 4. Capacity Needs Assessment for Ecuador

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

#### 4.1. CNA activities for Ecuador

The CNA stakeholder consultation and document mapping exercises were prepared by the *Instituto Nacional de Evaluación Educativa* (Ineval) – the PISA 2025 NC – from May to June 2023. Ineval is responsible for the integral, external, and internal evaluation of the National Education System of Ecuador. Its work is based on standards defined and specified by the Ministry of Education, as well as the development of other standards that are technically relevant. Ineval's mandate to promote a culture of evaluation is focused on student learning, teacher and principal performance, and educational management. The stakeholder consultation and document mapping exercises assisted in the subsequent CNA activities and are presented as tables in Annex B.

The CBIS CNA questionnaires were administered to key Ineval stakeholders. Valid responses were received from three respondents for the questionnaire for officials, and from ten respondents for the questionnaire for individuals over the period of approximately four weeks in May and June 2023.

Stakeholder consultations were carried out during the in-country visit undertaken by Ian Teo from ACER. This in-country visit took place between 12-16 June 2023 with the intention of obtaining further information based on initial analyses of stakeholders' responses to the online questionnaires and documents submitted by Ineval. These consultations took place in Quito, the capital city of Ecuador, with representatives of educational institutions, Ineval, key development partners, and other stakeholders. Annex C outlines 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 (E1) – Established

Large-scale assessment programs are embedded within Ecuador's national education system. Such programs have been enabled through the establishment of a legislated public institution – the *Instituto Nacional de Evaluación Educativa* (Ineval) – that has the autonomy and comprehensive internal and external evaluation capabilities to promote education quality. Such evaluations have included implementing and managing large-scale assessment programs at national (e.g., SEST, *Ser Bachiller, Evaluación para obtener la calidad de candidato apto*, and *Ser Estudiante en la Infancia*) and international (e.g., PISA-D and ERCE) levels.

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

Although not explicitly specified in national legislation, large-scale assessment programs inform 'how' education evaluations are conducted in Ecuador and 'what' educational outcomes/standards are aspired to. Legislation providing for the use of large-scale assessment through the established public institution – Ineval – include Article 346 of the Magna Carta and Article 70 of the Organic Law Reforming the Organic Law of Intercultural Education. Additionally, Articles 71 and 72 of the Organic Law Reforming the Organic Law of Intercultural Education indicate that Ineval will implement comprehensive internal and external evaluations of the National System of Education based on the standards established by the National Educational Authority. This includes the use of data from large-scale assessment programs to address student learning outcomes and strengthen the National Education System.

#### Leadership (E3) – Established

The Government of Ecuador has demonstrated leadership and the political will to support large-scale assessment by establishing Ineval with the authority to conduct evaluations of the National Education System, including the development, implementation, and ongoing management of large-scale assessment programs. This has also been demonstrated through 'Research lines in educational evaluation' (as outlined in the *Agenda de Investigación en Evaluación Educativa 2022-2025*) that are aligned with the interests of the Ministry of Education. These research lines refer to set objectives and activities that, for example, contribute to improving education quality through research focused on international large-scale learning assessment models and student performance in mathematics and language. The government has also promoted participation in large-scale assessment programs across different contexts. These have included maintaining an inclusive agenda, aiming to improve the effective implementation of large-scale assessment, and working to effectively disseminate assessment results to the population.

#### Institutional arrangements (E4) – Established

Institutional arrangements that enable Ineval to conduct large-scale assessments and inform education evaluation since 2012, have been set by The Constitution of the Republic of Ecuador (Article 346) and The Organic Law of Intercultural Education (Articles 67 and 68). Accountability mechanisms underpinning Ineval's use of large-scale assessment outcomes for education evaluation include a constitutional mandate to conduct evaluations of the National Education System of Ecuador. It also includes ensuring that the Research Agenda on Educational Evaluations are aligned across the Ministry of Education, the Directorate of Educational Standards, Ineval, and other key stakeholders, and that relevant public-facing reports/documents are published.

#### Funding (E5a) – Established

The Government of Ecuador has provided central funding and resources to implement a range of large-scale assessments since the 1990s (e.g., The Ministry of Education's Aprendo tests, Ser Ecuador, and SEST). This includes funding to support its education evaluation activities, such as the implementation and management of large-scale assessments.

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

The Government of Ecuador does not receive large-scale assessment funding from donors. It receives loans that need to be repaid or funds as part of an agreement. Funds used in

large-scale assessment programs are generally allocated from the general state budget for use by Ineval.

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

The government has the capacity to use assessment data for enhancing the quality of the National Education System. It does so, in part, by acting through Ineval as a public institution to implement standardised practices (e.g., use of technical and procedural guidelines and booklets) for collecting and analysing large-scale assessment data. Data is then used by the government to shape policies aimed at improving education quality.

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

At an operational level, the Directorate of Territorial Analysis, Application and Coverage contributes to ensuring that systems are in place for collecting, integrating, processing, maintaining, and using data/information from schools, teachers, and students. Ineval's engagement with PISA 2025 sampling tasks suggests that these systems are sufficient for gathering data to complete these tasks on-time and to-date. Nevertheless, challenges remain with respect to ensuring that necessary ICT infrastructure and IT resources are available to support large-scale assessments, and that reliable sampling approaches are utilised.

#### 4.2.2. Organisational level

#### Assessment team (O1) – Established

The assessment team is overseen by Ineval's Department of General Technical Coordination. This department manages the application of evaluation standards and strategies applied to the National Education System, and directs and supervises the design and production of education evaluation activities, including assessment-related tasks. Other Ineval departments involved in assessment-related activities include the Technical Coordination of Design and Production of Education Assessment, Technical Coordination of Management of Educational Assessment, Strategic Design Department of Educational Assessments, Item Production, Psychometric Analysis, and Educational Assessment Analysis.

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

Under Article 67 of the Organic Law of Intercultural Education, Ineval possesses the administrative and financial autonomy to mobilise funding obtained from the Ministry of Economy and Finance. The mobilisation of such funds must be aligned with Ineval's mandate to conduct education evaluations, which includes the implementation of PISA 2025 and associated tasks. Within Ineval, the allocation of funding is guided by the Executive Director who prepares the annual work plan and budget, and submits these to the Ineval Board of Directors for approval and execution.

#### Temporary staff (O3) – Established

The Department of Human Resources monitors the management and planning of human talent at Ineval. This includes the preparation and administration of budget requirements relating to human resourcing, and managing employee performance planning and scheduling. Established processes are in place for recruiting and remunerating 200-300 temporary staff during peak periods to support assessment-related activities in key areas, such as, the Departments of Analysis, Implementation, and Territorial Coverage, and Psychometric Analysis.

#### Physical infrastructure (O4) – Established

There is sufficient office space (i.e., dedicated multi-level building), modern facilities (e.g., offices and meeting rooms), assets (e.g., computers, printers, scanners, and vehicles), and infrastructure (e.g., stable and secure internet connection, and storage assets and rooms) for implementing and managing all aspects of PISA 2025 in Ecuador.

#### IT infrastructure and support (O5) – Established

Necessary IT infrastructure, software, and supports are present for implementing large-scale assessment programs like PISA 2025. This includes access to a stable 100Mbps internet connection, a secure network environment and the implementation of IT policies, password protected cloud-storage and email, licensed software and hardware, compliance with government protocols for information security, confidentiality, integrity and availability, and access to IT technical support staff.

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

A range of policies and procedure have been established to secure assessment materials and data. These include the use of confidentiality agreements on Ineval staff and actors (e.g., students, teachers, or directors/principals of educational institutions) engaged in different aspects of a large-scale assessment, as well as strict monitoring procedures to guarantee the security of assessment materials and data. Stored assessment data is also encrypted and made accessible to a limited number of Ineval staff to enhance security. An information security committee has also been implemented to ensure compliance with prescribed confidentiality guidelines and relevant legislation relating to personal data.

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

Instrument development and quality assurance is overseen at various levels. At a higher level, the Department of Technical Coordination of Design and Production of Educational Assessment coordinates design processes associated with education evaluation models, items, and psychometric analysis. The Department of Item Production then manages the production of assessment items, with a specific focus on ensuring the technical quality and conceptual validity of items to ensure that they are reliable, valid, and fair. Within this department, there is scope to provide capacity building opportunities to support the development of items that address real-world challenges. The Department of Psychometric Analysis is also involved in quality assuring assessment instruments as part of its mandate to investigate scoring methods and psychometric analytical approaches.

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

A new translation and adaption team has been established to assist with implementing PISA 2025. While this team has shown that they possess the expertise and capabilities needed to complete translation and adaption tasks on-time, there is scope to provide capacity building opportunities. These opportunities should be taken up to enhance Ineval's capability to quality assure these tasks independently of other Spanish-speaking countries and develop as a regional leader for future PISA cycles. This includes building organisational capacity to support the translation and adaption of cognitive and open-ended items and responses in large-scale assessments like PISA. These capacity building activities should be aligned with those associated with the O7 Instrument development indicator above.

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

The Department of Analysis, Implementation, and Territorial Coverage develops plans and manages processes for guaranteeing the validity of Ineval's sampling approaches. This includes utilising clear sample selection criteria, managing considerations relating to diverse educational contexts, and reviewing and analysing associated factors for survey data in light of sampling requirements. This department also engages with different entities/actors to ensure that education evaluations are applied across the National Education System. As Ineval has only conducted grade-based sampling for national assessments in the past, there remain opportunities to provide capacity building for working with age-based samples for large-scale assessments, like PISA 2025.

#### Survey operations and logistics (O10) – Emerging

Three Ineval departments contribute towards managing and quality assuring large-scale assessment survey operations and logistics. The Department of Instrument Administration prepares and updates standardised methodological documents, guides, manuals, and instructions, and analyses the quality and functionality of evaluation instruments. The Department of Analysis, Implementation, and Territorial Coverage also provides oversight for managing the application of national and international instruments across schools and regions, while the Department of Psychometric Analysis provides reporting on the reliability of results obtained from applied instruments. Challenges affecting this indicator and the implementation of PISA 2025 include successfully managing disruptions to assessment (e.g., natural disasters) and ensuring that relevant staff (e.g., assessment administrators and applicators) receive appropriate training.

#### Data management (O11) – Established

Processes and protocols for managing Ineval's database are overseen by the Department of Geomatics and Information Management. Accordingly, appropriate technologies are implemented to support results analysis and interpretation, as well as approaches for data extraction, transformation, and loading. A continuous cycle of improvement is also implemented to support quality assurance, and for enabling comprehensive, valid, and reliable data to be used for educational evaluations.

