



PISA NATIONAL PROJECT MANAGER MANUAL

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The following updates were made to this manual:

- Chapters 1 through 4 remain the same with a few exceptions in reference to the PISA Portal and a few dates.
- Chapters 5 and 6 contain text boxes with orange borders with updates due to the postponement of the Field Trial and Main Survey by one year.
- Chapters 7 through 10 have been updated with revised dates
- Appendices D and E have been updated with the new timeline. Tasks with changes only to dates are marked with an asterisk before the task description. New tasks are marked with a double asterisk.

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CHAPTER 1 – INTRODUCTION TO PISA 2021 AND THE NPM MANUAL

1.1. Introduction

The Programme for International Student Assessment (PISA) is a multi-year project with phases that are sequential and linked. This chapter provides a brief overview of the rationale and design of PISA. It discusses the organisations and management structures associated with the international implementation of PISA in both the Field Trial and Main Survey phases. It also provides suggestions to assist National Project Managers (NPMs) who are new to PISA. The remaining chapters in this manual are organised according to the phases and the chronological order in which they occur.

This manual is designed to serve as a first reference point in planning your work. However, you are expected to refer to and make use of other materials, including a number of key documents that will be provided throughout the various phases of PISA 2021.

It can seem daunting to consider all of the information and materials at once, particularly if you are new to PISA. We recommend that you **review this chapter** and become familiar with the available documentation and reports from previous cycles that are listed in Section 1.2.4 “Further reading”. We suggest that you then review Chapter 2 and Chapter 3. They describe the protocols for communicating with the PISA Contractors and provide instructions for accessing and using the PISA Portal, which is the primary access point for all key documents and timelines.

Finally, we recommend that you **review the relevant chapter at the beginning of each phase**. At the same time, you should review the chapter for the subsequent phase because phases can overlap and you will need to plan your activities and allocate resources accordingly.

NOTE: The Tasks tab on the PISA Portal shows you a list of tasks customised for your country/economy, the date by which a task needs to be completed and whose responsibility it is to complete it: either representatives from your National Centre or international PISA Contractor.

1.2. PISA: An overview

PISA was designed and developed by the Organisation for Economic Co-operation and Development (OECD) in the late 1990s as an ongoing, periodic international comparative study that primarily gathers indicators of student characteristics and proficiencies. It is designed to generate reliable, high-quality indicators of education system outputs (chiefly, knowledge and skills in the domains of Reading, Mathematics and Science) at a point at which compulsory schooling (age 15) is at or nearing an end in most OECD member countries/economies, referred to as “OECD countries/economies”. PISA also gathers contextual data that allow these outputs to be interpreted in terms of their broader contexts. PISA data are of interest to academics, researchers and other partners in education.

PISA is managed and directed collaboratively by countries/economies with full membership status in PISA (i.e. Members and Associates who are either OECD member countries/economies or hold associate status). The number of non-member economies, referred to as “Partners”, has been increasing. For PISA 2018, thirty-six OECD member countries/economies and 45 partners (hereafter referred to as simply “Participants”) participated.

The OECD oversees the project through the PISA Governing Board (PGB) and administers the project through a Secretariat based in Paris. For each survey administration period, the OECD appoints external contractors to implement the project following an open and competitive tendering process.

PISA surveys take place every three years. Although each survey administration period assesses all three main assessment domains, the focus of the survey shifts from domain to domain in rotation so that very detailed data are periodically available for each domain, and in-depth comparisons are possible every nine years. The first survey took place in 2000 (when the focus was Reading), the second in 2003 (Mathematics), the third in 2006 (Science), the fourth in 2009 (Reading again), the fifth in 2012 (Mathematics again), the sixth in 2015 (Science again) and the seventh in 2018 (Reading again). For PISA 2021, Mathematics is again the major domain. From time to time, additional “innovative” domains are assessed. PISA 2021 includes an assessment of Creative Thinking. There is also an optional assessment of Financial Literacy that has been an option since 2012. In 2018, twenty-one countries/economies opted to administer Financial Literacy.

PISA takes a “real-life literacy” perspective rather than a curriculum-driven one. It focuses on the extent to which students can use the knowledge and skills they possess when confronted with situations and challenges relevant to these skills. That is, it assesses the extent to which students can use their knowledge and skills in reading to understand and interpret the various kinds of written material that they are likely to meet as they negotiate their daily lives; the extent to which they can use their mathematical knowledge and skills to solve various kinds of mathematics-related challenges and problems they are likely to encounter; and the extent to which they can use their scientific knowledge and skills to understand, interpret and resolve various kinds of scientific situations and challenges. PISA’s assessment design is guided by an assessment framework, which is published by the OECD. The framework defines the scope, sub-areas and skills associated with each domain, and it includes sample test items.

PISA assesses mainly 15-year-old students in school in international grade 7 or higher. It is an age-based survey rather than a class- or grade-based one. The choice of this population means that the assessment measures the extent to which students are prepared for the daily challenges of adulthood in modern society.

Because valid and reliable cross-national comparability is crucial to PISA, its implementation plan is guided by a set of Technical Standards published by the OECD. The purpose of these standards is to assure the consistency, precision and generalisability of the data, as well as adherence to the international survey administration timeline.

One year prior to each Main Survey implementation, materials and procedures are field-trialled in all participating countries/economies. For the Main Survey, scientific sampling procedures are

implemented, typically in a two-stage design, whereby a nationally representative sample of schools is selected first and then a random within-school sample of students who fit the PISA population definition is selected second. The sample is guided by clear definitions of the PISA populations of schools and students. The sample size of assessed students for countries/economies choosing to implement PISA 2021 as a computer-based assessment (CBA) is a minimum of 6 300 (2 100 for adjudicated entities) or the entire PISA Defined Target Population where the population is below 6 300 (2 100 for adjudicated entities). The sample size of assessed students for countries/economies choosing to implement PISA 2021 as a paper-based assessment (PBA) is a minimum of 5 250. This ensures that estimates derived from the data are precise enough to allow inferences about the population from which the sample has been drawn.

A common set of assessment and questionnaire instruments is used in each participating country/economy. These core instruments typically comprise assessment materials, a Student Questionnaire and a School Questionnaire. The translated and adapted materials are verified with extreme care. Further, all procedures affecting test conditions are standardised across countries/economies and carefully monitored. These two factors ensure that valid and reliable cross-country/economy comparisons (as well as comparisons for subgroups within countries/economies) can be made.

The PISA data are scaled using item response theory (IRT). This feature of PISA allows a large pool of test items to be used in the survey and enables comparisons within and among participating countries/economies and the reporting of trend data (comparisons of outcomes across survey cycles).

Following the implementation of the survey in participating countries/economies, the data are subjected to a rigorous checking and validation process. National Centres participate in this review and collaborate with the PISA Contractors on data treatment issues.

The OECD publishes an initial international report of the outcomes in December of the year following the Main Survey. The international database is released at the same time as the initial international report, and a technical report follows shortly after. Manuals that assist users in understanding and analysing the data are also published. Thematic reports are published after the initial report. These are designed to provide more in-depth treatment of specific topics. The PGB determines the focus of the thematic reports (see also next section).

All international OECD publications, as well as the international database, are available on the OECD PISA website at www.oecd.org/pisa.

1.2.1. PISA 2021: An overview

PISA cycles 2000 through 2012 were implemented as paper-based surveys, with computer-based assessments as optional components since 2006.¹ For example, the 2012 cycle included computer-based problem solving, mathematics (CBAM) and digital reading (DRA) assessments. The CBAM and DRA were together referred to as the Computer-Based Assessment of

¹ Three countries/economies chose this option in 2006, with close to 20 in 2009, and more than 40 in 2012.

Literacies (CBAL). These optional CBA components were administered to a sub-sample of the regular PISA 2012 samples.

PISA 2015 represented an important step forward, as it was the first cycle to implement PISA as a fully computer-based survey, and PISA 2021 will build on this trend. PISA 2021 will offer all three core domains – Mathematics as the major domain and Reading and Scientific Literacy as the minor domains – as well as the new innovative domain of Creative Thinking as computer-based assessments. While computer-based delivery will be the primary mode for 2021, paper-based instruments linked to previous surveys will be provided for countries/economies unable or unwilling to test their students by computer. The paper-based assessments (PBAs) will include trend items only, as all new items are developed only for computer delivery. All PBA and CBA countries/economies will administer the Student and School Questionnaires. The questionnaire content is as parallel as possible in both forms (paper- and computer-based). However, limitations might occur with the formats of the paper-based items.

Consistent with other cycles and pending decisions from the OECD and participating countries/economies, PISA 2021 may continue to offer optional components that can vary from new assessment domains to optional questionnaires. The following international options will be available for students in CBA countries/economies only: an assessment of Financial Literacy, an Information and Communication Technology (ICT) Familiarity Questionnaire and a Well-Being Questionnaire. In addition, PISA 2021 offers an online Teacher Questionnaire (CBA countries/economies only) and a Parent Questionnaire (paper only; an option for both CBA and PBA countries/economies).

1.2.2. PISA: International management structure

This section provides an overview of the various groups involved in the international implementation of PISA and a description of decision-making processes.

Countries/Economies with full membership status in PISA (currently the 36 OECD countries/economies, plus Brazil) are responsible for PISA at the policy level. Through the PGB, they determine PISA's policy priorities and oversee adherence to these priorities during its implementation. The PGB determines policy objectives, establishes priorities for indicator development and reporting, and specifies the scope of work. The PGB also works with the OECD Secretariat to ensure compliance with objectives, milestones and study parameters.

The OECD Secretariat is responsible for PISA's overall management, acting as the Secretariat of the PGB and as the interface between the PGB and the PISA Contractors. It monitors the implementation of the project and builds consensus among participating countries/economies on policy issues through the PGB. The OECD Secretariat produces the indicators and analyses, and prepares the international reports in collaboration with participating countries/economies.

Within each participating country/economy, a National Centre is established. An NPM is appointed according to a specified set of guidelines. NPMs co-ordinate all activities at the national level under the guidance of their PGB members. Typically, the NPM works closely with the country/economy's PGB member to establish a national perspective on policy matters, on matters related to project implementation and on the analysis and reporting of outcomes that may be of particular relevance to the country/economy. Usually the NPM works with a National

Team on tasks such as project development, implementation and reporting at the national level. Depending on the country/economy's education structure and PISA implementation plan, NPMs and PGB members may also liaise on specific aspects of the projects with national or sub-national committees, subject or assessment expert groups, curriculum authorities, teacher unions and other individuals or groups. A detailed description of the tasks and responsibilities of NPMs is provided in Appendix A.

PISA is implemented by PISA Contractors appointed by the OECD. These contractors are selected each survey administration cycle following an open and competitive tendering process.

For PISA 2021, a group of contractors is leading all aspects of PISA implementation under the close guidance of the OECD Secretariat.

PISA 2021 Contractors		
Core A	Educational Testing Service (ETS), in co-operation with: <ul style="list-style-type: none"> • Westat • University of Liège (Service d'Analyse des Systèmes et des Pratiques d'Enseignement; aSPe) • University of Luxembourg • HallStat SPRL 	Design, development, implementation and analyses, including: <ul style="list-style-type: none"> — Instrument development for Mathematics, scaling and analysis — Translation plans, procedures and workflows, and translation verification follow-up — Data management — Questionnaire development — Development of the electronic platform for the CBA — Survey operations and procedures — Oversight and management
Core B1	RTI International	Framework development for Mathematics
Core B2	Educational Testing Service (ETS)	Framework development for the Questionnaires
Core B3	ACT	Instrument development for Creative Thinking
Core C	Westat, in co-operation with the Australian Council for Educational Research (ACER)	Population definition, school and within-school sampling, and weighting
Core D	cApStAn	Linguistic quality assurance and linguistic quality control
Core E	Australian Council for Educational Research (ACER)	Country/economy preparation and implementation support, for PISA participants who signed up to the Core E component

Specific details about the communication protocols relating to the PISA Contractors are presented in Chapter 2 of this manual.

Successful implementation of PISA depends on the effective communication and collaboration of the PISA Contractors with personnel engaged at the national level. National Centres provide the PISA Contractors with information about conditions and constraints operating in their countries/economies, feedback regarding instruments and procedures being developed, and important advice on how the project can best be implemented nationally. The group of PISA Contractors in turn provides National Centres with information about project requirements, draft materials for national consideration and feedback, training on matters such as within-school sampling, item coding and data processing, and materials to facilitate project implementation.

Various expert groups have been established to provide substantive and technical advice on specific aspects of PISA. The **Technical Advisory Group** advises on the technical features of the survey, such as scaling and sampling methodologies, and has a role in ensuring the technical quality of the data. The **Subject Matter Expert Groups** and **Questionnaire Expert Group** are responsible for linking the policy objectives identified by the PGB with expertise in the relevant area, as well as establishing consensus on content and technical issues raised by countries/economies within the larger framework, and the objectives of the overall implementation strategy.

1.2.3. Accommodations for students with disabilities or special needs

PISA permits limited modifications and accommodations to assist students with special educational needs (SEN). This is because the PISA design is intended to generate data that are aggregated to provide national (and sub-group) measures and not to provide individual student scores.

There is provision for school staff to record information about students having special educational needs; if they are deemed severe enough to prevent the student from participating, this is one of the accepted grounds for exclusion (more details are provided in materials sent to schools).

There is also a provision for cases where a school caters exclusively to students with SEN to administer a shortened, one-hour version of the test to all sampled students. This version is referred to as the UH Form (Une Heure, which is French for one hour). However, as PISA has evolved, procedures have been adapted that also would enable individual students in mainstream schools to use this version of PISA under certain defined conditions and also allow more flexible administration conditions (accommodations). More information about accommodations is provided in the school-level materials (School Co-ordinator, School Associate,² and Test Administrator Manuals). You should discuss your questions and plans

² Throughout this manual, the terms “School Co-ordinator” and “Test Administrator” are used when discussing the administration of the test in schools. However, please note that some countries/economies use School Associates, individuals who fulfil the role of both School Co-ordinator and Test Administrator. School Associates will receive a School Associate’s Manual and will be trained by the National Centre.

about accommodations for SEN students with Core A Survey Operations before implementing them.

1.2.4. Further reading

If you are new to PISA, you are especially encouraged to explore the OECD PISA website (<http://www.oecd.org/pisa>). It contains a number of informational and planning publications for various stages of the survey. Some key examples are listed below.

- The PISA Frameworks present the conceptual frameworks underlying the PISA assessments and questionnaires. They represent blueprints of the study and are useful for communicating the survey content (e.g. in drafting background chapters for a national report).
- The international reports offer an excellent starting point for understanding how results are used. These reports are available for each cycle at <http://www.oecd.org/pisa/keyfindings>.
- Various thematic reports are illustrative of the in-depth treatment of specific policy issues.
- The Data Analysis Manuals provide an introduction to the technical aspects of PISA, describe how to apply appropriate analysis procedures in both SPSS and SAS, and detail the content and structure of the PISA international database. The manuals from previous cycles are available at <http://www.oecd.org/pisa/pisaproducts/pisadataanalysismanualspssandsassecondedition.htm>.
- For more information about the technical aspects of PISA (such as sampling techniques, weighting and scaling of test items), refer to the PISA 2015 Technical Report at <http://www.oecd.org/pisa/data/2015-technical-report/>. A similar report for PISA 2018 will be available in 2020.
- Note that you can also access all the publications, documents and manuals, as well as links to the databases, on the OECD PISA website at <http://www.oecd.org/pisa>.

1.3. The NPM Manual

1.3.1. Purpose of the NPM Manual

The NPM Manual is the central operational manual for PISA and is produced by the PISA Contractors. If you have any questions or suggestions regarding this manual, please contact PISA-GeneralQueries@westat.com.

You should use this manual as the starting point for reviewing project requirements and planning national tasks, referring to other specific key documents when appropriate. All key documents can be accessed from the PISA Portal (<http://pisa.ets.org/portal>).

The manual has a number of purposes:

- depicting the role of the NPM within the broader international context of project implementation
- providing practical information for planning and implementation of various tasks and information that has implications for national resource allocations
- providing a general overview of the PISA Portal
- helping to provide NPMs with a clearer rationale for tasks by specifying the link between NPM activities and the PISA 2021 Technical Standards
- explaining protocols for successful communication with the PISA Contractors and other stakeholders.

The data collection activities of each country/economy throughout the PISA 2021 survey administration will ultimately be judged against the PISA 2021 Technical Standards to determine the suitability of data for inclusion in the PISA 2021 data set. Reference to the standards will be made throughout the NPM Manual.