#### Data analysis and reporting (O12) – Established

The process of data analysis and reporting is overseen by the Department of Geomatics and Information Management; with the Department of Psychometric Analysis managing scoring methods prior to this. Accordingly, the Department of Geomatics and Information Management quality assures data analysis and reporting, and confirms that technically sound statistical processes and analysis are implemented to produce reliable outcomes. The production of valid and useful population inferences is also supported, and developed into reports, by this department for different education system stakeholders. Assessment outcomes and corresponding analytical processes are publicly available on the Ineval website.

#### Dissemination and communication (O13) – Established

The Department for Social Communication has a central role in disseminating and promoting education evaluation activities to stakeholders and across the general population. Specifically, it provides support to other Ineval departments by developing communication strategies for reporting and communication. These include using a range of traditional (e.g., print) and social (e.g., YouTube, Twitter, and the Ineval website) media

platforms, coordinating events, and developing promotional and communications materials that are accessible to various stakeholder groups (e.g., students, parents, teachers, and school directors). Dissemination and communication strategies used by this department will be crucial for ensuring that the population is better prepared to undertake and accept the results from the PISA 2025 assessment.

#### 4.2.3. Individual level

#### National Project Manager (II) – Established

The General Technical Coordinator at Ineval has been appointed to the role of the PISA 2025 NPM. He possesses significant knowledge and experience with managing education projects and large-scale assessments, and maintains the decision-making authority within Ineval to lead the assessment team and implement PISA 2025. He is able to communicate sufficiently well in English – orally and in writing – and has been employed on a full-time basis for the duration of the PISA 2025 cycle.

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

This role is fulfilled by three Ineval staff. First, the Translation and Adaption Coordinator has had previous experience ensuring the conceptual and technical quality of assessment content, as well as adapting assessment items for special needs students. Second, the Coding Leader is experienced with overseeing tasks associated with instrument design, psychometric analysis, and conducting field operations, and has served in this capacity at Ineval since 2014. Third, the Director for Item Production (Ineval) has the potential to provide support for reviewing and adapting items for international assessment; though her role for PISA 2025 is to serve as the Manager of the Participation Agreement. Accordingly, while these individuals possess the collective ability to address the demands of this capacity indicator, the absence of a dedicated PISA 2025 member in role may present some challenges. These include adapting items for international assessment, and managing communication and collaboration between Ineval staff.

#### Sampling manager (13) – Emerging

The PISA 2025 Sampling Manager possesses the experience needed to implement and manage sampling tasks for national large-scale assessments and PISA 2025. Since 2017, she has been involved in a range of sampling tasks that include preparing the sample design and selection for national assessments, analysing the validity and reliability of data, verifying sample data, and managing and training data entry teams. Capacity building for this role and other Ineval staff may include developing more expertise with PISA sampling tasks to inform educational evaluations and improve education quality.

#### Survey operations and logistics manager (I4) – Established

This role has been appointed to the Director of Analysis, Implementation, and Territorial Coverage. She maintains clear survey operations and logistics management experience with respect to implementing PISA 2025. She has also developed strategies for conducting assessments (including online assessments) across different regions in Ecuador, coordinated assessment activities with different stakeholders, and provided reports associated with survey operations and logistics management. Support for providing school-level materials, as well as maintaining the security confidentiality, and technical support needed for computer-based assessment delivery can be provided by other departments at Ineval.

#### Data manager (I5) – Established

The PISA 2025 Data Manager maintains the capabilities needed to complete the requirements of this role. She has had past and ongoing experience validating data from assessment instruments, analysing statistical data, and providing reporting deliverables across multiple project contexts. She is also across processes involving the use of secure procedures to transmit participants' data and maintain their privacy, and training staff in data entry procedures, and supervising/training support staff engaged in data entry and collection. She has served as the Data Manager for other large-scale assessments, such as PISA-D, PIAAC, and the Regional Comparative and Explanatory Study, Programme for the International Assessment of Adult Competencies (ERCE).

#### Data analyst (I6) – Emerging

The lead data analyst is suitably experienced to analyse, interpret, and report data using a range of statistical packages (e.g., SPSS, STATA, R), and has worked in the area of statistical analysis and reporting since 2014. Capacity building may be required to enhance her experience with managing and analysing assessment data intended for international comparisons, as well as statistical approaches and protocols that are unique to PISA. Such opportunities might also be extended to the wider data analysis team to build Ineval's experience with analysing PISA 2025 data.

#### Information Technology coordinator (I7) – Established

The Information Technology Coordinator has over two decades of experience working in cybersecurity and database administration within schooling and large-scale assessment contexts. His technical expertise includes computer programming using PHP, Java, and Visual Basic, managing SQL and PostgreSQL databases (i.e., installation and configuration), and providing training for computer-based educational assessments across national and international contexts. He has also directed and executed online and offline applications that inform educational evaluations in Ecuador, including those relating to large-scale assessments.

#### Communication in English (18) – Established

Key staff within the NC play a supportive role when communicating in English at conversational and technical levels. These individuals provide English-language support as required across all project stages and have been appointed as the PISA 2025 NC Overseer and the PISA 2025 Support to the NC.

#### 5. Conclusions

The CNA conducted for Ecuador suggests that many of the identified capacity indicators are established at an enabling environment level. Possible exceptions, however, include considerations and issues involving the implementation of education management information systems.

At the organisational level, it was observed that the PISA 2025 NC – Ineval – is suitably capable of implementing international and national large-scale assessments. This was demonstrated by Ineval having the authority to manage resources and funding for conducting large-scale assessments, and comprising of multiple departments that can develop and implement educational research and evaluation activities. Opportunities for organisational capacity development include building Ineval's capacity to complete

translation and adaption tasks independently of other Spanish-speaking countries and developing into a regional leader with respect to the Translation and linguistic quality control indicator. Capacity development might also be provided to support instrument development, survey operations and logistics for contexts involving disruptions to assessment, and training operational and technical staff for the PISA 2025 field trial and main survey.

At the individual level, all staff appointed to a PISA 2025 role possess significant professional expertise and experience for completing their job descriptions. Opportunities to further support staff members may involve providing capacity building workshops in key areas. These include supporting the review and adaptation of assessment items, sampling and analysis of large-scale data to inform education policies, and development of reports for different stakeholders.

Overall, Ineval has the capacity to successfully implement PISA 2025, and support the use of assessment data to transform education policies and enhance practices and outcomes for school principals, teachers, and students in Ecuador. These perspectives were voiced repeatedly by a majority of interviewees and individuals during the in-country visit. That said, the following challenges remain with respect to implementing PISA in 2025:

- 1. The outcomes of 2023 general election have the potential to disrupt PISA 2025 management, delivery, and reporting
- 2. There is a need to negotiate PISA-related communication strategies across all stakeholder groups, regions, and levels of society
- 3. It will be necessary to carefully plan, support, and administer how students located in rural and remote regions in Ecuador will be assessed online and offline for PISA 2025.

It is suggested, therefore, that where capacity building is provided by the OECD and its contractors, that these opportunities be taken up by Ineval staff. This will help to ensure the successful implementation of PISA for the current and future cycles, and grow Ineval's capacity to lead educational research and evaluation in Ecuador and across the region.

### Annex A. Detailed findings of the CNA

Annex A presents the detailed findings of the CNA for Ecuador 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
and relevant context data at key stages of primary and secondary school education	part of the assessment system to provide performance data in key learning domains and relevant context data at key stages of	Established	The criteria associated with this indicator have been enabled through legislation and ministerial agreements that emphasise the embedding of large-scale assessment programs across the National Education. The embedding and use of large-scale assessments provide evidence for informing country-wide educational evaluations.  This embedding of large-scale assessment programs within Ecuador's 'Assessment system structure' has been actioned through a public institution that possesses autonomy and the comprehensive internal and external evaluation capabilities to promote education quality (Article 346 of the Magna Carta, Ecuador). This public institution was established in 2012 as the <i>Instituto Nacional de Evaluación Educativa</i> (Ineval) and serves as the PISA 2025 NC. Examples of past and ongoing large-scale assessment programs that Ineval has been involved in include:  • SEST (2013-2022)	
			<ul> <li>Domains: Reading/literacy/language; Mathematics/numeracy;</li> <li>Sciences; Social sciences</li> </ul>	
		ethnic and family situation) collected from	<ul> <li>Contextual data (e.g., socioeconomic, geographical, cultural, ethnic and family situation) collected from students at Elementary, Middle and Higher of Basic General Education (EGB), and the Baccalaureate level</li> </ul>	
			Ser Bachiller (2013-2020)	
			o Domains: Mathematical, Linguistic, Scientific and Social Domain	
			<ul> <li>Contextual data (e.g., economic, social and cultural aspects)     collected from students in their third year of secondary school     onwards and includes Ecuadorian citizens regardless of the     country they reside in, foreigners residing in Ecuador, and refugees     and asylum seekers</li> </ul>	
			Ser Estudiante en la Infancia (2022-2023)	
			<ul> <li>Domains: Pre-evaluation (Identity and autonomy; Coexistence; Relationship with the natural and cultural environment; Logical-mathematical relationships; Understanding and expression of language; Cultural and artistic expression; Body expression and motor skills) and Post-evaluation (Social sciences; Natural</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			sciences; Mathematics; Language and literature; Cultural and Artistic Education; and Physical education)	
			<ul> <li>Contextual data (e.g., level of support provided to students, geographic area, gender, and ethnicity) collected from first-year students at the start and end of their preparatory sublevel of Basic General Education</li> </ul>	
			• PISA-D (2018)	
			<ul> <li>Domains; Reading; Mathematics; and Science</li> </ul>	
			<ul> <li>Contextual data (e.g., school location; socioeconomic levels; and gender) collected from students aged 15-16 years.</li> </ul>	
			Prior to the establishment of Ineval, examples of Ecuador's involvement in large-scale assessment programs have included the:	
			Measurement of the quality of education (1989)	
			Aprendo tests (1996 and 2007)	
			Ser Ecuador (2008)	
E2 Legislation or policy	The large-scale assessment programs that form part of the assessment system are guided by legislation or policy.	Established	Large-scale assessment programs are not explicitly specified in country-level legislation. Such programs are, however, inherent as a key element that informs 'how' education evaluation in Ecuador is conducted and 'what' educational outcomes and standards are aspired to.	
			Accordingly, various legislative mechanisms provide Ineval with the scope needed to implement large-scale assessment programs. Ineval also has the administrative capabilities and technical autonomy needed to promote education evaluation and quality. These mechanisms include:  • Article 346 of the Magna Carta	
			<ul> <li>Article 70 of the Organic Law Reforming the Organic Law of Intercultural Education (hereafter referred to as the Organic Law).</li> </ul>	
			Additionally, Articles 71 and 72 of the Organic Law indicates that Ineval will implement comprehensive internal and external evaluations of the National System of Education based on standards established by the National Educational Authority. These evaluations, which include the use of data from large-scale assessment programs, will focus on:  • Student learning outcomes	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			The performance of professionals, managers and teachers, school management	
			Institutional performance	
			<ul> <li>Researching the most appropriate evaluation methodologies that can be used at the national level, for system components, and for the outcomes of evaluation processes</li> </ul>	
			<ul> <li>Developing processes and analytical approaches obtained from evaluations to inform education policy and decision-making</li> </ul>	
			<ul> <li>Publicly, truthfully, and reliably disseminating evaluation results as they relate to the education system and its components</li> </ul>	
			<ul> <li>Assessing the education system to derive evidence that can be used to strengthen or create policies, plans, and programs, to improve education quality and implement short-, medium-, and long-term goals.</li> </ul>	
			At the institutional policy level, Ineval seeks to fulfil its legal mandates via objectives that specify:  • Increasing the evaluation of education system components and the development of a comprehensive evaluation model	
			<ul> <li>Increasing the relevance of evaluations according to contexts and standards</li> </ul>	
			<ul> <li>Increasing the quantity and quality of educational research and promoting its use</li> </ul>	
			<ul> <li>Increasing the use and access to evaluation results.</li> </ul>	
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	The Government of Ecuador has supported large-scale assessment by establishing Ineval with the authority to conduct evaluations of the National Education System. This includes the development, implementation, and ongoing management of large-scale assessment programs. As a public entity positioned alongside the Ministry of Education, Ineval has been empowered by the government to deliver various objectives relating to large-scale assessment. Government <b>support</b> for large-scale assessments is evidenced by the establishment of 'Research lines in educational evaluation' ( <i>Agenda de Investigación en Evaluación Educativa 2022-2025</i> , 2022) that are aligned with the interests of the Ministry of Education. These research lines include a range of objectives and activities that are directly or indirectly related to the implementation, management, and uses for large-scale assessment programs. They include:	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul> <li>Objective Line 1. Contribute to the improvement of educational quality through research focused on the contextual analysis of student performance:</li> </ul>	
			<ul> <li>b. Models and practices of formative assessment for large-scale competencies and learning outcomes</li> </ul>	
			<ul> <li>e. Large-scale learning assessment models in various countries and their impact</li> </ul>	
			<ul> <li>h. School performance in Mathematics and Language, according to the results of the tests applied by Ineval</li> </ul>	
			<ul> <li>I. Relationship between reading comprehension and the results in the applied evaluations</li> </ul>	
			<ul> <li>m. Student trajectory through assessments: Ser Estudiante en la Infancia and SEST</li> </ul>	
			<ul> <li>Objective Line 2. Investigate teacher performance around the comprehensive evaluation of their management, in order to contribute to the strengthening of the National Education System.</li> </ul>	
			<ul> <li>I. Large-scale evaluation models in relation to professional teacher performance and its application in different countries.</li> </ul>	
			Ineval is also mandated through legislation and its internal policies/practices to develop stakeholder strategies that promote:	
			Participation in large-scale assessment     Objective Line 3. Propose strategies aimed at the application of evaluations with adaptations to the specific educational needs associated and not associated with the disability, which account for the diverse realities in which they develop in their school life	
			<ul> <li>a. Innovative assessment strategies for students with specific educational needs associated and not associated with disability.</li> </ul>	
			<ul> <li>b. Evaluative practices linked to healthy coexistence in inclusion and specific educational needs associated and not associated with disability.</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul> <li>c. Intervention of the educational community in the learning and development of socio-emotional skills of students with specific educational needs associated and not associated with the disability (effect, cause, consequence, impact, among others).</li> </ul>	
			<ul> <li>h. Models of assessment for students with disabilities and multi disabilities applied in different countries</li> </ul>	
			<ul> <li>i. Preparation of test items adapted to people with specific educational needs associated and not associated with disability.</li> </ul>	
			Effective implementation of large-scale assessment     Objective Line 1: Contribute to the improvement of educational quality through research focused on the contextual analysis of student performance	
			<ul> <li>a. Contextualized evaluation models (disability/interculturality and plurinationality/gender/intergenerational equality/human mobility) that improve teaching-learning and education results</li> </ul>	
			<ul> <li>f. Evaluative strategies that contemplate the development of contents, taking into account the emotional situation (individual/group) of the students.</li> </ul>	
			<ul> <li>Dissemination of large-scale assessment results</li> <li>Article 72 of the Organic Law requires Ineval to:</li> </ul>	
			<ul> <li>f) Make public the overall results of the evaluation, respecting the dissemination policies and social accountability established by the competent authority;</li> </ul>	
			<ul> <li>h) Provide relevant, truthful and reliable evidence and results on the situation of the National Education System or its components, and through its assessment, obtain inputs to strengthen or create policies, plans and programs to improve educational quality and to verify the fulfilment of short-, medium-, and long-term goals</li> </ul>	
			<ul> <li>As observed during the in-country visit (12-16 June 2023), the various strategies that have previously been utilised by Ineval to disseminate information about large-scale assessment results, as well as modalities and administrative processes, include:</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul> <li>Social media platforms like Twitter and YouTube</li> </ul>	
			<ul> <li>Ineval's and the Ministry of Education's websites</li> </ul>	
			<ul> <li>Printed materials/resources that are sent to schools.</li> </ul>	
E4 Institutional arrangements	The government has well-established institutional arrangements for large-scale assessments with clear accountability mechanisms.	Established	The institutional arrangements that enable Ineval to conduct large-scale assessments – e.g., Ser Maestro, SEST, and Ser Estudiante en la Infancia –and inform education evaluation since 2012 have been set by:  • The Constitution of the Republic of Ecuador, Article 346  • The Organic Law of Intercultural Education, Articles, 67 and 68.	
			Accordingly, the accountability mechanisms underpinning Ineval's use of large-scale assessment outcomes for education evaluation include:  • Its Constitutional mandate to conduct "integral, external and internal evaluations of the National Education System of Ecuador" (Ineval, n.d.)	
			<ul> <li>Ensuring that Research Agenda on Educational Evaluation are aligned with educational quality standards defined by the Ministry of Education and the Directorate of Educational Standards, and feedback provided by Ineval's Directors and technical experts, and external institutional and regional stakeholders.</li> </ul>	
			<ul> <li>Publishing research, reports, finances/expenditure, and other public facing documents on the Ineval website; it is noted, however, that at the time this CNA report was drafted, there was no information provided in the Ineval Library/Biblioteca webpage.</li> </ul>	
E5a Funding	The government provides sufficient and stable funding for large-scale assessments.	Established	The Government of Ecuador has provided central funding and resources to implement a range of large-scale assessments since the 1990s. These have included:  • The Ministry of Education's Aprendo tests (mathematics and communication) for grade three, seven, and ten students, which were implemented four times between 1996 and 2007.	
			<ul> <li>The Ser Ecuador in 2008, which assessed students in mathematics, language and communication, social studies, and science during the seventh and tenth years of basic education, and the third year of secondary school</li> </ul>	
			<ul> <li>The SEST from 2013-onwards, which assessed students in mathematics, language and literature, science, and social sciences at</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			grades 4, 7, and 10 of basic general education, and at the 3 <sup>rd</sup> year of the baccalaureate level	
			<ul> <li>PISA-D in 2017, which assessed the reading, mathematics, and science performance of 15-year-old students.</li> </ul>	
			In 2012, the Government of Ecuador established Ineval as a public law entity with the ongoing public funding arrangements and the financial autonomy needed to conduct education evaluations, including the implementation of large-scale assessments.	
			It was noted, however, that additional funding – in the form of a grant – was sought by Ineval during the in-country visit from the Korea International Corporation Agency to further support education evaluation activities.	
E5b Funding from donors	The government receives funding from donors for large-scale assessments.	Established	The Government of Ecuador does not receive funding from donors for large-scale assessments. It receives funds from organisations (e.g., The World Bank or UNICEF) in the form of loans that needs to be repaid, or as part of agreements.	
			The central government subsequently allocates funds to Ineval from the general state budget. Funding from this budget is provided annually to Ineval to execute all obligations for which it is responsible, including the delivery of large-scale assessments.	
E6 Use of assessment data	Government and key stakeholders have capacity to use data from large-scale assessments for evidence-based education policy and planning.	Established	The government has the capability to use large-scale assessment data for evidence-based education policy and planning. This is, in part, achieved by acting through Ineval as a public institution. Ineval possesses the organisational capabilities to analyse large-scale assessment data that can then be used to inform evidenced-based education policy and planning by the government. At the national level, for example, SEST data has been analysed by Ineval for almost a decade to highlight student learning and outcomes. Data from this large-scale assessment is then used by the government to shape policies aimed at improving education quality. At the international level, Ineval's analysis of PISA-D data resulted in the government committing itself to extensive curriculum reform and policy changes, which are being implemented in 2023.	
E7 Educational Management Information System	The government has developed a system for the collection, integration, processing, maintenance and use of data and information related to schools, teachers and students.	Emerging	At an operational level, the Directorate of Territorial Analysis, Application and Coverage (DAACT) contributes to ensuring that systems are in place for collecting, integrating, processing, maintaining, and using data/information from schools, teachers, and students. For example, DAACT operation manuals with clear criteria and processes for managing the online and offline delivery of the SEST assessment include specifications for:  • Internet bandwidth; internet browser requirements; IT operating systems (e.g., Windows/Linux, RAM, and processor speed) and hardware (e.g., Android tablet operating system, RAM, and storage) requirements	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul> <li>Evaluation instruments that collect data from large-scale assessments;</li> <li>e.g., structured base tests, product analytical rubrics, checklists, and associated factors surveys</li> </ul>	
			<ul> <li>Activities conducted before (e.g., announcements and trainings), during (e.g., execution of the assessment, monitor the evaluation, and application of the associated factors survey), and after (e.g., reporting) the assessment</li> </ul>	
			<ul> <li>Identifying key actors and their roles/responsibilities (including those relating to data handling and management) in the assessment; e.g., student, teachers, monitors, applicators, headquarters manager, area manager, evaluation application coordinator, and application committee</li> </ul>	
			Standard protection measures against COVID-19	
			<ul> <li>Contingencies; e.g., student medical attention; natural or man-made disruptions to assessment, or power failure</li> </ul>	
			Troubleshooting; e.g., passwords, internet connection, computer virus, or system interface problems	
			With respect to PISA-2025, it has been observed by the Country Liaison Officer that Ineval have been able – up to this point – to complete all PISA sampling tasks on time. This suggests that the government has a sufficient system in place for collecting, processing, maintaining, and using data/information related to schools, teachers, and students.	
			Nevertheless, challenges relating to this indicator remain with regards to ensuring that:  • Large-scale assessments are appropriately supported by ICT infrastructure (e.g., internet) and IT resources (e.g., computers) so that data/information can be collected	
			<ul> <li>Student, teacher, and school data collected will support reliable sampling approaches and ensure that gaps in sampling are addressed; this concern regarding sampling gaps was voiced by Ministry of Education officials during the in-country visit.</li> </ul>	