PISA is a consultative project in which various involved groups provide input and suggest improvements at different stages. Some features of survey implementation (e.g. international options for assessment, questionnaires and sampling) cannot be finalised before consultations with NPMs and other PISA stakeholders about various technical, operational and substantive issues. The NPM Manual cannot, therefore, provide full specifications of these elements at this stage. Instead, you should refer to information presented in the PISA Portal in the Documents and Tasks tabs as well as its Calendar feature.

Your day-to-day work will be supported by the PISA Portal website, this manual and other procedural documents. The PISA Portal is the access point to all PISA materials and tasks as well as the repository of all of the key details relating to the national implementation of this project. Detailed information about the PISA Portal is provided in Chapter 3.

1.3.2. Structure of the NPM Manual

This chapter provides an introduction to PISA and a summary of the roles and responsibilities of key stakeholders.

Chapter 2 describes the protocols for communication between and among international and national PISA staff, while Chapter 3 describes the structure of the PISA Portal. The remaining chapters correspond to the key phases of the survey administration as follows, with **approximate** dates for the end of each phase also provided in parentheses:

- Chapter 4: First Review Phase (July 2019 and July 2020)
- Chapter 5: Field Trial Preparation Phase (February 2020 and February 2021)
- Chapter 6: Field Trial Phase (October 2020 and October 2021)

- Chapter 7: Second Review Phase (December 2020 and December 2021)
- Chapter 8: Main Survey Preparation Phase (February 2022)
- Chapter 9: Main Survey Phase (February 2023)
- Chapter 10: Review and Reporting Phase (December 2023).

NOTE: These phases overlap, so at times you will be completing tasks corresponding to more than one phase.

The “phase” chapters in this manual are structured in a similar manner with two main sections:

- **Overview of Tasks** – Brief overview of the main tasks typically carried out during the phase. As well as providing an overview, it also may have useful material for inclusion in internal communications and progress reports, for example, to your national funding body.
- **Key Tasks** – A description of the tasks to be undertaken during the phase. References to key documents are provided where appropriate. Extracts from the PISA 2021 Technical Standards are presented and explained in the context of some activities where relevant. It should be noted that the ordering of activities in these checklists is not necessarily chronological, and there will be times when several activities occur concurrently.

Appendix A is based on the document “PISA 2021 NPM Roles and Responsibilities” that the OECD Secretariat provides to prospective PISA participants and describes the scope of the work typically undertaken by NPMs. The other appendices contain supplementary information, including a sample confidentiality form (Appendix B) and a glossary of PISA terms (Appendix C). Finally, Appendix D includes a tentative schedule of tasks to be undertaken during each of the phases noted above during the PISA survey period and should be used as a reference when reviewing each chapter. To facilitate planning, Appendix E replicates the tasks presented in Appendix D but organises them chronologically.

1.3.3. Schedule of tasks for PISA 2021

Implementing the PISA project involves co-operation, negotiation and sharing of information at all stages of the project. The PISA Contractors will provide you with a range of materials at key points throughout the survey administration period. At times there will be information to review (for example, items that have been developed for consideration for the Field Trial, or reports of item performance following the Field Trial), including source material of test and questionnaire instruments and manuals. There will also be in-person meetings and online webinars that will provide an opportunity for contractors to present processes and introduce key documents and for you to provide input and feedback. In addition, there will be many points where you will need to discuss aspects of your national implementation plans with the PISA Contractors. There will be forms to be completed and uploaded onto the PISA Portal.

Within this manual, we have attempted to indicate points at which these negotiations and exchanges of information will occur. We have also discussed activities, such as translation, Test Administrator training, within-school sampling, coding of student responses and data entry, that will need to be conducted by your National Centre, and when these activities will occur. Further details about these tasks that you will be overseeing as NPMs will be provided in the key documents.

As previously noted, Appendix D describes the sequence of tasks for the survey administration. It is a starting point to assist with planning your national schedule and only presents key tasks for PISA 2021. These activities are organised by phases and grouped by general areas. The column “responsibility” identifies who is responsible for the task, mainly PISA Contractors or National Centres led by the NPMs.

A number of the tasks referred to in the table in Appendix D are connected to your testing period. For example, the submission of your Field Trial database is required within eight weeks of the last day of testing in your country/economy. The time when this task is completed will therefore vary, depending on your testing period.

There will, of course, be many other tasks and activities that you will be undertaking beyond those that are listed in the table, such as organising national committee meetings, the preparation of informational materials and organising the printing of materials. These activities also should be inserted into your national schedule so that you can plan for them in advance.

CHAPTER 2 – COMMUNICATION PROTOCOLS

2.1. Overview

PISA is an international, collaborative project whose primary purpose is the creation of a single data set of the highest possible quality on educational outcomes for release by the OECD. As an international study, the project makes extensive use of available communication technologies such as the Internet, webinars, videoconferencing, emails, file transfer protocols (FTP), couriers and telephone. As a collaborative project, interaction among all participants is encouraged to foster exchange of knowledge and procedures and to promote further exploration of results. Because PISA has a primary purpose to which all participants contribute, operational information and objectives must be communicated clearly and unambiguously. However, PISA uses secure instruments to measure educational outcomes, so all communication directly relating to operations must be conducted in a secure manner. Because PISA is an OECD-sponsored project, all communications to those outside PISA can only reference material that has been placed in the public domain by the OECD.

An understanding of how the various stakeholders within PISA interact with each other is fundamental to successful engagement with this project. This chapter provides information about the different stakeholders involved in PISA and, more specifically, details the methods and protocols for communication between the National Centres and the PISA Contractors.

2.2. Communications among the PISA stakeholders

2.2.1. The PISA Governing Board, the OECD Secretariat and the PISA Contractors

To fully understand the relationship between the National Project Managers (NPMs) and the PISA Contractors that manage PISA on behalf of the OECD, consideration needs to be given to the wider context in which the project operates. PISA Contractors do not have a direct relationship or direct contact with the PISA Governing Board (PGB) unless invited to do so. Rather, PISA Contractors report to the PGB through the OECD Secretariat and implement the project on the PGB's behalf. The relationship between NPMs and the PISA Contractors focuses on issues related to project implementation.

Therefore, if NPMs wish to access PGB documents or to have matters officially addressed at the PGB meeting on behalf of their country/economy, they need to discuss them with their national PGB representative. However, the PISA Contractors are always willing to consider issues raised by National Centres relevant to their respective areas of responsibility and to forward them to the OECD Secretariat when appropriate.

2.2.2. Subject Matter Expert Groups

The PISA Contractors are responsible for convening the Subject Matter Expert Groups and the Questionnaire Expert Group. This includes providing information to expert group members and making arrangements for expert group meetings. Information from National Centres forwarded

to expert groups includes national item reviews and responses collected through the Field Trial and Main Survey review exercises. Where appropriate, the PISA Contractors also forward ad hoc advice and comments received from National Centres. As with the previous cycle, the OECD Secretariat is responsible for all aspects related to the Technical Advisory Group and its meetings.

2.2.3. The general public

The PISA Portal does not allow for public access because it contains confidential materials, but public materials are available through the OECD PISA website at <http://www.oecd.org/pisa>.

The PISA Contractors do not engage directly with the general public, except with the express permission of the OECD Secretariat. Otherwise, all information to the general public is provided through the OECD or through National Centres. When the PISA Contractors receive queries from the general public, they direct individuals to information already in the public domain. The following are posted on the OECD website and are available for public download:

- PISA frameworks
- PISA technical reports
- PISA databases without confidential or secure information
- contact details of PISA NPMs
- sample test questions
- links to other sites where appropriate and as they become available.

PISA Contractors do not release material or data that is not in the public domain.

While National Centres need to actively engage the general public, in particular the education communities within their countries/economies, they can only use PISA information already authorised and released by the OECD for public use. It is essential that all embargoes on project information and data be respected.

2.2.4. The academic and research community

The PISA Contractors also receive queries from academics and researchers who work in organisations not directly involved in PISA. Such requests usually relate to the methodologies used in PISA. Where possible, the PISA Contractors should respond to such queries in the spirit of academic co-operation and collaboration. However, the contractors do not have extensive resources to engage in such discussions.

International experts often present and publish papers on matters related to PISA in academic forums. Such papers are based on information and data in the public domain, and analyses and interpretations made in such papers may or may not reflect the views of the OECD.

PISA is designed to promote free and open exchange among countries/economies on matters related to education and actively encourages further analysis and interpretation of the PISA data set. However, because the PISA international database is publicly available, neither the OECD nor the PISA Contractors have direct control over such analyses and interpretation of results.

2.3. Communication between National Centres and PISA Contractors

Project implementation is the primary focus of the National Centres' exchanges with the PISA Contractors. The PISA Contractors seek to provide National Centres with the appropriate information and support to implement the project to the required standards within agreed-upon timelines. The PISA Contractors will continue to promote free and open exchange between participants while maintaining a strong task focus.

In their communication with National Centres, the PISA Contractors are required to respect and follow certain protocols, in particular the need for communication to the National Centre to go through the NPM or an authorised delegate of the NPM. The PISA Contractors also need to ensure that all communications with National Centre staff members are with individuals subject to confidentiality agreements. Further, the PISA Contractors cannot formally discuss matters with National Centres that are in the domain of the PGB. Similarly, countries/economies are also required to respect and follow certain communication protocols that are in place to ensure an accurate and timely response.

2.3.1. Participant contact details

Contact information for PISA 2021 participants can be found on the PISA Portal under “Home/Contacts 2021” and “Links/Contacts”. The contact details of members of National Centres, the OECD, PISA Contractors and experts are displayed. NPMs should note that this information is confidential and should be used with appropriate discretion for the purpose of the PISA project only.

Contact information

To ensure effective communication with National Centres, the PISA Contractors and the OECD Secretariat need to maintain up-to-date contact information. This includes contact details for NPMs as well as additional National Team members as appropriate (e.g. Data Manager, Sampling Manager). Contact details will be submitted via a form and should be sent to the OECD Secretariat (Sophie.Vayssettes@OECD.org) and PISA-GeneralQueries@westat.com.

For each member, the following contact information should be submitted:

- Title – You may select from the following options: Mr., Mrs., Ms., Dr., Prof. or Prof. Dr.
- Last name
- First name
- Email

- Country/Economy
- Organisation
- Phone number – You may specify one or more phone numbers
- Roles – You may specify multiple roles from among the following options: NPM, Data Manager, Sampling Manager, IT Co-ordinator or National Team (e.g. anyone else from the National Centre outside of the roles previously listed)
- Postal address – This information is helpful for PISA Contractors but will be hidden in the normal view
- Dist. list – A “Yes” indicates whether the individual or global email address should be included in the central distribution list for email dispatches. This will also indicate to the PISA Contractors that the individual is authorised for direct communication with PISA Contractors
- New to PISA – You should indicate which team members are new to the PISA project
- New to Role – You should indicate which team members are new to their role on the PISA team (e.g. your Data Manager may have worked on PISA in a different capacity before but is new to the role of Data Manager).

These details will be displayed on the PISA Portal and will be accessible to all PISA Contractors, the OECD Secretariat and other National Centres.

Authorised National Centre staff

Individuals other than the NPM who are allowed to communicate directly with PISA Contractors and receive direct communication from PISA Contractors will be identified by the “Dist. List” field in the contact details. This will enable PISA Contractors' staff to communicate more effectively and confidently when queries are received from someone other than the NPM. It is nevertheless recommended that all communication from National Centres come from their primary email address (which could be a generic project email address or the NPM's email address), or that the primary email address be copied on all communication so the NPM has a complete project communication archive.

For all National Centre staff authorised to work on PISA, NPMs must ensure that appropriate confidentiality agreements are in place so that they have the authority to communicate with the PISA Contractors on their behalf and have permission to access confidential information.

Maintaining accurate contact details

Information for new contacts or changes to existing contacts in your National Centre should be sent to the OECD, Sophie.Vayssettes@OECD.org, and then forwarded to PISA-GeneralQueries@westat.com; Core A General Queries will ensure the information is updated

on the PISA Portal. Please note that the PISA Contractors cannot change a country/economy's NPM on their contact list without the authorisation of the OECD Secretariat (see the section below "Change of NPM").

Change of NPM

It is important that the PISA Contractors maintain contact with the appropriate authorised NPMs within each National Centre. If a new NPM is being appointed, the OECD Secretariat must be informed directly by the PGB member. The PGB member should include contact information for the new NPM and indicate if the new NPM has experience working on PISA. The previous NPM will be automatically removed from the distribution lists of the OECD Secretariat and the PISA Contractors and will not have access to the PISA Portal, unless the PGB member indicates otherwise. The OECD will inform PISA Contractors, and at that point, PISA Contractors will update the PISA Portal and begin communications with the newly nominated NPM.

2.3.2. Communication structure

Daily communication

All communication with the PISA Contractors must contain clear subject headings that include the three-letter country/economy code in square brackets AND the general nature of the inquiry (e.g. "[ZED] Query re: data submission date"). This type of subject line helps to ensure that emails are correctly monitored and tracked.

Emails are generally processed by PISA Contractors within five business days (an acknowledgment is provided within one business day). However, if you do not receive a response from the PISA Contractors within five business days, please send a follow-up email. Sometimes emails are lost because of server problems, spam filters, viruses or if a PISA Contractor's staff member inadvertently overlooks a response or issue. It is better to maintain contact than to leave issues unresolved.

To ensure an accurate and timely response, PISA 2021 will offer several global email addresses. These email addresses, as well as a short description of the purpose of each, are provided below and can also be found on the PISA Portal under "Home/Support" and "Links/Support".

<p>General Inquiries and Contact Information</p> <p><PISA-GeneralQueries@westat.com></p>	<p>If, after looking at the emails below, you are still unsure whom to contact, please send <u>general queries</u> to this email and your email will be forwarded to the appropriate PISA Contractor.</p> <p>Additionally, the General Queries email should be used for <u>contact information</u>. Please submit the contact form with either new or updated contacts to (PISA-GeneralQueries@westat.com).</p>
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<p>PISA Portal</p> <p><PISA-Portal@ets.org></p>	<p>Used for questions or issues regarding the <u>PISA Portal</u>. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • access to the PISA Portal or to specific parts of the PISA Portal (e.g. the Documents, Tasks/Workflow or Translation tools areas) • issues related to a new or existing user account • questions related to the functionalities of the PISA Portal.
<p>PISA Questionnaires – Content Issues</p> <p><PISA-QuestionnaireContent@ets.org></p>	<p>Used for questions regarding <u>the content of the computer- and paper-based questionnaires</u>. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • questions regarding the content of the questionnaires • questions regarding adaptations of questions or national questions • questions regarding IDs used in the questionnaires • questions regarding harmonisation • global questions about the Questionnaire Adaptation Spreadsheet • questions regarding the international options chosen for the questionnaires.
<p>PISA Questionnaires – Technical Issues</p> <p><PISA-QuestionnaireTechnical@ets.org></p>	<p>Used for questions regarding <u>technical problems encountered with the computer-based questionnaires or the questionnaire workflows</u>. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • computer- and paper-based questionnaire workflows, status of tasks and timeline for completing the tasks (e.g. deadlines, questions about the questionnaire workflows tasks) • Questionnaire Authoring Tool (QAT) • authoring process for the questionnaires using the QAT

	<ul style="list-style-type: none"> • testing of the authored questionnaires using the QAT • monitoring the online questionnaires and their users during the Field Trial or the Main Survey data collection periods • support for questionnaire users during the Field Trial or the Main Survey data collection periods • support for retrieving data from online questionnaires during the Field Trial or the Main Survey data collection periods.
<p>PISA Student Delivery System or the Computer-Based Platform <PISA-StudentDelivery@ets.org></p>	<p>Used for questions regarding the <u>Student Delivery System (SDS)</u> as well as the <u>Open-Ended Coding System (OECS)</u> coding software. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • SDS workflow, status of tasks and timeline for completing the tasks (e.g. deadlines, questions related to the SDS workflow tasks) • SDS technical aspects or requirements (e.g. setup of the SDS, System Diagnostic) • support for technical issues related to the SDS (e.g. enable launching the Student Delivery, unable to login) • SDS testing plan or process (e.g. crashes, wrong language displayed) or any of its parts (e.g. testing of the cognitive or questionnaire parts within the SDS) • OECS software, including its technical aspects or requirements, problems in generating PDFs, support for retrieving data, etc. • support for technical issues related to the XLIFF Editor Open Language Tool (e.g. unable to open an XLIFF file).
<p>PISA Cognitive Tests (Reading, Mathematics, Science and Financial Literacy) <PISA-Cognitive@ets.org></p>	<p>Used for questions regarding the <u>computer- and paper-based cognitive tests in the domains of Reading, Mathematics, Science, Financial Literacy or Creative Thinking</u>. Examples of questions or issues include:</p>