**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	Evidence of this indicator is spread across several Ineval departments. At the highest level, the General Technical Coordination department oversees the application of evaluation standards and strategies applied to the National Education System, and directs and supervises the design and production of education evaluation activities, including assessment-related tasks. As such, challenges that are unique to the Ecuadorian context – such as the use of communication strategies to communicate the purpose of PISA 2025, as well as carefully planning, the provision supports/resources, and administrating how students in rural and remote regions will be assessed online or offline – are also managed/overseen by this department.  Other Ineval departments/teams involved in Assessment include:  • Technical Coordination of Design and Production of Educational Assessment, which coordinates the design processes of item production, guides and supervises methodologies for the development of assessment items and instruments, and seeks to improve/innovate design and production processes associated with educational evaluation.																										
			<ul> <li>Technical Coordination of Management of Educational Assessment, which oversees database management, and the analysis and reporting of results</li> <li>Strategic Design Department of Educational Assessments, which supports the development of models for education evaluation (e.g., normative, theoretical, and methodological models), assessment structures (e.g., hierarchically structured assessment matrices), and the preparation of technical sheets that contain data for evaluations</li> </ul>																										
																												<ul> <li>Item Production Department, which plans the production of assessment items. This includes the review, translation, and adaption of items from international assessments, and promotes the continuous improvement of item production and planning.</li> </ul>	
			<ul> <li>Psychometric Analysis, which addressing coding, develops and executes psychometric analysis of items and instruments, and investigates scoring methods and psychometric analysis</li> </ul>																										
				<ul> <li>Educational Assessment Analysis, which contextualises and analyses the results of assessments to prepare and disseminate the outcomes of national and international educational evaluations (including assessment) to improve the quality of the National Education System.</li> </ul>																									

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O2 Mobilisation of funding	The large-scale assessment centre is able to mobilise the allocated funds to complete the diverse tasks associated with large-scale assessments. Funding is also mobilised to provide for capacity-building of assessment centre staff.	Established	As specified in Article 67 of the Organic Law of Intercultural Education (2011), Ineval possesses the "administrative, financial and technical autonomyto promote the quality of education" in Ecuador. This financing is provided by Ministry of Economy and Finance, and based on evaluation priorities and Ineval's framework of competencies. These finances are then distributed to departments within Ineval to fund their activities.  Ineval subsequently has the authority to mobilise funding to complete a range of tasks associated with implementing national large-scale assessments, as well as for implementing PISA 2025 in its role as the PISA 2025 NC; this includes capacity building for assessment centre staff.  Within Ineval, the mobilisation of funding is guided by the Executive Director who prepares the annual work plan and budget. This is submitted for consideration to the Board of Directors and executed, if approved. The Financial Administrative Department also provides support for managing the administration of finances by authorising payments to contractors, certifying the value of contracted assets/services, make payments, and administrate organisational expenses. Funding for capacity-building is overseen by the Human Resources Department, which coordinates human talent planning and budgetary requirements.	
O3 Temporary staff	Clear and transparent criteria and procedures are in place for recruiting and remunerating temporary staff, including translators and reconcilers, test administrators, quality monitors, coders of constructed response items, coders of occupational data, and data entry and data management support staff.	Established	The Department of Human Resources monitors the management and planning of human talent at Ineval. This includes the preparation and administration of budget requirements relating to human resourcing, and managing employee performance planning and scheduling.  Established processes are in place, for example, for hiring 200-300 staff during busy seasonal periods to support a range of assessment and evaluation-related tasks. Many of these employees work in the Department of Analysis, Implementation, and Territorial Coverage, and the Department of Psychometric Analysis. Clear and transparent processes are used to support temporary staff recruitment and remuneration.	
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.	Established	Ineval possesses sufficient office space (i.e., dedicated multi-level building), as well as the modern facilities (e.g., offices and meeting rooms), assets (e.g., computers, printers, scanners, and vehicles), and infrastructure (e.g., stable and secure internet connection, and storage assets and rooms) needed to implement and manage large-scale assessment and PISA 2025.  It was noted in the online questionnaires, however, that there may be a need for more office printers, despite staff having access to scanning equipment and a recently purchased multifunction printer.	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O5 IT infrastructure and support		Established	Ineval maintains the IT infrastructure and support needed to implement and manage national and international large-scale assessments. These capabilities have been built on more recent experiences with assessing students online and offline for the SEST over previous years. This is important as Ecuador has opted to implement PISA 2025 as a computer-based assessment. The following IT infrastructure and support elements are currently in place:  • Ineval have upgraded their technological resources, including gaining access to a stable 100 Mbps internet connection provided through the state Internet Service Provider.  • The network environment is secured through IT policies and user-only access to applications, databases, or other outputs/activities that are required by Ineval staff. Network user permissions are granted via an Active Directory management tool or IP addressing, while servers are secured using SSL security certificates and encrypted connections. The security of web application servers is also maintained through a Web Application Firewall, and analysing HTTP/HTTPS request packets and traffic models. Finally, the overall network environment is managed by a dedicated security team.	
			<ul> <li>Each department at Ineval has access to password protected cloud storage.</li> </ul>	
			<ul> <li>Ineval staff have access to an official email account for information management. This is protected against malware and phishing through the implementation of IT policies and protocols for securing the network environment.</li> </ul>	
			<ul> <li>Software licenses have been obtained, including licenses for specialised software for conducting education evaluations (e.g., for encrypting code/information to ensure the confidentiality of the information contained.</li> </ul>	
			<ul> <li>IT personnel are employed across evaluation processes/phases to provide technical support.</li> </ul>	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			<ul> <li>Ineval also implements the Government's Information Security Scheme EGSI V2.0 for maintaining information confidentiality, integrity and availability. This is achieved through the application of information security risk management process and the selection of controls for the treatment of the risks, as informed by guidelines issued by the Ministry of Telecommunications and Information Security.</li> </ul>	
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	Various policies and procedures have been established to secure assessment materials and data. Ineval's Department of Legal Advice also has the capacity to provide support for this capacity indicator, if required. Examples of Ineval's security policies and procedures include the use of:  • Confidentiality agreements that all staff are required to sign to ensure security and confidentiality.  • Computer-based applications for large-scale assessments that implement digital confidentiality agreements/consent that must be approved by actors. Such actors include test applicators, directors/principals of educational institutions, and students.  • Where paper-based assessments are used, strict monitoring procedures are implemented to guarantee the security of assessment materials from the time these are sent to educational institutions to when they return to Ineval. These procedures ensure that assessment materials, for example, are only used by students taking the assessment, and that codes are assigned to student names and student records to maintain their anonymity and the confidentiality of data collected.  • Encryption to secure assessment data and access to this data made available to one Ineval employee who maintains oversight responsibilities. Ineval also has in place an information security committee to ensure compliance with guidelines for internal confidentiality of information, as well as with relevant legislation (e.g., the Organic Law on Protection of Personal Data).	
O7 Instrument development	Quality assurance mechanisms are in place to ensure the assessment instruments (tests and contextual questionnaires) are reliable, valid and fair.	Emerging	The process of quality assuring instrument development is overseen and managed at various levels. The Department of Technical Coordination of Design and Production of Educational Assessment coordinates design processes associated with education evaluation models, items, and psychometric analysis. This includes quality assurance through the pursuit of an improvement agenda with respect to assessment design and methodologies.	Capacity to adapt test items so that they are suited to real-world challenges.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			The Department of Item Production is focused on managing the production of assessment items. This includes the review and adaptation of items from international assessments, and improving the planning and production of items. This department directly oversees the technical quality, conceptual validity, and contextual relevance of test items to ensure that they are reliable, valid, and fair. As communicated by the NPM, there is scope for capacity building with respect to supporting how test items are adapted to address real-world challenges.  The Department of Psychometric Analysis is also involved in quality assuring assessment instruments as part of its mandate to investigate scoring methods and psychometric analytical approaches.	
O8 Translation and linguistic quality control	Where assessment instruments are developed in multiple languages, linguistic quality assurance procedures are in place to ensure the items are linguistically and psychometrically equivalent across multiple languages.	Emerging	Although Ineval has previously implemented and managed significant national (e.g., SEST and Ser Estudiante en la Infancia) and international (e.g., PISA-D and ERCE) large-scale assessments, it is in the process of further developing its capabilities and experience with respect to the latter.  Within the context of PISA, a dedicated Translation and Adaption Coordinator, and three translation/adaptation analysts, have been employed to support translation and linguistic quality control. Given that this team was established to assist with implementing PISA 2025, there is scope to provide capacity building opportunities that can enhance Ineval's capability to quality assure these tasks independently of other Spanish-speaking countries and develop as a regional leader for future PISA cycles.	Build the translation team's capacity to independently quality assure translation and adaption tools for large-scale assessments.  Capacity building activities should also target the translation and adaptation of large-scale assessment items and responses, including those relating to cognitive and open-ended questions. This should be aligned with capacity indicator O7 Instrument development above.
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	The Department of Analysis, Implementation, and Territorial Coverage develops plans and manages processes for guaranteeing the validity of its sampling approaches. This is important given the range of socioeconomic (e.g., social equity and ICT gaps) and cultural (e.g., multicultural and multilingual) challenges, as well as when seeking to assess students across the Sierra and Costa regions. Accordingly, this department establishes clear sample selection and exclusion criteria, considers diverse educational contexts, reviews and analyses associated factors survey data in light of sampling requirements, and engages with different entities/actors to ensure that education evaluations are applied across the National Education System. These sampling plans and processes are necessary for providing territorial coverage across Ecuador and for supporting educational evaluations that rely on large-scale assessment data, such as PISA 2025. That said, despite Ecuador's participation in international age-based assessments like PISA-D and PIAAC, Ineval has only previously conducted grade-based assessments.	Build greater organisational capacity to plan and conduct large-scale assessments using age-based samples.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
O10 Survey operations and logistics	Quality assurance mechanisms are in place to ensure survey operations are standardised, monitored and documented. Measures are in place to ensure participation and to monitor response rates.	Emerging	This indicator is evidenced across three Ineval departments. The Department of Instrument Administration is focused on developing instruments for education evaluation through its design, assembly, and qualitative review processes. This includes preparing and updating standardised methodological documents, guides, manuals, and instructions, and analysing the quality and functionality of evaluation instruments, such as large-scale assessments. The Department of Analysis, Implementation, and Territorial Coverage also provides evidence for this indicator by managing the application of national and international instruments in accordance with Ineval's authority and mandate to conduct education evaluations. The monitoring of participation and response rates are supported through the Department of Psychometric Analysis, which provides reporting on the reliability of results obtained from applied instruments.  Challenges facing PISA 2025 survey operations and logistics include education in emergencies (e.g., earthquakes, floods, and volcanic eruptions), which have the potential to disrupt large-scale assessment processes and protocols. Additionally, support might be provided with regards to onboarding and training relevant staff (e.g., test administrators and applicators) for the field trial and main survey, and workshops addressing best-practices and technical information about PISA 2025.	Provide capacity building that includes:  - Best practices and tips for quickly preparing test administrators / applicators to be job ready  - Information about PISA 2025's use of new technology-based assessment methods (e.g., online tests, simulations, and virtual environments);  - Information about how to ensure the validity and reliability of PISA 2025 results
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	The Department of Geomatics and Information Management has direct oversight for quality assuring data management. Specifically, it is tasked with ensuring that the database has the necessary technologies developed and implemented to support the analysis and interpretation of results; utilises approaches for data extraction, transformation, and loading, that are on a continuous cycle of improvement (i.e., quality assurance); and enables comprehensive, valid, and reliable evaluations of the National Education System.	
O12 Data analysis and reporting	Technically sound and appropriate data analysis techniques are used to provide analytical results that permit valid and useful inferences about the population(s) of interest. Analytical results are fully documented and reproducible.	Established	The Department of Geomatics and Information Management oversees the psychometric analysis of instruments and items. Reliable data analysis and reporting are further supported through rigorous conceptual and technical processes implemented by this department. The production of valid and useful population inferences are also supported by departmental staff, as well as the reporting and dissemination of data analysis to different actors and interested parties across the education system. The outcomes of assessments and corresponding analytical processes (e.g., SEST) are publicly available on the Ineval website and, thus, enable results to be reproducible. Prior to this, the process of investigating scoring methods is managed by the Department of Psychometric Analysis.	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
			The need to undertake technically sound and appropriate data analysis and reporting cannot be overstated. Almost all stakeholders in government (Ministry of Education officials) and at Ineval (Directors, managers, and coordinators), as well as principals/directors and teachers at schools, reported on the importance of using PISA data to inform and address a range of challenges in Ecuador. These include developing education polices to close learning gaps, improve teaching and learning, support school leadership practices, and improve policy planning.	
O13 Dissemination and communication	Appropriate products and approaches to reporting and dissemination are tailored to the different stakeholder groups and promote appropriate and effective use of the assessment data and results by those groups.	Established	Ineval has a dedicated Department for Social Communication that is tasked with disseminating and promoting its education evaluation activities to key stakeholders and across the general population. As stated multiple times by various stakeholders during the in-country visit, the types of strategies implemented by this department will be crucial for preparing the population to accept, participate in, and receive results from the PISA 2025 assessment. Accordingly, this department:  • Provides advice/communications to the authorities and officials on Ineval's education evaluation activities	
			<ul> <li>Proposes communication strategies for educational evaluation processes and the presentation of results</li> <li>Prepares, produces, and disseminates informative materials and</li> </ul>	
			media to communicate Ineval's activities to key stakeholders and the general population; including communications via social media and networks, and on Ineval's website	
			<ul> <li>Coordinates events and promotional materials for communicating/disseminating the outcomes of educational evaluations, including large-scale assessments</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.	Established	The PISA 2025 NPM also serves as the General Technical Coordinator at Ineval. His position at Ineval is central for managing and supporting the administration of all education evaluation activities and agenda at Ineval, including the implementation and management of large-scale assessment phases. Prior to this appointment at Ineval in 2022, the NPM served as Director of National Educational Standards at the Ministry of Education, and before this, as a Professor of Education at the University of the Pacific. Accordingly, the NPM brings significant real-world and conceptual knowledge and experience to this role, as well as the necessary project management skills for overseeing all assessment activities associated with implementing and manging PISA 2025. In his role as NPM, he maintains the decision-making authority to lead the PISA 2025 NC team and has a good grasp of English for communicating orally and in writing.	
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	It was confirmed by the NC that the requirements for this role could be addressed by three Ineval staff. First, the Translation and Adaption Coordinator has had previous experience adapting assessment items for visually and hearing-impaired populations, and ensuring the conceptual and technical quality of assessment content. She is also engaged in topics involving climate change and is suitably qualified to support the translation and adaption for assessment items associated with Agency in the Anthropocene for PISA 2025.  Second, the Coding Leader, is experienced with overseeing tasks associated with instrument design, psychometric analysis, and conducting field operations. She has served in this capacity since 2014, as well as in other supportive roles, at Ineval and other government organisations. She is also the Director of Psychometric Analysis at Ineval.  Third, the Director for Item Production (Ineval) has the potential to provide support with regards to reviewing and adapting items for international assessment. It is noted, however, that her role in PISA 2025 is as the Manager of the Participation Agreement (i.e., signing processes and managing payments) and that she may have limited engagement with tasks involving this capacity indicator.  Consequently, while these individuals possess the collective ability to address the demands of this capacity indicator, the absence of a dedicated PISA 2025 member in this role may present challenges. Specifically, with adapting items for international assessment, and managing communication and collaboration between Ineval staff.	Build greater capacity to review and adapt items for international assessment.

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
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 possesses the experience needed to implement and manage sampling tasks for national large-scale assessments. Since 2017, she has been involved in and gained increasing experience in preparing the sample design and selection for national assessments, as well as analysing the validity and reliability of data. She has also had wide-ranging experience with sampling and collecting field data from target groups, verifying sample data, managing and training data entry teams, and managing databases.  There may, however, be scope to further support the Sampling Manager and upskill Ineval staff with regards to PISA sampling processes and procedures; as voiced in the online questionnaire for individuals	Enhance the Sampling Manger's capacity to conduct advanced sampling techniques / approaches to implement PISA 2025, inform educational evaluations, and improve education quality.
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.	Established	The PISA 2025 Survey operations and logistics manager is also employed as the Director of Analysis, Implementation, and Territorial Coverage at Ineval. Since 2019, she has gained increasing experience with various tasks that have involved the implementation of national large-scale assessments (e.g., Ser Bachiller). Tasks have included developing strategies for implementing large-scale assessments across different regions in Ecuador, coordinating assessment activities with various stakeholders, developing communication strategies for implementing online assessments. She has also been involved in reporting outcomes, including risks and recommendations, associated with survey operations and logistics management.  Support for preparing school-level materials can be provided through Ineval's Department of Instrument Administration, which manages and updates methodological documents, guides, manuals, and instructions. Additionally, issues involving the security, confidentiality, and technical support needed for computer-based assessment delivery can be provided by Ineval's Department of Geomatics and Information Management.	
I5 Data manager	The data manager is appropriately skilled and experienced in data management, data processing, quantitative data analysis and using statistical packages such as SPSS, SAS, STATA or R, to oversee and manage all data-related activities at the national level.	Established	The PISA 2025 Data Manager maintains the capabilities needed to complete the requirements of this role. She is the only member of the PISA 2025 project team who was also part of the team that delivered PISA-D for Ecuador. She has had past and ongoing experience validating data from assessment instruments, analysing statistical data and providing reporting deliverables across multiple project contexts, using secure procedures to transmit participants' data and maintaining their privacy. This experience includes training staff in data entry procedures, and supervising/training support staff engaged in data entry and collection. Crucially, she has also served as the data manager for the:  • ERCE: December 2017 – September 2022  • PIAAC: December 2017 – December 2019  • PISA-D: December 2017 – December 2018.	

Indicator area	Capacity indicator	Rating	Justification	Identified capacity needs
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.	Emerging	The lead data analyst is suitably qualified and experienced to analyse and interpret data using a range of statistical packages (e.g., SPSS, STATA, R), and has worked in the area of statistical analysis and reporting since 2014. She has also delivered project reporting and presentations to key stakeholders in education and government contexts, and planned and implemented research workshops. Having not participated in PISA-D, capacity building may be required. This may be provided to her and other Ineval staff to enhance their experience with managing and analysing assessment data intended for international comparisons, as well as using statistical approaches and protocols that are unique to PISA.	Build technical and applied experience to manage, analyse, and report PISA data for different stakeholders.
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	The Information Technology Coordinator also serves as the Coordinator of Technical Coordination of Management of Educational Assessment at Ineval. Over two decades, he has amassed education and assessment-based expertise and experience in cybersecurity, the development systems using various programming languages PHP, Java and Visual Basic, and managing SQL and PostgreSQL database administration. This has included the installation, configuration, and provision of training required to use computer-based educational assessments across national and international contexts. He has also provided the Ecuadorian government with IT/ICT advice, and directed and executed online and offline applications that inform education evaluations, including those relating to large-scale assessments.	
I8 Communication in English	The NC ensures that qualified staff are available to respond to requests in English by the OECD and international contractors during all stages of the project.	Established	Key staff within the NC play a supportive role when communicating in English at conversational and technical levels. These staff members are fluent in their written and spoken command of English, and provide the English-language support needed across all project stages. They occupy the following roles:  PISA 2025 NC Overseer  PISA 2025 Support to the NC	