<p>(For issues related to Reading, Mathematics, Science and Financial Literacy or related to designs, workflows and SDS)</p> <p>PISA Creative Thinking Test</p> <p><PISA2021CreativeThinking@act.org></p> <p>(For issues related specifically to the assessment of Creative Thinking)</p> <p><i>(Questions regarding the framework for Creative Thinking should be directed to Mario Piacentini</i> <i>(mario.piacentini@oecd.org)</i></p>	<ul style="list-style-type: none"> • questions regarding framework, characteristics of the domains or items and summaries or overview of the instruments • questions regarding the integrated designs and the test flow used in the SDS • questions regarding the options chosen for the cognitive (e.g. Financial Literacy) materials • issues related to the languages used for the cognitive (e.g. language borrowed, specification of languages by domain) materials • cognitive workflows, status of tasks and timeline for completing the tasks (e.g. deadlines, questions related to the cognitive workflow tasks) • content of the specific cognitive units for both paper- and computer-based cognitive materials • content of the orientation modules used in the SDS • functionalities of CBA cognitive units • cognitive paper booklets, including process for assembling them, content or corrections, cover pages, special requirements for printing, etc. • coding design, guides content and process.
<p>cApStAn (Linguistic Quality Control)</p> <p><pisa.verif@capstan.be></p>	<p>Used for questions or issues regarding <u>the linguistic quality control of the questionnaires and cognitive items</u>. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • timeline for submitting translations for verification or final check • timeline for receiving verification or final check feedback • verification process (including final check).
<p>Béatrice Halleux (Translation)</p> <p><beatrice.halleux@skynet.be></p>	<p>Used for questions or issues regarding <u>translation of the computer- and paper-based cognitive tests and Core A Translation Referee reviews</u>. Examples of questions or issues include:</p>

	<ul style="list-style-type: none"> • language(s) of testing • Translation Plan: translation procedures, borrowed versions, etc. • trend change request process • negotiation of corrections that require follow-up • general language issues.
<p>PISA Survey Operations <PISA-SurveyOperations@westat.com></p>	<p>Used for questions regarding the <u>school-level materials, international PISA Quality Monitors and other tasks related to survey operations</u>. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • school-level materials (e.g. deadlines, Materials Adaptation Form, manuals, scripts and forms) • international PISA Quality Monitors (e.g. nominations, deadlines, school test dates) • Test Administrator training.
<p>PISA Sampling <PISA-Sampling@Westat.com> <i>and</i> PISA Sampling - Email Archive <PISA-SMPArchive@westat.com></p> <p><i>(IMPORTANT:</i> This archive email address is <i>NOT</i> monitored and is only used for archiving all sampling related email. This email should <i>always</i> be in the CC: list of any school sampling- or within-school sampling related emails you write or to which you respond, but never in the TO: list.)</p>	<p>Used for any questions or issues regarding <u>school or within-school sampling</u>. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • questions about the required school and student sample sizes for PISA 2021 • questions about when the Field Trial Sampling Guidelines will be released • issues with finding a sampling task template file recently released on the PISA Portal • questions about how the student response rate is calculated • questions about whether or not school type X needs to be included on the school sampling frame for PISA. <p>Note that the response to your email will come either from Sheila Krawchuk <u>or David Ferraro</u> of Core C Sampling or the country/economy statistician from Core C Sampling with whom you are or will be</p>

	working.
<p>PISA Within-School Sampling Software</p> <p><maple.pisahelp@acer.org></p>	<p>Used for any questions or issues regarding <u>the within-school sampling software</u>. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • questions about when the Field Trial version of the software be released • questions about which team member needs to attend the within-school sampling software training at the upcoming meeting • issues with finding duplicate records in the student tracking file • issues with validity reports not showing all entered explanations.
<p>PISA Data Management</p> <p><PISA-DataMgmt@ets.org></p>	<p>Used for questions regarding all aspects of data management procedures, including <u>the Data Management Expert software (DME)</u>, <u>Open-Ended Response System (OERS) paper-based coding software</u>, <u>data cleaning</u> and <u>national data codebooks</u>. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • data management and data analysis workflows, status of tasks and timeline for completing the tasks (e.g. deadlines, questions related to data export, data delivery, data processing, report delivery, certified data) • DME technical aspects or requirements (e.g. setup of the DME, specific coding/adaptations in the software) • codebook generation and distribution (e.g. language of national codebook, how to make adaptations to codebooks, timeline for receiving Field Trial and Main Survey codebook templates) • support for technical issues related to the data management (e.g. unable to edit variables in the DME software, problems with exporting data, issues captured in consistency checks) • OERS software, including its technical aspects or requirements, support for retrieving data, etc.

<p>PISA Meetings <PISA-Meetings@westat.com></p>	<p>Used for questions or issues regarding <u>NPM and training meetings</u>. Examples of questions or issues include:</p> <ul style="list-style-type: none"> • problems with or questions about registration forms • questions about visa letters.
<p>PISA Occupational Coding < ISCO@acer.org ></p>	<p>Used for questions or issues regarding occupational coding content or procedural decisions.</p>
<p>OECD Secretariat <Sophie.Vayssettes@OECD.org></p>	<p>Questions about contracts, participation in international options, reporting, communication with PISA Contractors, change of NPM, etc.</p>
<p>Core E < PISA-E@acer.org ></p>	<p>Used for all country/economy preparation and implementation support activities and queries, <u>for PISA participants who signed up to the Core E component</u></p>

Email dispatches

In dispatching materials to National Centres, the PISA Contractors will adhere to the following practices:

- Send emails without large attachments, stating the purpose of the dispatch and listing all documents that are part of the dispatch.
- Upload all project documents released in that dispatch to the PISA Portal and clearly state via email the location of the files on the website so that NPMs can download individual files or selected files as a zip folder.
- Follow up on all “delivery failure” notifications.

If for some reason a PISA Contractor has to dispatch materials or large files by email, a preliminary email without the attachments will be sent first followed by a subsequent set of emails with the attachments.

Please ensure that you always have sufficient storage in the PISA mailboxes, as email is a primary means of communication with the PISA Contractors.

The PISA Portal website

The PISA Contractors are continuing to develop the PISA Portal website (<https://pisa.ets.org/portal>). This is a secure website accessible using a login and password. Each National Centre will have a set of NPM and Reconciler logins that will be sent to the NPM by Core A PISA Portal and can be used by the National Team at the discretion of the NPM (the reconciler accounts will be mainly used for the translation and verification tasks).

Dissemination of documents and information

All documents released to National Centres will be made available on the PISA Portal. When specific confidential documents are dispatched to your National Centre, they will also be posted on the PISA Portal and an email will be sent to your National Centre outlining the access instructions.

The PISA Portal also includes a calendar page with information about meetings and key dates for the project. NPMs should wait until registration opens before making travel arrangements for meetings. The invitation is the official confirmation of meeting dates and location.

Submission of project implementation documents and information

For PISA 2021, all National Centre project implementation documents and information will be submitted to the PISA Contractors through the PISA Portal, using the upload document facility. The latest versions of these documents and information will be displayed on the PISA Portal. Only your authorised National Centre staff and PISA Contractors can view these pages. The submission of materials through the website provides greater version control and allows the PISA Contractors to distribute information more effectively to key PISA Contractor staff.

Some of these implementation documents and information need to be “agreed upon” by the responsible PISA Contractors' members. The aim is for agreement to be reached in a timely manner. The definition of “agreed upon” as used in relation to the PISA Technical Standards is shown in Exhibit 2.1.

Exhibit 2.1. 'Agreed upon' – PISA Technical Standards

Agreed upon - variations that are mutually agreed upon between the National Project Manager and the international contractors

Options and agreed-upon variations

NPMs will negotiate variations and options selected for their countries/economies with either the OECD or the PISA Contractors, depending on the topic, and details regarding national deviations will be explained to countries/economies individually based on their need. The PISA Contractors will maintain a record of all agreed-upon variations as well as national and

international options. This will allow National Centres to check that PISA Contractors' records relating to these matters are correct, thereby avoiding confusion.

Timeline for acknowledgment of queries and information submission

Where negotiation on information is required, you will receive feedback on your submitted proposal from a qualified PISA Contractor within five working days. When a query or implementation document sent by you requires more time to process, a response will be sent to your National Centre within five working days to give an indication of the time required to resolve the query.

In Exhibit 2.2, PISA Technical Standard 18.2 relates to information submission in accordance with agreed-upon timeline, and Standard 16.1 relates to communication with the PISA Contractors.

Exhibit 2.2. Information submission and communication with the PISA Contractors – PISA Technical Standards

Standard 18.2 The *following* items are submitted to the international contractors in accordance with *agreed timelines*:

- the Translation Plan
- a print sample of booklets prior to final printing, for new countries/entities using the paper-based instruments (where this is required, see Standard 13.1),
- results from the national checking of adapted computer-based assessment materials and questionnaires,
- adaptations to school-level materials,
- sampling forms (see Standard 1),
- demographic tables,
- completed Field Trial and Main Survey Review Forms,
- documents related to PISA Quality Monitors: nomination information, Test Administrator training schedules, translated school-level materials, school contact information, test dates, and
- other documents as specified in the PISA operations manuals.

Standard 16.1 The international contractors ensure that qualified staff are available to respond in English to requests by the National Centres during all stages of the project. The qualified staff:

- Are authorised to respond to National Centre queries,
- Acknowledge receipt of National Centre queries within one working day,
- Respond to coder queries from National Centres within one working day,
- Respond to other queries from National Centres within five working days, or, if processing the query takes longer, give an indication of the amount of time required to respond to the query.

CHAPTER 3 – THE PISA PORTAL

3.1. Overview

The PISA Portal (<http://pisa.ets.org/portal>) is the central website for PISA 2021 and is maintained by the PISA Contractors. It is one of the main channels for communication between the PISA Contractors and participating National Centres.

All released information and documents are placed on the PISA Portal, including:

- customised project tasks and deadlines
- key dates for meetings and dispatches
- test instruments for the Field Trial and Main Survey
- questionnaire instruments for the Field Trial and Main Survey
- material related to coding and coder training
- manuals and guidelines for project operations
- contact information for all parties involved in PISA 2022
- frequently asked questions (FAQs)
- glossary
- summary of national information (e.g. Field Trial and Main Survey dates, languages, international options).

3.2. National Centre website access

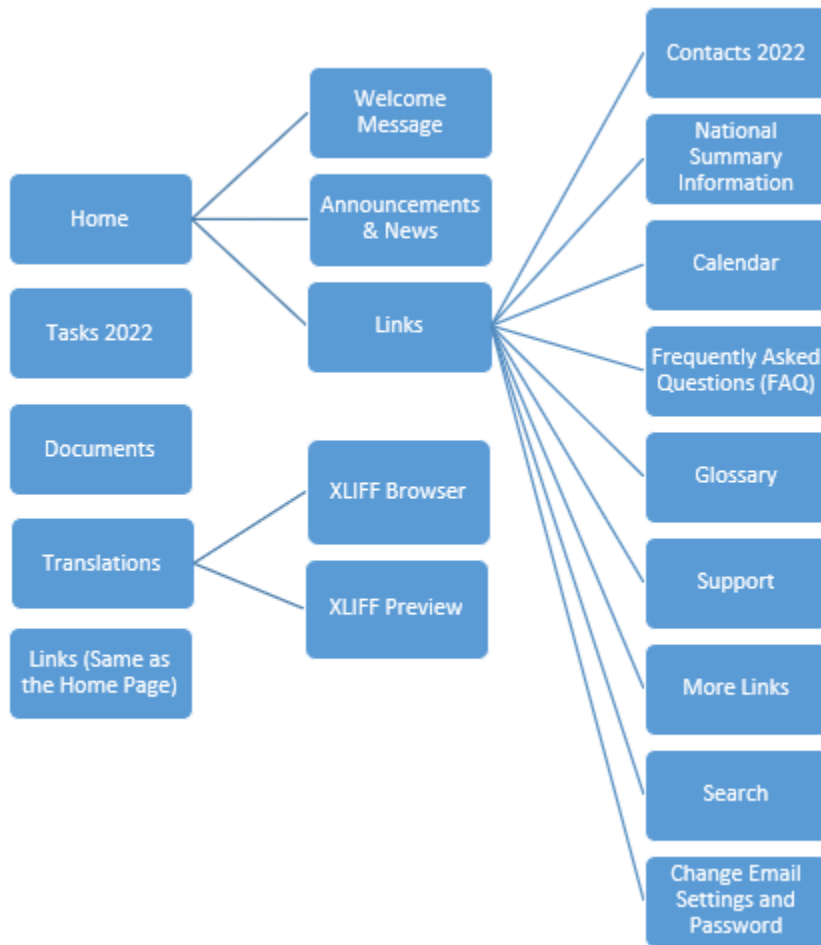
The PISA Portal is a secure website accessible using a login and password. As noted in Chapter 2, each National Centre has a set of National Project Manager (NPM) logins and Reconciler accounts. The NPM is responsible for sharing these logins with the National Team at their discretion based on agreed-upon confidentiality procedures established at the National Centre. It is the responsibility of the NPM to ensure that only authorised staff members have access to the website and to change the password if necessary following a staffing change at the National Centre. The password associated with each login will need to be changed every 90 days.

The NPM is the main contact in the National Team regarding all issues with the PISA Portal. As such, in case of technical difficulties related to the PISA Portal, the NPM should contact PISA-Portal@ets.org.

3.3. Website structure

The PISA Portal is composed of five main areas called “tabs”. Each tab is a place designated for certain activities or to hold specific information or documents. Exhibit 3.1 gives a global overview of the organisation of the PISA Portal.

Exhibit 3.1. Structure of the PISA Portal



The five tabs of the PISA Portal are Home, Tasks 2022, Documents, Translation and Links.

NOTE: The account information will be sent ONLY to the nominated NPM, who has full responsibility for controlling who has access to the PISA Portal.

- The **Home** tab includes general information regarding the project, including announcements and news. It also provides links to project management tools, such as the summary of national information, calendar, glossary and a tool to change passwords.

- The **Tasks** tab includes the different tasks and deadlines a country/economy will have to complete through the project. Each task will be part of a workflow that allows countries/economies and PISA Contractors to exchange documents or files through a secure and structured way that also allows version control over the various documents/files.
- The **Documents** tab contains the meeting documents, manuals, guidelines and all materials needed for the project. This part is updated on a regular basis by the PISA Contractors. The **Exchange** folder under Documents is an import facility for sharing information with PISA Contractors that is confidential and cannot be transmitted via email. The **Dispatches** folder includes all messages sent to NPMs through the distribution list.
- The **Translation** tab provides tools used for the translation of the cognitive instruments. The tools provide users with a way to preview translated and source versions of the CBA units.
- The **Links** tab groups several useful links that can also be reached via the Home tab. This provides direct access to Contacts, National Summary, Calendar, FAQ, Glossary, Support and More Links.

3.4. Questions, comments or suggestions

Your feedback is appreciated. If you have any questions, comments or suggestions about the PISA Portal, please send your comments to PISA-Portal@ets.org.

CHAPTER 4 – FIRST REVIEW PHASE

4.1. Overview of tasks

During this phase, assessment instruments and questionnaires will be developed in both English and French, finalised, adapted and translated. Preparations for the Field Trial will start with sampling tasks, the Translation Plan and the Student Demographic Study Programme Table. This also includes seeking comments from national representatives and members of subject area groups on draft materials for Mathematics, Creative Thinking and questionnaires as well as any optional instruments under consideration for the Field Trial.

There are many tasks to be completed in a short span, so it is important that you have a clear plan in place to organise your time. It is also important to ensure that you have enough support staff to assist.

Your preparation will include the following tasks:

- establish a National Centre: Submit contact information for all National Centre team members to PISA Contractors and establish security protocols
- participate in the instrument development process: submit stimuli, items and review instruments
- initiate preparations for Field Trial sampling: establish test dates, population definition and language distribution
- negotiate details about the study programmes
- negotiate your Translation Plan with the Core A Translation Referee
- indicate your participation in international and/or national options
- prepare for the translation and verification phases
- attend the first National Project Manager (NPM) meeting in March 2019
- attend the PISA Introductory Meeting in January 2019 (new countries/economies and/or new NPMs only), if applicable.

The timeline for most tasks is tailored to your country/economy based on the data collection dates. The Tasks 2022 tab in the PISA Portal lists these tasks and provides a description and due date for your country/economy. The relevant documents will be released according to the timeline.

Exhibit D.1 in Appendix D shows a tentative schedule of tasks associated with the first review phase. Procedures associated with these activities are briefly described below; more detailed documentation will be released closer to the actual task dates.