# 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	Instituto Nacional de Evaluación Educativa (Ineval)  Teodoro Álvarez, Delegate of the President of the Republic of Ecuador and President of the Board of Directors of Ineval  Susana Araujo, Executive Director (Ineval) and PISA Governing Board Member for Ecuador  Ministry of Education  Mara Brown, Minister of Education  Diana Castellanos, Vice Minister of Education  Emilia Sofa Vallejo, Undersecretary of Educational Foundations  Juan Pablo Andrade, National Director of Educational Standards  Daniela Maldonado, National Director of Curriculum  Freddy Peñafiel, Former Minister of Education  Cinthya Game, Former Vice-Minister of Education  Department of Education, Recreation and Sports of the Municipality of Quito, Office of the Secretariat  María Isabel Salvador, Secretary of Education, Recreation and Sports of the Municipality of Quito		

Dimensions	Government (national or sub-national)	Education or assessment institutions, organisations, agencies	Representatives in education development partner/ donor organisations
Organisational level	<ul> <li>Instituto Nacional de Evaluación Educativa (Ineval)</li> <li>José Flores, General Technical Coordinator and NPM for PISA 2025</li> <li>Carlos Cahuasquí, Coordinator: Technical Coordination of Design and Production of Educational Assessment</li> <li>David Gualpa, Coordinator: Technical Coordination of Management of Educational Assessment and PISA 2025 Technology Coordinator</li> <li>Victor Espinosa, Director: Strategic Design Department of Educational Assessments</li> <li>Natalia Esparza, Director: Item Production Department and PISA 2025 Administrator of the participation agreement</li> <li>Natalia Echezuría, Director: Instrument Administration Department and PISA 2025 Design and Printing Leader</li> <li>Salomé Borja, Director: Psychometric Analysis Department and PISA 2025 Coding Leader</li> <li>Aracely Pineda, Director: Department of Analysis, Implementation, and Territorial Coverage</li> <li>Marco Amaya, Director: Geomatics and Information Management Department</li> <li>Mary Terán, Director: Department of Educational Assessment Analysis</li> </ul>	Federation of Secular Private Education Establishments  • Karen Mejía, Representative  Ecuadorian Network of Pedagogy  • Josué Habacuc, Director	UNICEF  María Fernanda Porras, Education Officer  UNESCO  Isabel Maldonado, Specialist in inclusion, gender and disability / Education  Inter-American Development Bank  Luana Moratta, Education Senior Associate  The World Bank  Ezequiel Molina, Senior Economist in the Education Global Practice  Helena Rover, Senior Education Specialist  Ciro Avitabile, Senior Economist
Individual level	Instituto Nacional de Evaluación Educativa (Ineval)  Gustavo Beltrán, NC Overseer Laura Guerra, PISA 2025 Translation and Adaptation Coordinator Georgina Silva, PISA 2025 National Data Manager Fernanda Cadena, PISA 2025 Sampling Leader Aracely Pineda, PISA 2025 Application Leader (Survey operations leader) Salomé Borja, PISA 2025 Coding Leader	School Principal / Director (School)  María Rita Haro Pachacama, General Pintag Mónica Tatiana Camaelo Rodrguez, UEM Juan Wisneth Miryam Silvana Ushiña Chuquimarca, UEM Julio Manuel Peñaherrera Gladys Espinosa, UE Réplica Montufar Freddy Valladares, UEF Miguel A. Zambrano Francisco Javier Gallardo Morales, UEF	

Dimensions	Government (national or sub-national)	Education or assessment institutions, organisations, agencies	Representatives in education development partner/ donor organisations
	Alejandra Espinosa, PISA 2025 Lead Analyst	Conocoto  Paulina Marlene Risueño Calahorrano, UEF Alexander Von Humboldt  José Miguel Castillo Barros, Alfonso del Hierro Cristina Baca, Tomás Moro Estela Elizabeth Miranda Galarza, Instituto Nacional Mejía Sandra Coello, Colegio Manuel Córdova Patricia Trujillo Acevedo, Gran Colombia Marianita Del Rocío Bonilla, Gran Colombia Bernardita Proaño Vargas, Gran Colombia Aleida Monserrat Alvarracín, Alfredo Cisneros Karina Flores, UEM Cotocollao	
		Teacher (School)	
		<ul> <li>Marjorie Pillajo, Dr. Emilio Uzcátegui</li> <li>Esthela Freire, Dr. Emilio Uzcátegui</li> <li>Liliana Gómez, Institución Educativa Central Técnico</li> <li>Mario Chillagoma, UE Manuela Sáenz</li> <li>Verónica Rivadeira, Alfredo Cisneros</li> <li>Eddy Cárdenas, Pintag</li> <li>Jeysi Torres, UEF Conocoto</li> <li>María Elena Barrera, UEM Quitumbe</li> <li>Angélica Vásquez, Colegio Menor</li> <li>María Angélica Aldas, UE Diez de Agosto</li> <li>Maribel Coello, UEMM Bicentenario</li> <li>Jorge Andrango, UE Manuela de Santa Cruz y Espejo</li> <li>Mara José Santander, Escuela Fiscal Guayaquil</li> <li>Carmen Pillajo, Escuela Fiscal Guayaquil</li> <li>Pilar Estupiñan, UE Manuela de Santa Cruz y Espejo</li> <li>Gladys Espinosa, UE Réplica Montufar</li> <li>Gabriela Constante, UE Raúl Andrade</li> <li>Christian Maigua, UE Raúl Andrade</li> </ul>	

Dimensions	Government (national or sub-national)	Education or assessment institutions, organisations, agencies	Representatives in education development partner/ donor organisations
		<ul> <li>Carolina Duque, Gran Colombia</li> <li>Jessica Indio, UEF Guayaquil</li> <li>Carmen Yaguana, Gran Colombia</li> <li>Sandra Reyes, Gran Colombia</li> <li>Teresa Benitez, Gran Colombia</li> <li>Jessica Puga, Unidad Educativa Central Técnico</li> <li>Jennifer Tulcanaza, Unidad Educativa Central Técnico</li> <li>Estalin Ramos, Alfredo Cisneros</li> <li>Galo Ruiz, UEF Eugenio Espejo</li> <li>Alberto Poveda, UEM Sebastián de Benalcázar</li> <li>Petronio Piedra, Francisco Zurita</li> <li>Mirian Gualacota, Los Shyris</li> <li>Vanesa Caisaguano, Los Shyris</li> <li>Verónica Cisneros, JJJ Camaño y Flores</li> <li>Priscila Venegas, Escuela Eugenio Espejo</li> <li>Yamira Aguilar, Escuela Guayaquil</li> <li>Pablo Pachaicela, La Salle Conocoto</li> <li>Ana Proaño, Unidad Educativa Central Técnico</li> </ul>	

Table A B.2. Document mapping table

Dimensions	Documents
Enabling environment	
Organisation level	<ul> <li>Instituto Nacional de Evaluación Educativa. (2023). Prácticas educativas eficaces. ¿Qué hacer para que los estudiantes consoliden un aprendizaje significativo? Ineval.</li> </ul>
	<ul> <li>Instituto Nacional de Evaluación Educativa. (2022). Agenda de investigación en evaluación educativa 2022-2025. Ineval.</li> </ul>
	<ul> <li>Instituto Nacional de Evaluación Educativa. (2022). Efectos socioemocionales de la COVID-19 en los aprendizajes de los estudiantes de 4.º de Educación General Básica (EGB). Ineval.</li> </ul>
	<ul> <li>Instituto Nacional de Evaluación Educativa. (2022). Manuals for the processes of applying national and international evaluations conducted by Instituto Nacional de Evaluación Educativa. "Ser Estudiante" 2022 On-site modality with offline evaluation instrument. Ineval.</li> </ul>
	<ul> <li>Instituto Nacional de Evaluación Educativa. (2022). Manuals for the processes of applying national and international evaluations conducted by Instituto Nacional de Evaluación Educativa. "Ser Estudiante" 2022 On-site modality with online evaluation instrument. Ineval.</li> </ul>
	<ul> <li>Instituto Nacional de Evaluación Educativa. (2022). Modelo específico de evaluación 'Ser Estudiante'. Ineval.</li> </ul>
	<ul> <li>Instituto Nacional de Evaluación Educativa. (2022). Ser Estudiante 2022. Ineval.</li> </ul>
	<ul> <li>Instituto Nacional de Evaluación Educativa. (2021). Cuadernillo Técnico 1. Elaboración y validación de modelos y estructuras de evaluación. Ineval.</li> </ul>
	<ul> <li>Instituto Nacional de Evaluación Educativa. (2021). Cuadernillo Técnico 3. Administración de instrumentos. Ineval.</li> </ul>
Individual level	<ul> <li>Ineval responses to the PISA 2025 CBIS Capacity Needs Assessment Questionnaire for Officials and Individuals</li> </ul>
	<ul> <li>Curriculum Vitae for Ineval staff appointed to the PISA 2025 NC</li> </ul>
	<ul> <li>Susana Araujo, PISA Governing Board Member for Ecuador</li> </ul>
	o José Flores, NPM
	o Gustavo Beltrán, NC Overseer
	<ul> <li>David Gualpa, Technology Coordinator</li> </ul>
	o Georgina Silva, National Data Manager
	<ul> <li>Laura Guerra, Translation and Adaptation Coordinator</li> </ul>
	o Fernanda Cadena, National Sample Manager
	<ul> <li>Aracely Pineda, Application Leader (Survey operations leader)</li> </ul>
	o Salomé Borja, Coding Leader
	<ul> <li>Alejandra Espinosa, Lead Analyst</li> </ul>
	Natalia Esparza, Manager of the Participation Agreement
	<ul> <li>Andrea Almeida, Support to NC</li> </ul>