4.2. Key tasks during the first review phase

4.2.1. Establish a National Centre

Submit contact information to PISA Contractors

It is important for the PISA Contractors to have the most up-to-date information regarding the structure of your National Centre to ensure effective communication. You are asked to inform first the OECD, then the PISA Contractors early in the project of the contact details for NPMs. In addition you will provide the PISA Contractors all the information and contact details related to the additional National Team members as appropriate (e.g. Data Manager, Sampling Manager). Please contact PISA-GeneralQueries@westat.com to submit contact information and for additional questions. More information regarding this task is also explained in Section 2.3.1 “Participant contact details”.

Establish security protocols

Strict confidentiality when handling project materials is vital to protecting the integrity of PISA. This includes test items, draft questionnaires, data under embargo and draft material provided to National Centres for feedback and comment. This also includes the list of sampled schools, as the publication of such a list could potentially breach confidentiality and security (for example, schools in the field later in the testing period could contact schools that were in the field earlier in the testing period).

It is a PISA Technical Standard that formal confidentiality arrangements be established with all who are given access to the secure materials, including staff at the National Centre, sub-contracted staff (e.g. translators, coders, data entry staff), sub-contracted organisations (e.g. printers) and any others that could have contact with secure materials. This also applies to everyone who is given access to the PISA Portal.

Appendix B provides a sample confidentiality form that can be modified as required and used to formalise confidentiality arrangements.

You will need to exercise direct supervision and control of confidentiality arrangements for your National Centre.

You may also need to consider confidentiality requirements at the national level, such as legislative requirements related to school staff and student privacy.

If in doubt about the security status of any PISA material or about confidentiality requirements, seek confirmation from Core A Survey Operations by emailing PISA-SurveyOperations@westat.com.

The PISA Technical Standard relating to security of material is shown in Exhibit 4.1 below.

Exhibit 4.1. Security of PISA test materials – PISA Technical Standard

Standard 11.1 PISA materials designated as secure are kept confidential at all times. Secure materials include all test materials, data, and draft materials. In particular:

- no-one other than approved project staff and participating students during the test session is able to access and view the test materials,
- no-one other than approved project staff will have access to secure PISA data and embargoed material, and
- formal confidentiality arrangements will be in place for all approved project staff.

4.2.2. Participate in the instrument development process

Submit stimuli, items and artwork

PISA seeks to maximise item input from Mathematics and Creative Thinking experts in participating countries/economies, as domains for which new materials will be developed in this cycle.

To better ensure that the pool of new units reflects the cultural diversity across participating countries/economies, the PISA Contractors established a process that includes the following phases:

- Item development workshops: Workshops for Mathematics took place in May and June 2018 in two locations. Participants worked independently or in small groups to develop new items.
- Unit submission: Countries/Economies were invited to submit Mathematics and Creative Thinking units through 31 August 2018.

These materials should have been submitted in English. Material submitted in other major languages of instruction among PISA countries/economies could also be accepted following prior consultation with the Core A, Core B3 and Core D PISA Contractors.

Review instruments

For both Mathematics and Creative Thinking, in addition to the submission of units and ideas, countries/economies have the opportunity to review and provide feedback on units developed by Core A Cognitive and participating countries/economies. This is an opportunity for countries/economies to review the material developed with respect to their own curriculums and cultural sensitivities. Review of Mathematical and Creative Thinking materials were available through three batches in mid-September, mid-October and mid-November with a two-week review period.

For the questionnaires, countries/economies will be provided with two opportunities to review and comment on the international master version. The first opportunity for reviewing

questionnaire material was in October 2018 and focused on its relevance to the educational system, its relevance for the target population and any sensitivity and translation issues. All feedback was summarised and considered during the Questionnaire Expert Group meeting. Following this meeting, proposed Field Trial questionnaires will be prepared and shared with countries/economies by mid-December 2018 for a second round of review. Feedback will be expected by mid-January 2019.

4.2.3. Initiate preparations for the Field Trial sampling: Establishing test dates, population definition and language distribution

Discussion of sampling issues for the PISA 2021 survey is part of the March 2019 NPM Meeting. The Field Trial Sampling Guidelines, to be released prior to the first NPM Meeting in 2019 and located on the PISA Portal, will be the basis for this discussion. Prior to this, in late 2018, you will already have submitted and had approved your cycle-wide Sampling Task 0 (ST0) regarding your testing languages for both the Field Trial and the Main Survey. Be aware that delays with this ST0 task may negatively impact the entire schedule. In January of 2019, you will be asked to provide details about the study programmes of PISA students in your country/economy. Also prior to the NPM Meeting, your initial country/economy cycle-wide sampling plans will have been released for your updates regarding sampling options. Following this meeting, you should discuss these details with your national committee(s). You should then submit your updated sampling option ideas on your revised sampling plan no later than 1 April 2019.

Additionally, you should submit your cycle-wide testing dates and population definition through Sampling Task 1 (ST1) in June 2019. To avoid overlap issues of the population birth dates between the Field Trial and Main Survey testing periods, you will need to provide an indication of your Field Trial and Main Survey testing dates at the same time. If you have participated previously in PISA, the testing dates (months and approximate days) should be the same as in prior surveys.

For countries/economies that participated in the PISA 2018 Main Survey, the information on test dates and population definition from that cycle will form the starting point of the 2021 ST1.

The PISA 2021 Field Trial data collection needs to be completed within six consecutive weeks between 1 March 2020 and 30 June 2020, unless otherwise agreed upon. For new countries/economies, when considering your proposed testing period, keep in mind that a great deal of work is required between the release of the source version instruments in April 2019 and the beginning of testing. An overview of this work is described in Chapter 5 of this manual. If you are an early-testing country/economy that begins your Field Trial testing period in March 2020, you should ensure that you have the resources available for this very intense period of the project. You will need to negotiate a timeline for the verification of your Field Trial instruments before the end of February 2019. This Preferred Verification Schedule (PVS) will be based on your Field Trial start dates.

Cycle-wide school and PISA student information is recorded in Sampling Task 2 (ST2), which should be submitted in July 2019. Included in this will be your estimated Field Trial and Main Survey assessment rates. Understand that an assessment rate is not a response rate. The

assessment rate takes into account all student losses (absent, refusal, ineligible and excluded) from the students sampled. Additionally, if your country/economy has different school types that contain eligible PISA students, you will be asked to document the approximate proportion of 15-year-olds in the various school types. You will also be asked about your school stratification plans for the Field Trial and Main Survey.

For countries/economies that participated in the PISA 2018 Main Survey, the information on the 2018 ST2 will form the starting point of the 2021 ST2.

After the submission of both ST1 and ST2, Core C Sampling will provide feedback within five working days. Once agreed upon, this information will be used as a reference point for a wide range of activities throughout the survey administration period.

4.2.4. Negotiate details about the study programmes

Prior to the negotiation of questionnaire and manual adaptations, a number of questions about programmes of study need to be discussed with you.

Core C Sampling will collect information on study programmes for use in the within-school sampling software. This study programme information is also used by Core A Questionnaire Content. Collection of this information will need to take place early in the cycle in January 2019 because adaptations to trend questionnaire items are negotiated from March to July 2019.

For countries/economies that participated in the PISA 2018 Main Survey, the information on study programmes will form the starting point of these discussions.

4.2.5. Negotiate your Translation Plan with the Core A Translation Referee

The Translation Plan documents all the processes you intend to use for all activities that are related to translation, adaptation, languages, mode of testing and international options. It collects, for example, information on translation procedures, translators and reconcilers, as well as testing languages for the different instruments and coding guides used for the Field Trial and Main Survey (for both major and minor languages). The PISA Technical Standard in relation to the negotiation of the Translation Plan is shown in Exhibit 4.2 below.

Exhibit 4.2. Negotiation of Translation Plan – PISA Technical Standards

Standard 18.1 *An agreed upon Translation Plan will be negotiated between each National Centre and the international contractors.*

The Translation Plan will be dispatched in early December 2018, and you will need to upload a draft version of it to the PISA Portal by 21 December 2018. Additional details will be provided with a full description of the task.

4.2.6. Indicate your participation in international and/or national options

The core of PISA is a test and questionnaire administered to randomly selected students representing a defined target population (mostly 15-year-old students but also a few 16-year-

olds) and an additional School Questionnaire administered to the schools of the participating students. There are also national and international optional components within PISA.

Once approved by their PISA Governing Board (PGB) member, this information should be shared with the OECD Secretariat. Countries/Economies participating in international options receive support for their implementation from the PISA Contractors in the same manner as for the implementation of “core” survey components. When considering international options, countries/economies need to keep in mind that participating in them will require additional national resources (e.g. staff, printing, administration, meeting attendance, data processing). The contractual agreement or costs associated with participation in international options are negotiated directly with the OECD.

National options, however, are not supported at the international level and are not developed as part of the international survey design, but rather by individual participating countries/economies that may wish to address a specific policy or research issue. National options often result in additional costs for the National Centre as well as for PISA Contractors, and a national option contract will need to be established directly with the Core A Contractor. To ensure that national options do not affect the data used for the international comparisons (e.g. because of test fatigue, learning effects from national test items), proposals for national options must be discussed and agreed upon with the PISA Contractors. The contractual agreement or costs associated with participation in national options are negotiated directly with the Contractors and a formal contract is signed with ETS, as the Core A Contractor.³ For these national options, a single contract per participant must be established with Core A and all negotiations must occur through the National Project Manager.

For brevity, international and national options are at times referred to simply as “optional components” in this manual.

Understand international options

Consistent with previous cycles, PISA 2021 will offer a set of international options. The available options include an assessment of Financial Literacy and questionnaires to students (Information and Communication Technology [ICT] Familiarity and Well-Being), teachers or parents. Your country/economy PGB member must inform the OECD Secretariat if it wishes to participate in any of these options by **30 November 2018**. Note that countries/economies must conduct a Field Trial for an international option to be permitted to implement it in the Main Survey. Also, note that some of these options, such as the Teacher Questionnaire and the assessment of Financial Literacy, would require special sampling arrangements and negotiations with Core C Sampling. Practical considerations, such as budget and staffing, should also be taken into account.

³ Exceptions may apply.

Understand national options

You must also notify the PISA Contractors of any national options you plan to implement and seek agreement for these plans in advance. A national option is defined in the PISA 2021 Technical Standards in Exhibit 4.3 below. In general, Core C Sampling co-ordinates sampling options via your cycle-wide sampling plan, and the Core A Contractor (through ETS) co-ordinates all other options. This will be clearly communicated and negotiated with countries/economies in advance.

Exhibit 4.3. Definition of national options – PISA Technical Standards

National option – a national option occurs if:

a) National Centre administers any additional instrumentation, for example a test or questionnaire, to schools or students that are part of the PISA international sample. Note that in the case of adding items to the questionnaires, an addition of five or more items to either the school questionnaire or the student questionnaire is regarded as a national option.

OR

b) National Centre administers any PISA international instrumentation to any students or schools that are not part of an international PISA sample (age-based or grade-based) and therefore will not be included in the respective PISA international database.

OR

c) National Centre administers any PISA international option only in some, not all, jurisdictions. The country will in this case sign up for the international option with the OECD, as if it was administered in the entire jurisdiction, and the additional work involved with administering the international option to part of the jurisdiction only is considered a national option.

The PISA Technical Standards relating to the implementation of national options are shown in Exhibit 4.4 below.

Exhibit 4.4. National options standards – PISA Technical Standards

Standard 10.1 Only *national options* that are *agreed upon* between the National Centre and the international contractors are implemented.

Standard 10.2 Any *national option* instruments that are not part of the core components of PISA are administered after all the test and questionnaire instruments of the core component of PISA have been administered to students that are part of the international PISA sample, unless otherwise agreed upon.

In previous PISA surveys, some countries/economies developed a small number of questionnaire items of national relevance and inserted them into the international questionnaires following negotiation with the PISA Contractors. These additional questions are referred to as national extensions and affect the development process and add work to everyone involved, including National Centres, all PISA Contractors, as well as respondents (students, teachers,

administrators and parents). They also add risks to the project because technical expertise is needed for modifying the computer-based files as errors are easily introduced, sometimes resulting in software crashes. But most importantly, these extensions may affect data quality when the instruments become longer and result in fatigue and missing data (or affect instruments coming afterwards). The inclusion of these additional questionnaire items should be negotiated with Core A Questionnaire Content at the time of negotiating the adaptation of the international questionnaires through the Questionnaire Adaptation Spreadsheet (QAS). National extensions beyond the pre-set limit of five questions per questionnaire may be negotiated through a separate national option contract. Note that the content of national extensions is not subject to linguistic verification.

Another option sometimes used is the grade-based sample. This involves an additional grade-based population that participates in the full range of PISA test and questionnaire instruments. A grade-based sample is a national option, as defined in the glossary.

You will need to discuss these national options with your PISA Governing Board member, committees and other stakeholders where appropriate to come to a decision regarding participation. Practical considerations, such as budget and staffing, should also be taken into account.

Understand the UH form (one-hour form) and UH questionnaire for students with special educational needs

This option involves the administration of a shorter test and questionnaire to students with special educational needs. Its primary purpose is to assist some countries/economies in achieving the PISA coverage standard. This option will be offered to countries/economies implementing PISA as both computer- and paper-based assessments.

4.2.7. Prepare for the translation and verification phases

The translation and verification schedule for PISA 2021 will be tailored to each country/economy's data collection period, with fixed threshold dates. Translation and/or adaptation activities will start by early April 2019, soon after the March NPM Meeting. Verification will start in September 2019 for most countries/economies, but possibly before that date for early-testing countries/economies. Therefore, very careful preparation and planning is required.

For PISA 2021, all new cognitive development is for computer delivery. The amount of material to be translated will vary from participant to participant based on participation in the previous cycles of PISA and on international options participation, and will be discussed individually with each country/economy.

Your pre-filled PVS will be made available to you on the PISA Portal in January 2019. This PVS will be pre-filled based on your Field Trial start dates and on estimated time needed to complete each step. If you agree with the proposed dates, you will simply be asked to confirm your agreement. Finalisation of the PVS negotiation before the March 2019 NPM Meeting is

encouraged. Countries/Economies with complex timeline will have the opportunity to discuss and finalise the PVS at the March 2019 NPM Meeting if needed.

Additionally, your Translation Plan will need to be completed, submitted and agreed upon prior to the NPM Meeting in March 2019.

Prepare adaptations/translation of instruments and submit instruments for verification

The PISA Contractors will prepare documents explaining the preparation of the Field Trial assessment and questionnaire materials. These will present National Centres with step-by-step instructions to learn what they need to prepare, how they need to prepare it and by when they need to prepare it. Translation, adaptation and verification are mentioned in the NPM Manual and will be described in detail in follow-up documents that will be released closer to the task period.

The Translation Kit is a package of some of these follow-up documents that will be available on the PISA Portal to assist National Centres in organising Field Trial translation activities. It provides the key documents for the preparation of the materials, such as detailed guide to all the PISA 2021 translation tasks, customisable Power Point presentations for training the translators for the PISA materials, translation and adaptation guidelines, practice materials, links to the translation software and its user guides, and for the countries/economies that already participated in the previous PISA cycles, tools for trend review.

Material to be translated/adapted

In general, NPMs need to develop one version of the test instruments and questionnaires per testing language. The number of testing languages is agreed upon with Core C Sampling via cycle-wide Sampling Task 0.

All test materials, questionnaires and coding guides must be adapted and, if needed, translated (unless otherwise agreed upon). A document listing all materials to be adapted/translated and their approximate volume (word and character count) in the English source version will be made available to you once all master materials are finalised. It is designed to assist you in discussing costs and deadlines with your translators and in keeping track of the pieces of work completed or still under translation.

Note that most of the units will have undergone extensive review since the country/economy reviews and many will undergo further review after Field Trial selection. Therefore, units from the previously distributed source instruments for review should not be considered ready for translation and adaptation.

PISA Technical Standards in relation to the equivalence of the test and questionnaire instruments and manuals, and the submission of materials for verification, are shown in Exhibit 4.5 below.

Exhibit 4.5. Equivalence of test and questionnaire instruments and manuals – PISA Technical Standards

Standard 4.1 The majority of test items used in previous cycles will be administered unchanged from their previous administration, unless amendments have been made to source versions, or outright errors have been identified in the national versions.

Standard 4.2 All assessment instruments are equivalent to the source versions. Agreed upon adaptations to the local context are made if needed.

Standard 4.3 National versions of questionnaire items used in previous cycles will be administered unchanged from their previous administration, unless amendments have been made to source versions, outright errors have been identified in the national versions, or a change in the national context calls for an adjustment.

Standard 4.4 The questionnaire instruments are equivalent to the source versions. Agreed upon adaptations to the local context are made if as needed.

Standard 4.5 School-level materials are equivalent to the source versions. Agreed upon adaptations to the local context are made as needed.

Standard 5.1 The following documents are translated into the assessment language in order to be linguistically equivalent to the international source versions.

- All administered assessment instruments
- All administered questionnaires
- The Test Administrator script from the Test Administrator (or School Associate) Manual
- The Coding Guides (unless otherwise agreed upon)

Standard 5.2 Unless otherwise agreed upon, school-level materials are translated/ adapted into the assessment language to make them functionally equivalent to the international source versions.

Note 5.1 The quality assurance requirements for this standard apply to instruments that are in a language that is administered to more than 10% of the target population.

Standard 18.3 *Questionnaire* materials are submitted for linguistic verification only after all adaptations have been *agreed upon*.

Standard 18.4 All adaptations to those elements of the school-level materials that are required to be functionally equivalent to the source as specified in Standard 5.2, need to be *agreed upon*.

Translation

To ensure that all translated/adapted materials meet the PISA Technical Standards, it is a requirement that national versions of all instruments used in the assessment (i.e. the test materials [items and stimuli], the Student and School Questionnaires, and any optional questionnaire) be developed through a **double-translation-and-reconciliation procedure**. First, two independent translators should translate the source material into the target language.

A third person should then reconcile these two translations, that is, merge them into a single national version.

For the core assessment (i.e. tests) and the questionnaire materials, the PISA Contractors will develop two parallel source versions of the test materials: one in English and the other in French. One method that has been recommended in previous cycles and yielded outstanding results is to use the English source version for one of the translations into the national language and the French source version for the other.

An alternative method could be double translation and reconciliation from one of the source languages followed by extensive cross-checks against the second source language.

Note that no double-translation procedure is required for coding instructions and coding guides. The international source version of these materials will be distributed in English and French. One of your translators should translate the coding descriptions and student sample responses from one of the two source versions; then the reconciler should review the translation, check that the translation and adaptation guidelines were followed, and that the translation is consistent with the final version of the item, in particular as regards national adaptations. As coding guides follow the same logic, format and terminology across cycles, consistency with materials from PISA 2018 will need to be maintained.

To instruct and train the translation teams and for the later work of the team, you will use the PISA 2021 Translation and Adaptation Guidelines, released together with the source versions. It is essential to include this document in the translators' assignment specifications.

Recruit translation team(s)

Each translation team will include a minimum of three persons: two translators and one reconciler, with variations possible. Due to the significant volume of test material and, for new countries/economies, due to having three or four different domains, you may consider assigning the translation tasks to parallel teams of translators that would work separately.⁴In that case, a lead reconciler will need to ensure consistency, especially for the translation of recurring elements that appear in units from all domains.

The “adaptor” is the person in charge of adapting one of the source versions, a common reference version or a verified borrowed version. The **reconciler** and **adaptor** roles are particularly important. Please select for this task your most competent translator or a researcher from your staff who has expertise (i) in test development in the domain being tested; (ii) in the source and target languages; and (iii) in the case of questionnaires, familiarity with the national education systems. S/he should also have writing skills, excellent grammar and spelling, and a taste for work that requires great attention to detail.

⁴ Translations of science and mathematics items and reading trend items are not expected to be necessary for countries/economies that participated in PISA 2018.

It is strongly advised that professional translators or a specialist company be employed for the translation of all the materials (core assessment materials and questionnaires, as well as coding instructions and guides). The translation team responsible for this work must have the following:

- a perfect command of both the source language and the target language
- a solid command of the domains covered by the test, in particular for the domains of Mathematics, and (for new countries/economies) Science and Reading (It may, therefore, be necessary to rely on different pairs of translators for the translation of different domains.)
- some knowledge of the school system of the country/economy (in particular, for the School and Student Questionnaires).

Translators and reconcilers should have a good command of MS Word™ and MS Excel™.

Some experience with CAT tools (computer-aided translation tools) is also recommended. In particular, for CBA translators and the reconciler will use an open-source translation tool to edit the XLIFF⁵ files. The National Centre will need to provide training to the translators and reconciler on the required tools. Note that translators will need high-speed access to the Internet at all times.

NPMs are invited to organise training sessions for their translation team based on the PISA 2021 Translation and Adaptation Guidelines, the information received during the first translation meeting, and on the training module with hands-on exercises and sample units (both in English and French source versions) included in the Translation Kit. A workshop on the translation, adaptation and verification workflow and procedures will be given at the March 2019 NPM Meeting. The Translation Kit will be made available to National Centres in March 2019.

The work produced by the translation teams should be supervised by specialists from the National Centre and/or experts of the National Committee of Experts, particularly in relation to the following:

- psychometric quality of the tests
- problems of content and terminology
- national adaptations.

Reconciler / adaptor task

The reconciler is the most influential person in a translation team. Their main task is to merge the two independent translations in such a way that the resulting national version is semantically as close as possible to the source version(s), that all translation errors have been corrected, and that the wording is fluent in the target language.

⁵ XLIFF: tagged XML localisation interchange file format, the format used in PISA 2012, 2015, and 2018 and for all CBA materials.

A second important task for the reconciler or the adaptor will be to document all national adaptations that the translation team deems necessary. Detailed instructions on how to record these adaptations will be provided in the **material preparation documents** that will be posted on the PISA Portal.

You and the reconciler should discuss any proposed national adaptations with relevant national committees or other experts (e.g. curriculum and assessment groups) prior to finalisation of the national versions.

Establish confidentiality requirements for translators

Translators, as with all persons who handle the materials (e.g. members of the national research team, the National Committee of Experts, secretaries), should be aware that all PISA material is under embargo and therefore must be kept **strictly confidential**. Please make sure that each translator signs a confidentiality agreement prior to starting the translation work.

A sample confidentiality form is provided in Appendix B of this manual. It can be adapted to suit National Centre requirements. For instance, the confidentiality agreement could also include a reminder that PISA materials should never be exchanged by email or saved on unsecured clouds. Additional information is presented in Section 4.2.1 “Establish a National Centre”.

Agree on verification timeline

A six-month testing period is required for the fully authored CBA, meaning that all verified materials must have undergone a final check and be “locked” in the platform as early as October 2019, depending on the data collection dates. For this reason, translation/adaptation of the test materials and the questionnaires will need to take place from April to August 2019, and the verification window will be from early July to mid-November 2019 for CBA items, depending on the testing dates. Before the NPM Meeting in March 2019, Core D Translation Verification will send the PVS (Preferred Verification Schedule). Dates for submitting your materials for verification will have been pre-filled based on your testing dates, and you will be asked to approve them. It is highly recommended that you finalise the PVS negotiation before the March 2019 NPM Meeting, unless a complex timeline, due to shared or borrowed versions, needs a face-to-face negotiation and other contributors’ input. (Note that your plans for adaptation of the school-level materials will be negotiated with Core A Survey Operations. Further details of this separate negotiation will be provided at a time noted in the Tasks tab.)

Countries/Economies will have the opportunity to request updates to the trend questionnaire materials during the adaptation negotiation. Core A Questionnaire Content will provide you with a customised Field Trial Questionnaire Adaptation Spreadsheet (QAS), which will contain highlighted trend questionnaire items that need updating. You will provide relevant updates in the QAS when you provide adaptations for new questionnaire items. Note that adaptations to questionnaires need to be agreed upon with Core A Questionnaire Content before translation and verification can begin. The agreed-upon updates in the trend items will be centrally implemented during the verification. Core A Questionnaire Content will be available to negotiate

your questionnaire adaptations starting in March 2019 and to process verification feedback on questionnaires on the dates agreed upon in the PVS.

Translated (and reconciled) CBA materials must be submitted for verification according to the dates agreed upon in the PVS. To achieve this, it is crucial for countries/economies to begin translation and adaptation as soon as the materials are available.

It is important to keep in mind the following:

- For PBA countries/economies, printing of paper-based materials may occur several months after verification. Core A Cognitive will centrally assemble booklets from verified clusters. Because countries/economies do not need to assemble their booklets, the time constraints on printing will have little or no impact on the verification timeline.
- National Centres should expect staff to negotiate questionnaire adaptations from March 2019 to July 2019 and to process verification feedback on the dates agreed upon in your country/economy's PVS.
- For CBA countries/economies, once countries/economies have processed verification feedback, they will upload post-verification versions of computer-based items to the PISA Portal, and Core D Translation Verification will check whether corrections labelled as requiring follow-up by the Core A Translation Referee are addressed in a satisfactory way. Layout issues will be addressed separately by Core A Cognitive.

4.2.8. Attend the first NPM Meeting in March 2019

Attendance at NPM meetings and international trainings are critical to your understanding of PISA 2021 tasks. Using the meeting agenda as your reference, you should carefully consider which of your staff should attend each meeting. PISA Technical Standards in relation to meeting participation are shown in Exhibit 4.6 below.

Exhibit 4.6. Meeting attendance – PISA Technical Standards

Standard 22.1 Representatives from each National Centre are required to attend all PISA international meetings including National Project Manager meetings, coder training, and any separate within-school sampling training, and data management training, as necessary. Up to 6 international meetings are planned per cycle.

Note 22.1 The length of these meetings vary from 3 to 5 days.

Standard 22.2 Representatives from each National Centre who attend international meetings must be able to work and communicate in English.

The first NPM Meeting of the 2021 cycle will take place in March 2019, and your participation is essential and required. This meeting will present an overview of the project, review the timeline, explain roles and responsibilities, and present the integrated design. In addition, it will cover many important tasks associated with Field Trial sampling, survey operations and the adaptation, translation and verification of tests and questionnaires – both computer- and paper-

based. Note that NPMs from all CBA countries/economies will need to be familiar with the computer-based translation/adaptation procedures. This includes those NPMs in CBA countries/economies that test in English or French, as any adaptations to materials will be made using the required translation/adaptation process.

In addition, one-on-one country/economy consultations will take place throughout the meeting on topics such as school and student sampling, translation/verification, adaptation of questionnaires and survey operations. Decisions about the representatives to attend this meeting will depend greatly on the structure and resources of the National Centre and the final meeting agenda should be used as your reference but general guidelines are provided below.

- *NPM Meeting 1 Participants*: the National Project Manager and/or any member of the National Team who will assist the National Project Manager and the Translation Co-ordinator. If different project managers and/or co-ordinators are in charge of the cognitive and questionnaire components, it is recommended that all attend the meeting.

4.2.9. Attend the PISA Introductory Meeting in January 2019 for new countries/economies and/or new NPMs only

In addition to the first NPM Meeting above, if your country/economy is joining PISA for the first time or if your country/economy participated in the past but has a new NPM and/or National Centre, you and/or your team should **plan to attend an introductory meeting prior to the first NPM Meeting**. This meeting will provide participants with a more detailed overview of PISA, including project activities, the overall timeline and resource requirements with specific emphasis on activities that are key for the National Centre. This meeting will take place in Rockville, MD, USA on 14-16 January 2019. Please contact PISA-Meetings@Westat.com for detailed information.

In addition, this meeting will offer opportunities for one-on-one country/economy consultations on topics such as Sampling Task 0, Translation Plan, school and student sampling, survey operations and translation/verification, adaptation of questionnaires or any other aspect critical to preparations of the first phase of the project.

Introductory Meeting Participants: the National Project Manager and/or any member of the National Team who will assist the National Project Manager. If different project managers and/or members of the National Team are in charge of the different PISA components (sampling, translation, test and questionnaires) and/or activities covered by this meeting, it is recommended that all be present according to the activities covered by this meeting.

CHAPTER 5 – FIELD TRIAL PREPARATION PHASE

5.1. Overview of tasks

This section describes additional tasks associated with preparations for the Field Trial, including further work on sampling tasks, national versions of your instruments and working with participating schools. Careful preparation will ensure a successful Field Trial data collection.

During this phase, you will need to complete the following:

- further specify your Field Trial sampling plans
- finalise your Field Trial sampling plans
- assemble test and questionnaire materials
- prepare school-level materials
- work with schools
- recruit and train Test Administrators
- plan for national quality monitors to visit schools to monitor testing sessions
- plan staffing and resources for coding and data entry operations for the Field Trial.

The timeline for most tasks is tailored to your country/economy based on the data collection dates. The Tasks tab on the PISA Portal lists these tasks and provides a description and due date for your country/economy. The relevant documents will be released according to the timeline.

Exhibit D.2 in Appendix D shows a tentative schedule of tasks associated with the Field Trial Preparation Phase. Procedures associated with these activities are briefly described below, and more detailed documentation will be released closer to the actual task dates.

5.2. Key tasks during the Field Trial preparation phase

5.2.1. Further specify your Field Trial sampling plans

After agreeing on your Field Trial test dates, population definitions, testing languages, sampling options and various other issues, you will need to begin preparing the specifics of your Field Trial sampling plans. Guidelines on how to complete your plans are given in further detail in the Field Trial Sampling Guidelines. You will need to submit your detailed Field Trial sampling plans (i.e. allocation of the number of Field Trial schools to sample, into various groups such as urban or rural, public or private) – Sampling Task 3 (ST3, ST3a) – in September 2019. Following

review and discussion with Core C Sampling, your list of sampled schools – Sampling Task 4 (ST4) – should be submitted in November 2019 and will be finalised around the end of November. It is essential to ensure the confidentiality of your sampled schools.

The PISA Technical Standards note that “for the Field Trial, a sampling plan needs to be agreed upon.” The PISA Technical Standard regarding Field Trial sample sizes is shown below in Exhibit 5.1. If you have more than one language of instruction for mathematics in your country/economy, you will need to discuss this situation with Core C Sampling, particularly if you plan to exclude very small linguistic minorities from the target population for the Main Survey. Much of this discussion should have already occurred during the cycle-wide ST0 work in late 2018. However, if any problems of this kind exist that are not yet resolved, they should be discussed with Core C Sampling immediately.

Other language issues such as the prevalence of bilingual, multilingual or immersion schools should also be discussed at this time.

According to PISA Technical Standard 3.1, a Field Trial must occur for any languages involving more than 5% of the target population (either in the country/economy itself or, if agreed with PISA Contractors, in another PISA country/economy from which field-trialled and verified test and questionnaire materials would be borrowed and adapted for the Main Survey).

Countries/Economies that are able to borrow such versions from another PISA country/economy under some circumstances may not need to field trial these minority versions themselves. A minority language version is a version involving less than 10% of the target population. Languages involving 10% or more of the target population are major languages that must be field-trialled and these language versions are internationally verified. This must be agreed upon with Core C Sampling and Core A Translation Referee. If, for example, the minority language is sizeable and the PISA Contractors believe not testing operational procedures in this language in the Field Trial would pose a risk for the Main Survey, it will be necessary to undertake a Field Trial in this language.

Exhibit 5.1. Field Trial participation – PISA Technical Standards

Standard 3.1 PISA participants participating in the PISA 2021 Main Survey will have successfully implemented the Field Trial. Unless otherwise agreed upon:

- A Field Trial should occur in an assessment language if that language group represents more than 5% of the target population.
- For the largest language group among the target population, the Field Trial student sample should be a minimum of 200 students per item.
- For all other assessment languages that apply to at least 5% of the target population, the Field Trial student sample should be a minimum of 100 students per item.
- For additional adjudicated entities, where the assessment language applies to at least 5% of the target population in the entity, the Field Trial student sample should be a minimum of 100 students per item.

Note 3.1 The PISA Technical Standards for the Main Survey generally apply to the Field Trial, except for the Target Population standard, the Sampling standard, and the Quality Monitoring

standard. For the Field Trial a sampling plan needs to be agreed upon.

Note 3.2 The sample size for the Field Trial will be a function of the test design and will be set to achieve the standard of 200 student responses per item.

Note 3.3 Consideration will be given to reducing the required number of students per item in the Field Trial where there are fewer than 200 students in total expected to be assessed in that language in the Main Survey.

Updates for PISA 2022

If you have not changed any of your plans regarding Creative Thinking and Financial Literacy and your chosen Field Trial design will remain the same, then you only need to update your Sampling Task 1. Once that is complete, Core C Sampling will upload the four required files to a clean version of Maple and provide that Maple to you.

If you changed your plans regarding Creative Thinking and/or Financial Literacy, and your Field Trial design will change, you will need to update Sampling Task 1 and the Field Trial design sheet of Sampling Task 2. Sampling Task 3A and Sampling Task 4 may also need updating. Lastly, Core C Sampling will update Sampling Task 5A and 5B for you to review.

Finalise your Field Trial sampling plans

Once your plans have been approved (by the end of November 2019), Core C Sampling will send you a form called Sampling Task 5 (ST5) regarding your list of sampled schools that needs to be checked. This form contains all your sampled and replacement schools from your ST4 file, supplemented with all the within-school sampling parameters. Once approved by you, Core C Sampling will import this file, along with two other important files required for within-school sampling, into the within-school sampling software, enabling you to perform your within-school sampling.