# **Annex C. Capacity Needs Assessment consultations**

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

Name	Title	Organisation
Teodoro Álvarez	Delegate of the President of the Republic of Ecuador and president of the board of directors of Ineval	Instituto Nacional de Evaluación Educativa
Susana Araujo	Executive Director (Ineval) and PISA Governing Board Member for Ecuador	Instituto Nacional de Evaluación Educativa
José Flores	General Technical Coordinator and NPM for PISA 2025	Instituto Nacional de Evaluación Educativa
Marco Amaya	Director: Geomatics and Information Management Department	Instituto Nacional de Evaluación Educativa
Salomé Borja	Director: Psychometric Analysis Department and PISA 2025 Coding Leader	Instituto Nacional de Evaluación Educativa
Natalia Echezuría	Director: Instrument Administration Department and PISA 2025 Design and Printing Leader	Instituto Nacional de Evaluación Educativa
Natalia Esparza	Director: Item Production Department and PISA 2025 Administrator of the participation agreement	Instituto Nacional de Evaluación Educativa
Victor Espinosa	Director: Strategic Design Department of Educational Assessments	Instituto Nacional de Evaluación Educativa
Aracely Pineda	Director: Department of Analysis, Implementation, and Territorial Coverage and PISA Application Leader (Survey operations leader)	Instituto Nacional de Evaluación Educativa
Mary Terán	Director: Department of Educational Assessment Analysis	Instituto Nacional de Evaluación Educativa
Carlos Cahuasquí	Coordinator: Technical Coordination of Design and Production of Educational Assessment	Instituto Nacional de Evaluación Educativa
David Gualpa	Coordinator: Technical Coordination of Management of Educational Assessment and PISA 2025 Technical Coordinator	Instituto Nacional de Evaluación Educativa
Gustavo Beltrán	PISA 2025 National Centre Overseer	Instituto Nacional de Evaluación Educativa
Laura Guerra	PISA 2025 Translation and Adaptation Coordinator	Instituto Nacional de Evaluación Educativa
Georgina Silva	PISA 2025 National Data Manager	Instituto Nacional de Evaluación Educativa
Fernanda Cadena	PISA 2025 Sampling Leader	Instituto Nacional de Evaluación Educativa
Alejandra Espinosa	PISA 2025 Lead Analyst	Instituto Nacional de Evaluación Educativa
María Brown	Minister of Education	Ministry of Education
Diana Castellanos	Vice Minister of Education	Ministry of Education
Emilia Sofía Vallejo	Undersecretary of Educational Foundations	Ministry of Education
Juan Pablo Andrade	National Director of Educational Standards	Ministry of Education
Daniela Maldonado	National Director of Curriculum	Ministry of Education
María Isabel Salvador	Secretary of Education, Recreation and Sports of the Municipality of Quito	Secretariat of Education of the Municipality of Quito
Luana Moratta	Education Senior Associate	Inter-American Development Bank

Name	Title	Organisation
Ciro Avitabile	Senior Economist	The World Bank
Ezequiel Molina	Senior Economist in the Education Global Practice	The World Bank
Helena Rover	Senior Education Specialist	The World Bank
María Fernanda Porras	Education Officer	UNICEF
Isabel Maldonado	Specialist in inclusion, gender and disability / Education	UNESCO
Cinthya Game	Former Vice-Minister of Education	Education Innovation consultant
Josué Habacuc	Director	Ecuadorian Network of Pedagogy
Karen Mejía	Representative	Federation of Secular Private Education Establishments
Freddy Peñafiel	Former Minister of Education	Jacksonville University
José Miguel Castillo Barros	Principal / Director	Alfonso del Hierro
Aleida Monserrat Alvarracín	Principal / Director	Alfredo Cisneros
Sandra Coello	Principal / Director	Colegio Manuel Córdova
María Rita Haro Pachacama	Principal / Director	General Pintag
Patricia Trujillo Acevedo Marianita Del Rocío Bonilla Bernardita Proaño Vargas	Principal / Director	Gran Colombia
Estela Elizabeth Miranda Galarza	Principal / Director	Instituto Nacional Mejía
Cristina Baca	Principal / Director	Tomás Moro
Gladys Espinosa	Principal / Director	UE Réplica Montufar
Paulina Marlene Risueño Calahorrano	Principal / Director	UEF Alexander Von Humboldt
Francisco Javier Gallardo Morales	Principal / Director	UEF Conocoto
Freddy Valladares	Principal / Director	UEF Miguel A. Zambrano
Karina Flores	Principal / Director	UEM Cotocollao
Mónica Tatiana Camaelo Rodríguez	Principal / Director	UEM Juan Wisneth
Miryam Silvana Ushiña Chuquimarca	Principal / Director	UEM Julio Manuel Peñaherrera
Estalin Ramos Verónica Rivadeira	Teacher	Alfredo Cisneros
Angélica Vásquez	Teacher	Colegio Menor
Esthela Freire Marjorie Pillajo	Teacher	Dr. Emilio Uzcátegui
Priscila Venegas	Teacher	Escuela Eugenio Espejo
Carmen Pillajo María José Santander	Teacher	Escuela Fiscal Guayaquil
Yamira Aguilar	Teacher	Escuela Guayaquil
Petronio Piedra	Teacher	Francisco Zurita
Teresa Benitez Carolina Duque Sandra Reyes Carmen Yaguana	Teacher	Gran Colombia
Liliana Gómez	Teacher	Institución Educativa Central
	. 555.101	Técnico

Name	Title	Organisation
Verónica Cisneros	Teacher	JJJ Camaño y Flores
Pablo Pachaicela	Teacher	La Salle Conocoto
Vanesa Caisaguano Mirian Gualacota	Teacher	Los Shyris
Eddy Cárdenas	Teacher	Pintag
María Angélica Aldas	Teacher	UE Diez de Agosto
Jorge Andrango Pilar Estupiñan	Teacher	UE Manuela de Santa Cruz y Espejo
Mario Chillagoma	Teacher	UE Manuela Sáenz
Gladys Espinosa	Teacher	UE Réplica Montufar
Jeysi Torres	Teacher	UEF Conocoto
Galo Ruiz	Teacher	UEF Eugenio Espejo
Jessica Indio	Teacher	UEF Guayaquil
María Elena Barrera	Teacher	UEM Quitumbe
Alberto Poveda	Teacher	UEM Sebastián de Benalcázar
Maribel Coello	Teacher	UEMM Bicentenario
Ana Proaño Jessica Puga Jennifer Tulcanaza	Teacher	Unidad Educativa Central Técnico

### **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

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

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

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

Nam	e of the national large-scale assessment		
(this	will be populated by the answers above)		
<b>A5</b> . V	A5. What learning domains were included?  • Reading/literacy/language • Mathematics/numeracy • Sciences • Social sciences • Computing/information literacy/IT/ICT • 21st century skills/global citizenship/civi		-
A6.	How was the performance data measured?		(Please tick all that apply)
а	Raw scores (or averages of raw scores)		
b	Percent correct (per learning domain)		
С	Scale scores		
d	Performance levels on a scale		
е	Described proficiency levels		
f	Linked performance data (to monitor changes over tir	ne/between grades)	
A7.	What type of contextual information was collected?		(Please tick all that apply)
а	Gender		
b	Socio-economic status		
С	Language spoken at home		
d	School structures and resources (e.g., public/private class sizes)	status, location of school, school and	
е	Teaching and learning practices (e.g. teaching metho	ods, classroom management)	
A8.	What areas of the large-scale national assessment w that apply)	as led by your country? (Please tick all	(Please tick all that apply)
а	Coordination of the assessment program		
b	Design of the assessment		
С	Item development		

d	Sampling	
е	Implementation of the assessment	
f	Analysis	
g	Reporting	
h	Dissemination of results	

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

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

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

A10.	Please list, up to three, most recent international large-scale	A11. In which	A12. What were the
	assessment(s) your country implemented and tell us about when,	year(s) was it	targeted grades of
	and with whom it was implemented.	implemented?	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.

<ul> <li>(drop down menu of:</li> <li>Reading/literacy/language</li> <li>Mathematics/numeracy</li> <li>Sciences</li> <li>Social sciences</li> <li>Computing/information literacy/IT/ICT</li> </ul>
(

d

е

A14.	How was the performance data measured?	(Please tick all
		that apply)
а	Raw scores (or averages of raw scores)	
b	Percent correct (per learning domain)	
С	Scale scores	
d	Performance levels on a scale	
е	Described proficiency levels	
f	Linked performance data (to monitor changes over time/between grades)	
A15.	What type of contextual information was collected?	(Please tick all
		that apply)
а	Gender	
b	Socio-economic status	
С	Language spoken at home	

School structures and resources (e.g. public/private status, location of school, school and

Teaching and learning practices (e.g. teaching methods, classroom management)

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

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

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

If you have answered "Yes" please continue to question A18.

If you have answered "No", please continue to Section B.

viinistry	of Education or external to the ministry and/or government)			_
A19.	Is the assessment centre widely recognised in your country as an authority in student assessment? (please circle your answer)	Yes	No	Not sure
19.a. l	Please explain the reason for your answer in A19?			_
				_
A20.	Which body is the assessment centre accountable to?		•	 se tick the mos curate answer)
A20.	Which body is the assessment centre accountable to?  An autonomous board or committee that is institutionally separate from assessment centre (e.g. the centre is within the MoE and reports to a boar within the jurisdiction of the MoE)		•	
	An autonomous board or committee that is institutionally separate from assessment centre (e.g. the centre is within the MoE and reports to a boar	rd not	•	
a	An autonomous board or committee that is institutionally separate from assessment centre (e.g. the centre is within the MoE and reports to a boar within the jurisdiction of the MoE)  A board or committee that belongs to the same institution as the assessment of	rd not	•	

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

### Section B: Implementation of PISA 2025

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

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.

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

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

В3.	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
а	National Project Manager			
b	Survey operations and logistics manager			
С	Administrative Officer			
d	Sampling Manager			
е	Assessment instruments coordinator			
f	Data Manager			
g	Data analyst			
h	IT Coordinator			
i	Translation/Adaptation coordinator			

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

	If you answered "Yes" or "In progress" to B4, please provide a copy of the available job descriptions to your liaison office		nglish) of	any	
B5.	Are there processes and procedures in place to secure extra permanent or temporary staff if needed? (Please circle your answer)	Yes	No	Not su	re
<b>36</b> . Ca	an you describe the office space available for the PISA assessment team?				
				-	
B7.	Are there adequate and secure (i.e. safe from unauthorised access, theft, fir (Please tick the relevant box in each row)	es, floo	ds):	Yes	No
а	Workstations				
b	Meeting rooms				
С	Facilities for data processing				
d	Facilities for coding operations				
е	Storage rooms for assessment material				
B8.	Is there adequate: (Please tick the relevant box in each row)			Yes	No
а	Number of computers running Windows with up-to-date Microsoft Office (one team member)?	per ass	sessment		
b	High bandwidth internet connection? (e.g. at least 50mbits/sec)				
С	Secure network and servers? (e.g. requires password to access)				
d	Secure cloud access/storage? (e.g. requires password to access)				
е	Number of printers, copiers and scanners?				
f	Email accounts specific for PISA 2025?				