At some point between ST4 and ST5, Core C Sampling will ask when you would like to receive your Main Survey school sample. Your response to this question will determine your schedule for the submission of Main Survey sampling tasks.

Updates for PISA 2022

Since the Field Trial was postponed to 2021, you may desire to have a new sample of Field Trial schools. If so, Core C Sampling will work with you to enable the changes required.

5.2.2. Assemble test and questionnaire materials

The PISA 2021 Field Trial instruments – test items and questionnaires – will be available to National Centres by the end of February 2019, following PISA Governing Board (PGB) approval. At that time, the PISA Contractors will focus on finalising the translation materials.

Release of computer-based master instruments (computer-based countries/economies only)

Computer-based assessment (CBA) instruments

The final CBA new materials will be released for translation in batches, starting in early April 2019 with the last batch planned for early May 2019. For computer-based countries/economies, the electronic source version will be available in both English and French source versions, except for Financial Literacy, which is released in English only. These will be provided for translation in XLIFF format.

Coding guides for CBA units

The Field Trial coding guides will be released soon after the cognitive units are released (June 2019). The English and the French version of the coding guides will both be released at that time and will be updated in February 2020 following the Field Trial coder training.

The coding guides will be in Word format as in previous cycles. Nevertheless, in this cycle, the translation and verification process will be handled using the same computer-assisted translation (CAT) tool as for the test units, ensuring a higher quality of the materials and reducing the translation effort.

The National Centres will be able to start the translation of the coding guides as soon as the reconciliation of their cognitive units has been completed, in order to (i) take advantage of the translation memory from the reconciled units, and (ii) entrust the translation of the coding guides to the same translation team in charge of the cognitive units.

The verification would only start after the final Field Trial sources are released in February 2020 and the timeline would be based on the PVS. At that time, National Centres will need to implement the revisions arisen from the coder training into their national version before submitting the materials for verification. For early testing countries/economies, negotiations and early verification will be arranged on a case by case basis.

Computer-based questionnaires

The final computer-based questionnaire material will be released by the end of March - early April 2019 for countries/economies to begin the negotiation phase for national adaptations and extensions. Countries/Economies will need to negotiate national adaptations and extensions with Core A Questionnaire Content before beginning the translation process. National extensions refer to additional questions that countries/economies insert into the questionnaires to meet national policy interests. See note below.

NOTE: All adaptations and national extensions (i.e. additional national questions) must be negotiated during the Field Trial review and adaptation phase (starting in April 2019) and implemented during the Field Trial. No new questions will be accepted for the Main Survey if

they were not administered in the Field Trial.

National extensions affect the development process and add work to everyone involved, including National Centres, all PISA Contractors as well as respondents (students, teachers, administrators and parents). They also add risks to the project because technical expertise is needed for modifying the computer-based files and data software as errors are easily introduced, sometimes resulting in software crashes or data loss. But most importantly, these extensions may affect data quality when the instruments become longer and result in fatigue and missing data (or affect response rates of instruments administered afterwards). The proposals for these additional questions or extensions MUST be negotiated with Core A Questionnaire Content during the Field Trial review and adaptation phase (starting in April 2019). Core A Questionnaire Content will rely on information from a variety of sources to approve national requests. There is a limit of five additional national questions per questionnaire.

For computer-based countries/economies, the electronic source version for adaptation and translation will be available in English only, with a French source version available for reference and/or translation as a separate MS Word™ file. The international source version of the electronic questionnaires will be provided in the Questionnaire Authoring Tool (QAT, an online tool for editing and testing the questionnaires) for adaptation and in XLIFF format for translation. Countries/Economies will first adapt the computer-based questionnaires' master text in English in the QAT and the country/economy adaptations will be used to create a country/economy-specific XLIFF file for translation.

For countries/economies that participated in 2018, the QAT will be pre-populated with the English translation of the PISA 2018 trend questionnaire items and the XLIFF files will be pre-populated with the country/economy's existing translation of trend items with national adaptations. Countries/Economies will need to enter their adaptations to new questionnaire items into the QAT (in English) once these adaptations have been agreed upon by Core A Questionnaire Content. New items will be translated in the XLIFF file.

New countries/economies will need to enter their adaptations of all questionnaire items into the QAT (in English) after these adaptations have been agreed upon by Core A Questionnaire Content. Once the English adaptations are finalised, the PISA Contractors will prepare XLIFF files for the translation process.

Following the completion of the adaptation process in the QAT, XLIFF files will be provided for all national languages. The translated XLIFF files will go through a translation and verification process.

A workshop on how to work with the QAT and more information about the workflow will be provided at the March 2019 NPM Meeting.

Further details about the preparation of materials will be provided by the different PISA Contractors closer to the time when tasks need to be completed.

Release of paper-based master instruments (paper-based countries/economies only)

Paper-based assessment (PBA) instruments

The final PBA materials will be released for translation starting in early April 2019 in both English and French. New countries/economies will receive Microsoft Word versions of the two source versions and will be required to follow a double-translation-and-reconciliation procedure (see Section 4.2.7 “Prepare for the translation and verification phases” for more information). For countries/economies that participated in previous cycles, the PISA Contractors will retrieve translations and centrally manage this process, noting that no changes to trend items are allowed, except for correcting formatting, layout or outright errors noted during the previous PISA administration.

Coding Guides for PBA units

The Field Trial Coding Guides will be released soon after the cognitive units are released (June 2019). The English and the French version of the coding guides will both be released at that time and will be updated in February 2020 following the Field Trial coder training.

The Coding Guides will be in Word format as in previous cycles. Nevertheless, in this cycle the translation and verification process will be handled using the same computer-assisted translation (CAT) tool as for the test units, ensuring a higher quality of the materials and reducing the translation effort. The use of the CAT tool for paper-based countries/economies would be on a voluntary basis.

The National Centres will be able to start the translation of the Coding Guides as soon as the reconciliation of their cognitive units has been completed, in order to (i) take advantage of the translation memory from the reconciled units (ii) entrust the translation of the Coding guides to the same translation team in charge of the cognitive units.

The verification would start after the final Field Trial sources are released in February 2020 and the timeline would be based on the PVS. At that time, National Centres will need to implement the revisions arisen from the coder training into their national version before submitting the materials for verification. For early testing countries/economies, negotiations and early verification will be arranged on a case by case basis.

Once assessment materials are translated and verified, Core A Cognitive will centrally assemble test booklets following all international standards and guidelines regarding layout and format to ensure cross-national comparability (see Exhibit 5.2 below). Countries/Economies will be asked to check and verify.

Exhibit 5.2. Layout and pagination of assessment materials – PISA Technical Standards

Standard 13.1 All paper-based student assessment material will be centrally assembled by the international contractors and must be printed using the final print ready file and *agreed upon* paper and print quality. New countries/entities must submit a printed copy of all Field

Trial instruments (booklets and questionnaires) for approval of the printing quality for the Main Survey. The same printing standard must be used for both the Field Trial and the Main Survey.

Standard 13.3 The layout and pagination of all test paper-based material is the same as in the *source versions*, unless otherwise agreed upon.

Paper-based questionnaires

The final PBA questionnaire material will be released for negotiation of national adaptations and translation by early April 2019. For paper-based countries/economies, the source versions in PDF format show how the final instruments should be formatted. To help ensure cross-national comparability, the layout and format of all versions of instruments should be equivalent (see Exhibit 5.3 below).

Exhibit 5.3. Layout and pagination of questionnaires – PISA Technical Standards

Standard 13.4 The layout and formatting of the paper-based questionnaire material is equivalent to the source versions, with the exception of changes made necessary by national adaptations

The translation template for paper questionnaires will be available in both English and French. Prior to the translation process, countries/economies will need to negotiate national adaptations and extensions with Core A Questionnaire Content at this point. National extensions refer to additional questions that countries/economies insert into the questionnaires to meet national policy interests. See note below.

NOTE: All adaptations and national extensions (i.e. additional national questions) must be negotiated during the Field Trial review and adaptation phase (starting in April 2019) and implemented during the Field Trial. No new questions will be accepted for the Main Survey if they were not administered to the Field Trial.

National extensions affect the development process and add work to everyone involved, including National Centres, all PISA Contractors as well as respondents (students, teachers, administrators and parents). They also add risks to the project when these are not implemented or documented correctly. But most importantly, these extensions may affect data quality when the instruments become longer and result in fatigue and missing data (or affect response rates of instruments administered afterwards). The proposals for these additional questions or extensions **MUST** be negotiated with Core A Questionnaire Content at during the Field Trial review and adaptation phase (starting in April 2019) Core A Questionnaire Content will rely on information from a variety of sources to approve national requests. There is a limit of five additional national questions per questionnaire.

Further details about the preparation of materials will be provided by the different PISA Contractors closer to the time when tasks need to be completed.

Combining international and national options during administration

It can be useful to recall the distinction between the following questionnaire components:

- **Core:** These are the components that all countries/economies administer, namely the Student and School Questionnaires.
- **International options:** These are optional components that countries/economies may elect to administer in addition to the core components. Participation in these options is negotiated with the OECD Secretariat.
- **National options:** These components are country/economy-specific and administered for reasons of national policy or research interest. These may be national extensions within the existing questionnaire or additional, separate instruments. These are negotiated with the PISA Contractors as described in Section 4.2.6 “Indicate your participation in international and/or national options”.

As noted in the previous chapter, to maintain consistency in how students (as well as school staff and respondents to any additional optional components) respond to the questionnaires, it is important to have respondents answer the core component first, then the international optional component(s) (if applicable), and, finally, any additional national optional component(s) (if applicable).

Organise plans for printing materials and verify print quality (PBA countries/economies)

During the printing process it is essential to maintain the security and confidentiality of the PISA assessment material.

Guidelines about printing will be prepared to ensure consistency in the quality of the instruments. Practical details should also be taken into account.

The three main considerations while planning for the printing of PISA materials are described below.

- Assessment materials (both test booklets and coding materials) are secure at all times.
- Print and paper qualities are of a high standard (e.g. print resolution, paper thickness) to avoid an impact on students’ test-taking behaviour. The main print quality requirements are that participating students have no difficulty in reading the text and interpreting the graphics and that the layout and pagination of the material is equivalent across countries/economies.
- Booklet and questionnaire covers allow students or schools to be clearly identified. In addition, the PGB has specified that while the covers of instruments may be adapted to the national context, specific information should appear on all international versions. The following details should appear on the cover of each instrument:
 - the study: OECD Programme for International Student Assessment <20xx>

- country/economy
- administration: either Field Trial or Main Survey
- assessment instrument: test booklet <xx> or questionnaire <yy>
- date of assessment
- language of testing
- participant identification information: region, stratum, school and student ID, <school and student name> (for reasons of security and confidentiality, do not include names unless it is a national requirement)
- in the case of test booklets, coder identification as specified in the key documents.

The key document, “Integrated Design”, should be used in conjunction with your ST4 (number of students and schools to be sampled) to assist in estimating the number of booklets to be printed and associated costs.

The PISA Technical Standard related to the cover page of PISA paper instruments is shown below in Exhibit 5.4.

Exhibit 5.4. Cover page of instruments – PISA Technical Standards

Standard 13.2 The cover page of all national PISA test paper-based materials used for students and schools must contain all titles and approved logos in a standard format provided in the international version.

Printing PISA materials

Paper-based tests and questionnaires must be printed in separate booklets to avoid the possibility of students’ returning to the test material during the questionnaire session. Having the tests and questionnaires as separate booklets also assists the data entry process, as the questionnaire data can be entered while the test material is being coded.

The assembly of the PBA booklets will be performed centrally by Core A Cognitive, using national versions of the materials. Countries/Economies will be responsible for checking and identifying layout issues at the cluster level. Once approved, Core A Cognitive will rotate clusters of items following the pre-specified design and provide countries/economies with print-ready booklet files (in PDF format). Core A Cognitive also will work with countries/economies in adapting cover pages and will provide printing guidelines.

It is recommended that prior to commencing the print job you request a sample of each printed instrument from your printer. This will minimise any last-minute problems such as differences between your print settings and those of the printer. It will also allow you to confirm that the paper quality and print resolution are of the desired standard.

The assembly of assessment booklets will be centrally managed by Core A Cognitive. National Centres will be required to check their national versions thoroughly and promptly to determine if there are any layout or formatting anomalies and, if applicable, allow time for the PISA contractors to correct these.

Organise plans for testing and reproducing USB drive for the Student Delivery System

The computer-based assessment will typically be delivered using a USB drive, although they can also be run from the local hard drives on the school computers. The software runs much faster from the hard drive than the USB drives due to the higher transfer rates. Experience from PISA 2018, when USB drives were the most common approach, shows that the overall quality of the USB drive can have a large impact on the performance of the system and, thus, the students' test-taking behaviour. Also, PISA 2018 has shown that a large proportion of the errors identified in data collection were caused by poor quality of the USB drives or by errors when reproducing them. Therefore, it is important for National Centres to research and test a variety of USB drives. When choosing which USB drive to purchase, you are strongly advised to purchase a few sample units, install the PISA Student Delivery System (SDS) (master or national version, depending on the timeline), and fully test them in computers with similar technical specifications to the ones that will be available in schools. Only after this testing is complete should countries/economies go forward with purchasing all the necessary USB drives, which in most cases will be in the thousands. More information about selecting and testing USB drives is provided in the Student Delivery System Manual.

If you have a company copying the SDS onto the USB drives, it is recommended that you request a sample of the final USB drives from the company. This will minimise any last-minute problems such as differences between the USB drive that you tested and the USB drives that the company is returning to you with the SDS.

After translation and verification of the CBA instruments and questionnaires has been completed, a national SDS will be created for each country/economy. This software package will include the final Field Trial version of all instruments needed for delivering the survey to students. This software will first be tested by the PISA Contractors, but it is also necessary that countries/economies perform a thorough testing of the Field Trial SDS. This testing should be done using the types of computers and the operating system versions that are common to be used in schools. A testing plan will be provided to countries/economies to use in completing this testing. Two rounds of testing are planned for the Field Trial, with correction of any identified problems happening between the two rounds. The national SDS testing should be completed seven weeks prior to the beginning of the Field Trial start date in order to give adequate time for duplication and distribution of USB drives.

Updates for PISA 2022

Updating Questionnaires

The only questionnaires that will be updated for the Field Trial in 2021 will be the Student and School Questionnaires. The OECD, in coordination with the PGB, have determined that it is important to collect information on the effects of the current health crisis and other potential crises on student learning and school preparedness and have worked with the Core A contractor and the Questionnaire Expert Group to prepare a limited set of questions called the "Global Crises Module" (GCM) for inclusion in the School and Student Questionnaires.

The Core A contractor will add the GCM questions to all National Centres' questionnaires. The OECD has coordinated with the Core D contractor to centrally translate these new items for all the verified language versions. The Core A contractor will work with those countries that have non-verified language versions to share borrowed translations of the new items or to organise the translation.

In addition, there are a few questions in the School and Student Questionnaires that reference specific years - these questions will be updated centrally by the Core A contractor.

Beginning on a rolling basis in October 2020, PISA Centres will review the updated Student and School Questionnaires to identify any corrections to the centrally translated material that are needed for the Field Trial. Corrections will ONLY be permitted in the new GCM questions. Core A will review PISA Centres' requests for corrections. The approved corrections will be centrally implemented by Core D. Core D will ensure consistency between the verified and the new items. No further changes may be made to any of the previously agreed-upon Field Trial translations. During this review process, National Centres will also be able to request deletion of any GCM questions or items as necessary for their national context. Changes to or the addition of national questions are not permitted during this process.

The PISA contractors released guidance on the process for reviewing the centrally-translated material ([CY8_2007_MAN_FieldTrial_GCM_Review_Instructions.pdf](#)) and held a webinar in mid-August 2020 to explain the process to PISA NPMs. Please refer to the guidance and webinar for detailed instructions for the review of the GCM questions and information on how to access each PISA Centre's review schedule.

Cognitive Materials

There will be NO changes permitted to the completed cognitive translations for the Field Trial in 2021, either in new or trend materials. PISA Centres for which cognitive unit translation workflows have been completed and for which an initial Field Trial 2020 version of the SDS was released will have no additional tasks related to their cognitive translations.

All participants with overdue translation or adaptation workflows are required to complete the translation or adaptation tasks by October 2020. The translated Creative Thinking coding guide will be verified only before the Main Survey data collection.