В9.	Do you have security policies and procedures in place to ensure all	Yes	No	Not sure
	PISA 2025 assessment material and data is kept secure and confidential at			
	all times? (please circle your answer)			

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

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

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

В1	. In your opinion, do all relevant individuals understand the security ar	d Yes	No	Not sure
	confidentiality requirements?			
	(please circle your answer)			

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

### Section C: Legislation and engagement

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

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

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

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

# If you answered "Yes" to C3 please provide a copy (in English) of the legislation to your

C4.	Is the participation in large-scale assessments of schools and students enacted by this law or regulation?	Yes	No	Not sure
	(please circle your answer)			
<b>C5</b> . Ho	ow do senior government officials promote large-scale assessments?			
C6.	Are there any key stakeholders who oppose large-scale assessment programs?	Yes	No	Not
•••	The title diff to the programs.	. 00	'''	
6.a.	(please circle your answer)  If you answered 'yes' to C6, what are their main reasons for opposition?			sure
C6.a.	If you answered 'yes' to C6, what are their main reasons for opposition?  What kinds of products will be developed to communicate the assessment results t	o (Ple	ase tick	sure
	If you answered 'yes' to C6, what are their main reasons for opposition?  What kinds of products will be developed to communicate the assessment results t stakeholders?	o (Ple	ase tick	
C7.	If you answered 'yes' to C6, what are their main reasons for opposition?  What kinds of products will be developed to communicate the assessment results t	o (Ple	ase tick	
C7.	If you answered 'yes' to C6, what are their main reasons for opposition?  What kinds of products will be developed to communicate the assessment results t stakeholders?  Reports	o (Ple	ase tick	
C7.	What kinds of products will be developed to communicate the assessment results t stakeholders?  Reports  Policy briefs	o (Ple	ase tick	
C7. a b c	What kinds of products will be developed to communicate the assessment results t stakeholders?  Reports  Policy briefs  Assessment database	D (Ple	ase tick	

# Section D: Funding

<b>D1</b> . Ho	w is the implementation of PISA 2025 going to	be funded?					
D2.	In your opinion, is there adequate funding for (please circle your answer)	r the impleme	entation of PIS	A 2025?	Yes	No	Not sure
<b>D2.a</b> . If	f you answered "no" to D2, please specify why.						
D3.	Has funding been fully secured to particle meetings and trainings? (please circle your a	•	SA 2025 inter	rnational	Yes	No	Not sure
<b>D3.a</b> . If	f funding has not yet been fully secured, do you	expect to se	ecure the fundi	ing, and b	y when?		
D4.	What is the main source of funding for the implementation of PISA 2025? (please circle your answer)	Internal sources	Donors or sponsors	internal	contribution sources sponsors	s and	Not sure
D5.	Which development partners/donors (if any) actively supporting/funding the developeducation in your country?						
D6.	Please list below the current and planne development partners/donors:	d education	assessment	projects/r	orograms	funded	d by the
а							
b							
С							

### 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)

E2.	Do you expect to face any of these challenges when using large-scale assessment data in your country?	(please tick all that apply)
а	Lack of confidence in the reliability and validity of assessment results	
b	Inability to analyse and interpret assessment data	
С	Your own difficulty in understanding the purpose, intent and findings of the assessment	
d	Wider stakeholders have difficulty in understanding the purpose, intent and findings of the assessment	
е	Difficulty in using the results to inform decision making in education policies and practices	
f	Difficulty in dissemination of the results widely to engage wider stakeholders	
g	Fear of reprisal in light of poor assessment results	
h	Other	
<b>E2.i</b> . If v	rou answered "Other" to F2_please specify:	

### Section F: Educational Management and Information System

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

<sup>&</sup>lt;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.

<b>F2</b> . If you answered "Yes" to F1, which department or unit of the Ministry of Education or agend responsible for managing EMIS in your country?	-,,
	- - -
	_
<b>F3</b> . If you answered "No" to F1, please explain how data and information related to schools, teacher are currently collected, integrated, processed, maintained, and used:	s and students
	- - -

# Section G: Training

G1.	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)
а	No opportunities are available	
b	Test development	
С	Translation and adaptation	
d	Test design	
е	Item writing	
f	Sampling	
g	Field operations	
h	Data management	
i	Data analysis	
j	Project management	
k	ІТ	
I	Other	


#### **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.	

<b>42</b> . WI	hat previous work experience have you had that has helped you to prepare for	your role	e in PIS	A 2025?
				<del>_</del>
				_
				_
A3.	Are you a regular employee of the assessment centre <sup>7</sup> ? (please circle your answer)	Yes	No	Not sure
	answery			
A4.	Are you aware of processes and procedures in place to secure extra	Yes	No	Not sure
	permanent or temporary staff if needed? (please circle your answer)			
A5.	Do you have a written job description for your roles in PISA 2025?	Yes	No	Not sure
If	(please circle your answer)  you answered "Yes" to A5, please provide a copy (in English) of your job descr	intion to	your lis	pison officer
11	you answered Tes to A3, please provide a copy (III English) of your job descr	ιριιστί το	your ne	iisori omcei
A6.	Will you be available to attend the NPM meetings and international training	Yes	No	Not sure
	if required? (please circle your answer)			
<b>46.a</b> . l	f you answered "No" or "Not sure" to A6, please explain why.			
				<del>_</del>
A7.	Which aspects of PISA 2025 do you anticipate will be most challenging for y	our cou	ntry?	(please tick
				that apply)
а	Developing a sampling frame			
b	Translation of materials			
С	Engaging schools to participate			
d	Coordination of participating schools			
е	Training test administrators			
f	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.

g	Data entry (if paper-based option is taken)			
h	Data analysis			
i	Dissemination and reporting of data			
j	Other, please specify			
<b>A7.k</b> Ple	ease explain why you have chosen those aspects in A7.		-	
			-	
A8.	Do you have: (please tick all that apply)	Yes	No	Not sure
а	Your own work computer running Windows with up-to-date Microsoft Office			
b	High bandwidth internet connection (e.g. at least 50mbits/sec)			
С	Access to a secure work network and server (e.g. requires a password for access)			
d	Access to secure cloud access/storage for work (e.g. requires a password for access)			
е	Access to professional printers for school materials			
f	Access to a work email account specific for PISA 2025?			
g	Your own workstation/desk cubicle			
h	Access to meeting rooms that you can book and freely use			
i	Access to video-conferencing software that you can freely use			

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

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

B1.	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
а	Budgeting				
b	Personnel				
С	Infrastructure				

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

В	3.	Will you be available to work on PISA 2025 in a full-time capacity from	Yes	No	Not sure
		2023 onwards? (please circle your answer)			

	at challenges do you anticipate that you could face in ensuring that you have sufficien to implement PISA 2025?	nt staff ii	n you	r assess	ment
<b>B5</b> . In v	which areas of PISA or large-scale assessment more broadly, would you like to deve	elop mo	re exp	pertise?	
IT	Coordinator				
B1.	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	) No	ot sure
а	Troubleshooting problems with hardware				
b	Troubleshooting problems with networks and internet services				
С	Maintaining data and communications security				
<b>B2</b> . Whassess	nat challenges do you anticipate you could face in ensuring that you have suffi ment team in the IT-related aspects?	cient st	aff to	suppor	t the
<b>B3</b> . In v	which areas of PISA or large-scale assessment more broadly, would you like to deve	elop mo	re exp	pertise?	
	Translation/ Adaptation Coordinator				
	ase describe your experience in translating and/or adapting tests or questionnaires for ational context.	r large-s	scale	assessm	nents
B2.	Will domain experts and contextual experts be available for assisting with nation	nal Ye	:S	No	Not

	adaptations of items and questionnaires? (please circle your answer)						sure
В3.	Will the PISA 2025 assessment items and questionnaires need to be translated	for	Yes		No		Not
	the national context? (please circle your answer)						sure
		1				ı	
B4.	Will domain experts and contextual experts be available for:	Υe	es	No	)	No	ot sure
а	Reviewing the translated science test items						
b	Reviewing the translated mathematics test items						
С	Reviewing the translated reading test items						
d	Reviewing the translated questionnaire items						
е	Reviewing the translated items from the innovative domain "Learning in the Digital World"						
B5.	Are you aware that translation of the PISA instruments will require at least thr	ee	Yes		No		Not
	professional translators to work individually on every element of the translation?						sure
	(please circle your answer)						
<b>B6</b> . In \	which areas of PISA or large-scale assessment more broadly, would you like to deve	elop	more	e ex	pertis	e?	

# Sampling manager

B1.	In relation to sampling activities, do you have access to:	Yes	No	Not sure
а	A central database such as an education Management Information System (EMIS)?			
b	A database that provides full details about every school in your country			
С	A database that provides the number of students per age and grade in each school in your country			
d	Accurate and up-to-date enrolment and attendance data for each school in your country			
е	Accurate data for children and youth that are out-of-school <sup>8</sup>			

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

f	A complete list of the number of students with special needs in each school			
student	ease describe any potential challenges in assessing the target population in as with special needs, students in areas that are difficult to reach (e.g. as a results with a minority language or specific ethnic background.		. •	
<b>B3</b> . In v	which areas of PISA or large-scale assessment more broadly, would you like to	deve	lop more e	  expertise? 
<b>B1</b> . In դ	Data manager previous large-scale assessments, how have you monitored school participation	n and	student re	 esponse rates?
B2.	Do you have previous experience from large-scale assessments to:		Yes	No
а	Validate data collected from students			
b	Train and supervise data entry and data management support staff			
В3.	Will the assessment centre be able to:	Yes	No	Not sure
а	Undertake national-level data analysis			
b	Use statistical packages (e.g. SPSS, SAS, STATA, or R)			
С	Interpret scale scores and performance levels			
d	Perform descriptive analysis (e.g. frequencies, comparison of mean scores and variances)			
е	Perform regression analyses depending on the research questions			
f	Calculate standard errors to provide information about the spread or variability of a sample statistic around its mean			

g	Use correction techniques in the form of sampling weights to adjust the sample and account for biases			
<b>B4</b> . Ple	ase describe your previous experience in recording and reporting statistical an	alysis fro	m nation	al-level data
<b>B5</b> . In v	which areas of PISA or large-scale assessment more broadly, would you like to	develop	more ex	pertise?

Thank you for completing this Capacity Needs Assessment questionnaire!

### **PISA**

### **Capacity Needs Assessment: Ecuador**

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 Ecuador. The results are being used to design a capacity building plan for Ecuador that will be implemented by the OECD, its contractors, the Ecuadoran Ministry of Education and the Instituto Nacional de Evaluación Educativa (Ineval).

Supported by the