Preparing the Student Delivery System

A new Master Student Delivery System will be assembled to incorporate the new Global Crises Module and to account for any other necessary technical changes or upgrades of the system. All national Field Trial Student Delivery Systems also will be reassembled. The System Diagnostics Tool will not be updated.

Workflows for the PISA Field Trial Student Delivery System testing have been finalized, pending the release of a new national Student Delivery System for the Field Trial administration in 2021. All PISA Centres will be required to test the reassembled system using an updated National Testing Plan. New workflows will be established for this review process and will include the final Testing Report from the initial Field Trial Student Delivery System workflow as a reference for any National Centres that have already completed Student Delivery System testing of the original build(s).

The Master Student Delivery System will be released at the end of October 2020. A webinar will be held in conjunction with the Survey Operations team for a walkthrough of the Student Delivery System with the Test Administrator Script.

National Student Delivery Systems will be assembled on a rolling basis based on the scheduled Field Trial start dates. In addition, participants in the Chromebook Pilot Study will receive separate instructions for testing the Chromebook delivery system, which will be assembled and released 4-6 weeks after the final national Student Delivery System has been released.

5.2.3. Prepare school-level materials

In October 2019, you will be asked to complete the School-level Materials Adaptation Form (SMAF). This form contains three tabs. The first tab asks you to give general information about your testing plans, the second tab asks you to adapt a timeline to indicate your survey operations workflow schedule, and the last tab asks you to describe your plans for quality control. You should submit this form through the PISA Portal for approval from Core A Survey Operations before you begin adapting your school-level materials.

The international source versions of the school-level materials are released in English in November 2019 as a PDF version. Microsoft Word versions of the documents are released to you only after your SMAF has been approved. These materials include:

- School Co-ordinator's Manual
- Test Administrator's Manual
- School Associate's Manual
- Test Administrator's Script
- Forms
 - Student List
 - Student Tracking Form

- Session Report Form
- Worksheet for Calculating Absence Rates
- Student Logon Form (CBA countries/economies only)
- Teacher Tracking Forms (CBA countries/economies only; optional)
- Teacher Logon Form (CBA countries/economies only; optional)
- Assessment Date Form (if used)
- Materials Reception Form (if used)
- Materials Return Form (if used)

The adaptation process for the school-level materials involves working directly from the international English source versions in Microsoft Word. You make adaptations by using the “Track Changes” and “New Comment” functions in the Microsoft Word documents. Core A Survey Operations will review your adaptations and ask questions as needed. Once your adaptations to the international English source versions are approved, these will be your “national English versions”. You will use these national English versions to translate into your national language(s). Core A Survey Operations will host a webinar in November 2019 to review this process.

The Test Administrator’s Script for the Field Trial will be verified by Core D Translation Verification. All other translated materials do not need to be verified.

Updates for PISA 2022

The school-level materials will be updated for the Field Trial in 2021. The updates will include revised dates, information for testing in a post-pandemic environment, and any changes made to the SDS that impact operations. As a result of these updates, National Centres will need to go through the adaptation process again. Although this process is similar to the one used for the 2020 Field Trial, it will be faster to complete.

The School-level Material Adaptation Form (SMAF) will be revised and released in mid-October. You will be requested to update the form and include your field operations timeline. Once you have submitted your SMAF and we have reviewed and approved it, your school-level materials will be released for adaptation.

For those of you who completed adaptations of the school-level materials for the 2020 Field Trial, you will start with your final approved English versions of each document in the Task workflows on the portal. Participants who had not completed the adaptations to the school-level materials for the Field Trial will be contacted individually to discuss the process.

An updated source version of each school-level material will be released with all changes marked in track changes and with comments. You will use these source versions to update your final English national materials that you finished for the prior Field Trial. Using track changes and comments, you can also make further updates and adaptations depending on your national situation.

Please note that Test Administrator scripts will not be re-verified for the Field Trial in 2021. However, if you did not go through the verification process with the first Test Administrator scripts, this process must be completed by end of September 2020. You will be contacted about this directly if your script still needs verification.

5.2.4. Work with schools

Obtain any necessary permission from head offices to approach schools

In many educational systems, there is an established hierarchy of authority that should be respected. Contacts should be made accordingly, in a defined order. Letters, informational materials, telephone calls and personal visits are all useful ways of contacting the appropriate authorities. Some of these approaches may be more effective than others at different levels of authority. It is important to develop a strategy that defines how contacts will be made and what information will be provided at each of the different levels.

In some systems, it is not enough to notify the appropriate authorities; permission also must be obtained. This could include permission from one governmental level to contact another or permission from a governing board, private organisation or religious authority to contact individual schools. Obtaining permission can be time-consuming. It is important to begin the process of securing co-operation early enough so that all necessary permissions are obtained in time.

If your country/economy has a difficulty with low school response rates, endorsement letters and support from these agencies will be helpful if not critical to your success. Getting these endorsements as soon as possible should be a priority.

Develop a strategy and informational materials for schools

Experience has shown that conveying the rationale and purpose of PISA is important in engaging the co-operation and interest of school staff, which in turn can influence survey administration. Therefore, providing a clear overview of PISA adapted to your national context (e.g. as described at the beginning section of the School Co-ordinator's Manual) is important.

Informational and promotional materials should address the particular policy concerns of the educational system within your country/economy and indicate where the PISA assessment fits in. International materials (e.g. the PISA brochure, which is available through the OECD PISA website at www.oecd.org/pisa/aboutpisa) provide useful information for developing a strategy for addressing the special requirements and concerns of your particular system.

It may be useful to develop a strategy through discussion with your PGB member and committees and other stakeholders in education. It is worth considering the development of different kinds of promotional and informational materials for different target audiences (e.g. school staff, students, parents, teachers unions, curriculum and assessment groups, and the

media). Depending on the resources available to you, it is also worth considering different methods of delivering this information (e.g. a national website, brochures posted to schools, media reports and articles published in the journals or magazines of education groups).

Invite selected schools to participate and identify a School Co-ordinator in participating schools

It is essential to have enough participating schools to meet the analytical requirements of the Field Trial test design.

Procedures for securing school co-operation vary from participant to participant. In some countries/economies, it can be very difficult to get schools to participate. Reasons for these difficulties vary from concerns about too much testing and loss of instructional time to the burden on students, teachers and school staff. The following suggestions may help to ensure school co-operation.

In other studies and in previous PISA surveys, participating countries/economies have tried a variety of incentives, including financial incentives or honoraria for school staff; instructional materials; feedback reports; certificates of appreciation; and posters and banners. Incentives might be provided to the school, the students or both. NPMs should decide whether incentives can or should be used in their particular contexts.

Sharing information about approaches that work is an important part of participating in PISA. NPM meetings provide both formal and informal opportunities for NPMs to share information. Additionally, Core A Survey Operations will conduct webinars with NPMs on improving school and student response rates before the beginning of both the Field Trial and the Main Survey. When you have materials that you would like to share with other National Centres, please send them to Core A Survey Operations who will make them available to all countries/economies.

An essential part of securing the co-operation of the selected school is identifying someone within the school who will act as the School Co-ordinator. The School Co-ordinator acts as the liaison between the school and the National Centre. This person is very important to the success of the project.

Once the national version of the School Co-ordinator's Manual has been agreed upon with Core A Survey Operations, this manual should be sent to the School Co-ordinator at each selected school.

Make sure that school staff members have adequate time to review this manual and to complete the preparatory tasks required for the assessment. Depending on national circumstance and requirements, schools are typically first contacted and invited to participate **at least eight weeks prior to the first test date**.

Ascertain testing date for each school

It will be important to work with the School Co-ordinator to identify a suitable date for testing. Factors such as the length of time required to complete the PISA assessment will be described in detail in the School Co-ordinator's Manual. There are additional constraints to consider. If a person external to the school is to undertake the test administration, this person's schedule will need to be considered. The locations of schools, weather, holidays, political situations (such as strikes), length of the testing period, and national and regional tests and assessments should also be taken into account. You will need to develop a strategy to communicate with the School Co-ordinator and Test Administrator, especially for any changes or updates to testing dates.

Liaise with schools regarding any problems that may arise

Ensure that school staff and other officials can easily contact the National Centre to discuss any problems that may arise. To do this most effectively, you are required to establish a helpdesk (see Exhibit 5.5 below). However, you must ensure that any helpdesk staff are qualified to respond to schools and agencies who may have high-level concerns related to participation. If there are several time zones in your country/economy, be sure that the helpdesk staff are available during business hours in those locations.

Exhibit 5.5. Establishing a helpdesk – PISA Technical Standards

Standard 7.1 Each country should have a designated PISA helpdesk with contact information provided to each of its test administrators and school coordinators.

Standard 7.2 In countries that administer the computer-based version of PISA, the helpdesk staff must:

- be familiar with the PISA computer system requirements applications and training materials,
- be familiar with all national software standards and procedures; and
- attend the test administrator training sessions to become familiar with the computer-based assessments and appreciate the challenges faced by schools and test administrators.

Anticipate possible difficulties that may arise or questions that may be asked in relation to the PISA assessment, such as the delivery of materials to schools, clashes with the test date and other school activities, the availability of rooms and equipment, confidentiality issues and school feedback. It may be useful to compile a list of frequently asked questions and answers to use during telephone or email communication so that queries are answered consistently.

Obtain student lists from schools

If not using an up-to-date centralised database to procure your student lists, schools need to provide you with a list of enrolled students whose dates of birth fit the population definition

approved by Core C Sampling and, if you are participating in a sampling optional component, additional students for that option. If a central database with up-to-date and sufficiently detailed student-level information is available, you can use this instead of a list obtained from individual schools to reduce the workload of school staff.

If possible, we recommend that you request student lists electronically. However, in some cases, when electronic lists are too difficult to obtain, you may need to work with paper-based lists. In either case, it is important to ensure the confidentiality of these lists and also to check these lists very carefully to ensure that all PISA-eligible students of all school grades, genders and programmes have been listed, including students who may later be excluded if sampled. The School Co-ordinator's Manual will contain an example of a student list form as well as instructions to send to schools. You will need to adapt these as part of your preparation of the school-level materials. The Field Trial Within-School Sampling Manual will provide information about the process of student sampling and describe how to import these lists into the within-school sampling software. Please review these sections carefully before you finalise instructions and forms for schools.

Because it is very important that the student sample represent current enrolments, the list should not be prepared too far in advance. The instructions for preparing the lists should be sent to the School Co-ordinator **about eight weeks before commencement of testing**. If your School Co-ordinator Manual is not approved at this point, you will need to provide the instructions in a separate document. This document must be reviewed and approved by Core A Survey Operations to ensure that the lists are complete and accurate. The individuals who prepare the lists also should be instructed to return the lists to the NPM **at least four weeks before testing begins**. This will permit the NPM to use the within-school sampling software to select the student samples and send the Student Tracking Form, which lists selected students, back to schools at least two weeks prior to testing. This schedule may be affected by school and public holidays. NPMs should be aware of the impact of these events and modify the schedule accordingly.

Select student sample using the within-school sampling software

After all sampling tasks in your Field Trial sampling plan are approved, Core C Sampling will ask you to review a file on the PISA Portal with data relating to your sampled schools (ST5). After this file is reviewed and agreed upon by you, it will then need to be imported into the within-school sampling software by Core C Sampling prior to student sampling. After this has been done, consult the Field Trial Within-School Sampling Manual for details on the within-school sampling software operations and instructions for conducting student sampling.

Once NPMs have received the lists of eligible students from each school, the student sample should be selected using the within-school sampling software, the PISA software supplied by Core C Sampling.

Unless otherwise agreed upon, the student sample must be selected using the PISA Contractor supplied within-school sampling software (see Standard 1.14 below). The procedure for this is explained fully in the Field Trial Within-School Sampling Manual. NPMs

must receive approval from Core C Sampling if they wish to select students using other software (see Exhibit 5.6 below).

Exhibit 5.6. Use of the PISA Contractor supplied within-school sampling – PISA Technical Standards

Standard 1.16 Unless *otherwise agreed upon*, the international contractors will draw the school sample for the Main Survey.

Standard 1.17 Unless *otherwise agreed upon*, the National Centre will use the sampling contractor's software to draw the student sample, using the list of eligible students provided for each school.

Note 1.7 Any exceptional costs associated with verifying a school sample taken by the National Centre, or a student sample selected other than by using the sampling contractor's software will be borne by the National Centre.

The within-school sampling software produces a Student Tracking Form for each school. This is the central administration document for the study. The Student Tracking Form is the complete list of sampled students and is used to identify in advance those students with special educational needs, and among those, who should not attend the assessment. Before the day of assessment, it is checked for errors by the School Co-ordinator and used to identify ineligible students. The form specifies the link between the students and the assessment materials that they receive. The Student Tracking Form is used during and after the assessment by the Test Administrator to record the test session participation status for each sampled student.

The checked and updated Student Tracking Form is sent back to the National Centre.

Send Student Tracking Form to the School Co-ordinator and Test Administrator

The School Co-ordinator needs to know which students have been sampled so that he or she can notify the students, teachers and students' parents. The School Co-ordinator will also need to update the information on the Student Tracking Form and identify students who cannot be tested. Therefore, the Student Tracking Form should be sent to the School Co-ordinator no later than two weeks before the assessment session. Before sending the Student Tracking Form to the School Co-ordinator, make sure you have a backup copy for your records.

You should send a Student Tracking Form to the Test Administrator for recording student participation statuses, along with the assessment materials. The School Co-ordinator's and Test Administrator's Manuals discuss this document further.

You will also need to send Session Report Forms (used to gather information on session conditions) to the Test Administrator.

Updates for PISA 2022

Working with schools could be more challenging following the pandemic, depending on the situation in your country/economy. If you need support in regards to developing strategy for gaining co-operation, you can contact the Core A Survey Operations team.

Core A Survey Operations will also be conducting a webinar on gaining co-operation in November/December 2020 with an emphasis on working with schools “post-pandemic.”

5.2.5. Recruit and train Test Administrators

The PISA Technical Standards shown in Exhibit 5.7 below apply to test administration.

Exhibit 5.7. Test administration – PISA Technical Standards

Standard 8.1 All test sessions follow international procedures as specified in the PISA school-level materials, particularly the procedures that relate to:

- test session timing,
- maintaining test conditions,
- responding to students’ questions,
- student tracking, and
- assigning assessment materials.

Standard 8.2 The relationship between Test Administrators and participating students must not compromise the credibility of the test session. In particular, the Test Administrator should not be the reading, mathematics, or science instructor, a relative, or a personal acquaintance of any student in the assessment sessions he or she will administer for PISA.

Standard 9.4 In-person and/or web based test administrator trainings should be conducted by the NPMs or designees, unless a suitable alternative is *agreed upon*.

Note 8.1 Test Administrators should preferably not be school staff.

These standards were established for a variety of reasons, including the following:

- to minimise burden on the participating schools
- to establish the credibility of PISA as valid and unbiased
- to encourage uniformity in the administration of testing sessions.

It is preferable that the Test Administrators not be staff members of any schools in the PISA sample. However, it is recognised that this is not always possible in practice. It is therefore permissible for a staff member from one school to be the Test Administrator in another. In the rare event that the Test Administrator is related to any of the students they would test, the National Centre should assign another Test Administrator.

In schools where the School Co-ordinator and the Test Administrator are the same person (School Associate), they should not be a reading, mathematics or science instructor of the sampled students or related to any of the students.

PISA does not require that Test Administrators meet specific academic or professional requirements, but they should be familiar with schools and how they operate. They should also be familiar with standardised testing procedures, and they must be information and communication technology (ICT) literate (in CBA countries/economies). In some countries/economies, Test Administrators will have to be fully qualified teachers or undergo a security and background evaluation before they can work in schools.

New for PISA 2021: Two to three months prior to the start of your Field Trial, you will be asked to provide general information about the staff you hire as Test Administrators and your plans for training your Test Administrators. A form will be provided through the PISA Portal.

To help prepare you for the Test Administrator training, Core A Survey Operations will host webinars reviewing the key points that should be covered to ensure that all sessions within a country/economy and across countries/economies are carried out in a uniform manner. Topics to be included are as follows:

- introduction to PISA and what the results are used for in both international and national contexts
- description of the role of Test Administrators, emphasising the importance of uniform testing conditions in an international context (you may wish to refer to the PISA Technical Standards)
- review of Test Administrator activities before, during and after testing, as detailed in your national version of the Test Administrator's Manual
- review of the Student Tracking Form, Session Report Form and procedures for their completion, including some practice examples
- review of procedures for the administration of optional instruments, such as the Une Heure (UH) form, if any
- review of procedures specific to additional optional sampled students, if any
- review of the test administration script(s), emphasising the importance of adherence to the wording of the script and to session timing

- review of the explanatory notes to be used as a reference during the administration of the Student Questionnaire
- review and discussion of issues that commonly arise – these will vary from participant to participant, but may include procedures for changes to test dates, managing students during the second hour of the session, admitting students who are late, recording students who leave the session temporarily and managing disruptive students
- discussion about the security of materials at all times of survey administration and the necessity for the swift return of all assessment materials
- consideration of procedures relating to multiple and follow-up sessions and any implications for the management of assessment materials in schools or for the return of materials
- review and discussion of any nationally specific issues, such as protocols for entering schools or communicating with school staff.

Before your National Centre training, Test Administrators should review the manual, forms and script(s). It is also recommended that they complete a home study packet including a quiz which you review at the training. Resources to help you prepare your training are posted on the PISA Portal and Core A Survey Operations can review your training materials if requested.

Updates for PISA 2022

Due to the pandemic, you may be considering modifications to how you train your Test Administrators. Core A Survey Operations will host a webinar in December with an emphasis on virtual training and the team will also be available for individual consultation through the Field Trial preparation period. You will also be asked to complete the Test Administrator Training Information Form for the Field Trial in 2021 on the PISA Portal.

5.2.6. Plan for national quality monitors to visit schools to monitor testing sessions

The best way to identify issues concerning field operations within schools is for National Centre staff to visit some schools and observe test administration first hand. This is particularly important for the Field Trial since international quality monitors (see Section 8.2.7 “Nominate international PISA Quality Monitors (PQMs)”) only observe selected schools during the Main Survey. You may use your own observation form or one provided by Core A Survey Operations posted on the PISA Portal. Then, using the experience of these observations, the staff member should consult with Test Administrators and School Co-ordinators about the challenges they encountered and how these challenges could be overcome.

These observations of the testing sessions provide valuable information about aspects of your national implementation and test procedures, and your feedback will help ensure the quality of international procedures developed for the Main Survey.

To prepare for this activity, you will need to establish protocols for visiting schools and to consider suitable staff to visit schools to observe testing sessions. These individuals should attend your national Test Administrator training, if possible, to ensure their familiarity with PISA procedures.

National Centre Quality Monitors should also observe Main Survey schools in addition to the observations done by the international quality monitors. You will receive a list of the schools the international monitors visit so you can co-ordinate your visits and maximise the number of sessions observed.

5.2.7. Plan staffing and resources for coding and data entry operations

The coding and data entry operations that will follow the Field Trial testing period are discussed further in the next chapter. These activities will require additional staffing and resources, so planning well for these activities before the Field Trial testing period begins is advisable, particularly if you anticipate difficulties in identifying coding and/or data entry staff.

The following are guidelines that explain resources required for these activities. New National Centres or National Centres that will have inexperienced staff conducting these activities may require more resources. The Core A Contractor may conduct webinars to help National Centres prepare for this phase.

- **Coders of constructed-response items:** Coding operations vary in length, depending on the mode of assessment, sample size, coding design, experience of the coders and other factors (i.e. participation in the optional assessment of Financial Literacy). On average, standard-size samples have required on average of at least three weeks of coders' time for the Field Trial – one week for training and two weeks for coding (based on a coding rate of 1 000 responses per day per coder). Due to national variability in sample size and languages, a set of coding designs will be introduced during the November 2019 NPM Meeting and presented in detail during the Field Trial International Training in January 2020. Note that the coding designs will require that two bilingual coders per domain be part of the coding team.
- **Coders of occupational response data:** In previous surveys, occupational coding has required on average approximately 75 hours during the Field Trial period.
- **Data entry:** Data entry operations vary in length, depending on the mode of assessment, sample size, experience of staff and other factors. Countries/Economies that are participating in PISA 2021 as a paper-based country/economy should plan on two to three staff working full time for four weeks following the Field Trial for a standard PISA sample size. Countries/Economies that are conducting CBA will require data entry for the Session Report Form data. Additional time should be factored in to code the Parent Questionnaire responses, if applicable.
- **Data management:** Each National Centre shall have a secure computing facility for the operation of the Data Management Expert software for all countries/economies and the Open-Ended Coding System (OECS) for computer-based countries/economies and the Open-Ended Reporting System (OERS) for the paper-based countries/economies. All

computers that operate this software must have Microsoft Windows operating system (version 7 or later) and have adequate storage (about 20 GB) for the management of all files related to data collection and coding. For the OERS system, computers should also be equipped with Microsoft .NET version 4.0 software and Microsoft Excel (recommended version 97 or later). In addition, stable Internet connection will be needed as the PISA 2021 OECS will be an online system.

Updates for PISA 2022

It will be necessary to plan staffing and resources for the Field Trial coding and data entry activities will take place in 2021, including virtual coder and data management trainings in January 2021.

CHAPTER 6 – FIELD TRIAL PHASE

6.1. Overview of tasks

This section describes tasks directly associated with the Field Trial data collection and Field Trial data processing. During this phase, you will complete the following:

- attend the second National Project Manager (NPM) Meeting in November 2019
- dispatch test and school-level materials
- continue liaising with schools
- organise follow-up sessions
- monitor data collection of online questionnaires
- monitor collection of Parent Questionnaires, if applicable
- return materials to National Centre
- understand the process of coding cognitive items
- understand the process of coding occupations
- attend the Field Trial International Training in January 2020
- install and test software, data codebooks and coding software
- understand data entry operations
- submit Sampling Task 6 sampling data to Core C Sampling
- submit database to Core A Data Management
- be available during post-submission data processing
- archive your Field Trial materials
- complete and submit the Field Trial Review Questionnaire
- begin Main Survey sampling preparation.

Exhibit D.3 in Appendix D shows a tentative schedule of tasks associated with the Field Trial Phase. Procedures associated with these activities are briefly described below and more detailed documentation will be released closer to the actual task dates.

6.2. Key tasks during the Field Trial phase

6.2.1. Attend the second NPM Meeting in November 2019

Attendance at the NPM Meeting in November 2019 is important because it will include an overview of the CBA systems and their testing, an overview of the survey operations aspects of data collection, an occupation coder training, as well as the within-school sampling software training. Decisions about the representatives to attend this meeting will depend greatly on the structure and resources of the National Centre and the final meeting agenda should be used as your reference but general guidelines are provided below.

- *NPM Meeting 2 Participants*: the National Project Manager and/or any member of the National Team who will assist the National Project Manager, such as Occupation Coding Coordinator, Survey Operations Manager, IT expert and those responsible for within-school sampling. If different members of the National Team are in charge of different components, it is recommended that each attend the meeting according to the activities covered in this meeting.

Updates for PISA 2022

There will be no in-person NPM Meeting in November 2020. Instead, PISA contractors will host refresher webinars to cover Field Trial preparations as needed.

6.2.2. Dispatch test and school-level materials

There is no single best way to prepare materials for shipment and distribution. In this section, we suggest several different methods, recognising that each has its advantages and disadvantages with regard to cost, burden and efficiency. You should choose the way that will work best in your country/economy, taking into account how you intend to implement PISA within your particular educational systems. A key consideration here is the maintenance of the security of materials at each step and process. These materials include lists of sampled schools, lists of sampled students, test items and completed questionnaires of any sort. Core A Survey Operations can review your plans with you.

NPMs should consider the following:

- Does the National Centre have clear security guidelines in place to ensure the confidentiality and security of confidential materials throughout all phases of the PISA cycle? This should include organisations outside of the National Centre, such as printers and shippers.
- How do you organise coding, data processing and data management so that security and confidentiality is maintained throughout those phases?

- Will Test Administrators be National Centre staff (preferred) or staff from the selected schools? How will you ensure that National Centre and school staff understand and follow the security and confidentiality requirements?
- Does packing and labelling preserve the confidentiality of secure materials? Do you label/identify students (teachers or schools) on materials clearly so that they are distributed to the right person? Does the method of labelling/identifying materials preserve the confidentiality of schools, staff, parents or students participating in PISA?

We strongly encourage you to use electronic methods (e.g. mail merge in Microsoft Word) to generate student information for labelling materials (name, student ID, booklet/questionnaire ID). Having printed labels minimises errors with the assignment of booklets or USB drives to students. It also increases accuracy and efficiency of data entry and data processing. This procedure is described in the Test Administrator's Manual.

To protect test security, it is strongly recommended that all confidential materials be sent to the Test Administrators rather than to the schools. If these materials are sent to the participating schools or returned by the participating schools, the NPM must ensure that test security and confidentiality of the material is not compromised.

For PBA countries/economies, Core A Cognitive will produce print-ready electronic versions of booklets that National Centres will print, package and ship with all other assessment materials. The test booklets and Student Questionnaires for a school could be bound in a secure bundle with a bundle slip on top – sealed in either plastic or some other form of packaging that allows the Test Administrators easily to check if the package contains the correct number of booklets or questionnaires without having to open it. It is highly recommended that the National Centre bundle booklets and questionnaires in the exact order they appear on the Student Tracking Form. This will reduce errors in assigning them to students.

For CBA countries/economies, the CBA materials will be contained on USB drives used to deliver the test and collect the data. If an Internet connection is available, results data can be uploaded to central servers, bypassing the need to return data to the National Centres on the USB drives until after the end of the assessment period. It is recommended that the USB drives be sealed in clear plastic bags.

Three scenarios described below are examples of acceptable approaches to packaging and shipping the assessment materials. Any questions regarding packaging and shipping materials should be directed to Core A Survey Operations.

- Country/Economy A plans to **ship assessment materials to schools and to use school staff** who are not teachers of the students in the assessment to conduct the testing sessions. The National Centre will label each instrument before packaging it for shipment to schools. The Student Tracking Form should be included.
- Country/Economy B plans to **use Test Administrators** employed by the National Centre and **will ship materials directly to these Test Administrators**. The Test Administrators will open the packages assigned to a school prior to the session and will label the booklets,

questionnaires or USB drives with the students' names and ID numbers according to the assignment recorded on the Student Tracking Form.

- Country/Economy C, a PBA country/economy, plans to **ship materials directly to the schools, but will use Test Administrators** who are employed by the National Centre and will package the test booklets and questionnaires in separately bound bundles with a security seal. The booklets and questionnaires in each bundle will be ordered as per the Student Tracking Form.

As a reminder: If a school's package of assessment materials is being sent directly to the school, you will need to inform the School Co-ordinator of this arrangement and emphasise that the package must be kept secure at all times and that it must not be opened until the Test Administrator arrives at the school on the day of the assessment. The School Co-ordinator should email this confirmation to you. It is preferred that the materials be sent by courier with a signature of receipt required if this is feasible in your country/economy. If the materials are shipped to the School Associate at the school, it is important to emphasise that the materials must be kept in a secure place after they have been checked.

Regardless of the approach to be used for packaging and shipping, for each session the following materials should be sent either to the Test Administrator or to the school:

- appropriately labelled test booklets and the Student Questionnaires for each student listed on the Student Tracking Form for a paper-based assessment (PBA) country/economy (labelling can be done by the Test Administrator)
- appropriately labelled USB drives for each student listed on the Student Tracking Form for a computer-based assessment (CBA) country/economy (labelling can be done by the Test Administrator)
- Student Tracking Form
- copies of the Session Report Form
- return shipment materials (e.g. packaging, a pre-paid courier dispatch label and any necessary instructions as required in local circumstances)
- additional materials (e.g. instructions for confirming receipt of materials, writing materials and calculators, as required by local circumstances)
- extra School and Student Questionnaires (PBA countries/economies only)
- extra booklets (PBA countries/economies) or USB drives (CBA countries/economies).

In addition, NPMs will be responsible for distributing usernames and passwords for the online School Questionnaires (and Teacher Questionnaires if applicable) to schools. NPMs will receive this information from PISA Contractors 15 days before the Field Trial scheduled starting date.

6.2.3. Continue liaising with schools

Immediately prior to a school's test date, and also on the day of testing itself, you should be prepared for an increased number of last-minute queries from schools and Test Administrators. Many of these are likely to relate to final arrangements for the test, such as the following:

- identification and exclusion, if appropriate, of students with special educational needs
- dealing with student/parent refusals
- whether sampled students can be replaced (answer: student replacements must never be used!)
- the extent to which the School Co-ordinator or other staff members should attend assessment sessions
- the size or other features (e.g. temperature, noise, privacy) of the testing room
- session break times versus the school's timetable
- procedures associated with finishing the assessment and getting students back to their classes
- implementation of session IDs and student participation codes by Test Administrators
- whether a follow-up session is required.

In planning support for this work, it can be useful to review the test dates of participating schools and identify periods within the test schedules when a higher number of queries is likely. You are encouraged to designate at least two National Centre staff to liaise with schools in case of staff absence and multiple, urgent queries.

Please also review your strategy for informing school staff and Test Administrators of any changes to test dates.

6.2.4. Organise follow-up sessions

To ensure that you have an adequate number of students for reliable data, you should plan for follow-up sessions in schools. Use the method developed by the PISA Contractors when determining if follow-up sessions are needed. PISA Technical Standards regarding the number of assessed students and assessment rates are critical to ensuring the quality of the Main Survey data, and trialling these procedures in the Field Trial is important. The usability of the Field Trial data itself also relies on having the required number of assessed students.

The source versions of the Test Administrator's Manual and School Co-ordinator's Manual assume that follow-up sessions may need to be implemented. The Test Administrator's Manual provides uniform procedures for Test Administrators to help them decide whether a follow-up session is needed.

For PBA countries/economies, inform Test Administrators if they should return the completed assessment materials after the original session or after the follow-up session (recommended).

To ensure a high response rate, you should also follow up with schools that have not returned the School Questionnaire and any other questionnaires that have not been returned. Core A Survey Operations can provide suggestions for improving response rates.

6.2.5. Monitor data collection of online questionnaires (CBA countries/economies)

National Centres are provided access to an online monitoring tool to track the progress of schools (and teachers, if applicable) in responding to the online questionnaires and to follow up with schools if necessary. To achieve a high response rate and good data quality for the online questionnaires, it is crucial that countries/economies use the provided online monitoring tool to check the completion status of questionnaires.

After the student data collection period is finalised, the online questionnaires remain open for four weeks. NPMs continue to monitor the progress of users taking the questionnaires using the monitoring tool. In addition, NPMs will be able to upload data weekly to the Data Management Expert (DME) system to review the data for completeness. During this period, NPMs will receive reminders from PISA Contractors regarding the amount of time the online questionnaires will remain open and should contact schools as needed. Access to the online questionnaires will close four weeks after the student data collection period is completed and cannot be reopened. More information on how to monitor completion of the School and Teacher online questionnaires is provided in documentation that will be released with the online questionnaires.

Please keep in mind that a high response rate is essential so that your data can be included in the analysis and reporting.

Updates for PISA 2022

Core A will provide updated online questionnaire IDs and passwords for use during the 2021 Field Trial. PISA Centres should not use any IDs or passwords provided in 2020.

6.2.6. Monitor data collection of the Parent Questionnaire, if applicable

If applicable, the Parent Questionnaire is administered as a paper-based questionnaire instrument. Monitoring the collection of the Parent Questionnaire is important. As these are not collected online, a good approach is to ship the questionnaires to School Co-ordinators and ask them to send the questionnaires home with sampled students. The questionnaires should go home about two weeks before the assessment date and parents asked to return them to the School Co-ordinator via the student no later than the day of the assessment. A few days before the assessment, the School Co-ordinator should remind parents to return the questionnaire. The Test Administrator will then return the questionnaires with the assessment materials. The National Centre should monitor the return and request that the School Co-ordinator follow up as needed. In some cases, the National Centre contacts the parent directly. It is also advisable for

the National Centre to include a postage paid return envelope so that the School Co-ordinator can conveniently ship questionnaires that are returned after the assessment date.

6.2.7. Return materials to National Centre

To help ensure that the international survey timeline and deliverables are adhered to, data should be submitted to Core A Data Management within **eight weeks after the final test date** in your country/economy. Before this submission to Core A can be done, the Field Trial ST6 sampling data with school and student participation statuses, submitted **four weeks after the final test date**, needs to be reviewed and approved by Core C Sampling. Given this timeline, your procedures for returning materials should be both precise and efficient. You are likely to need two or more staff working together to complete this task.

The manner in which materials should be packaged for return is detailed in the Test Administrator's Manual. It is recommended that Test Administrators ship material back to you within 24 hours after each assessment session or follow-up session is completed.

Please note that if any test booklet, completed Student Questionnaire or USB drive is missing (including **unused** booklets or USB drives), it is essential that every effort be made to retrieve it immediately. As soon as possible, send the details of the missing booklet or USB drive to Core A Survey Operations at PISA-SurveyOperations@westat.com. A form to report missing secure and confidential materials is located with the international source versions of the school-level materials on the PISA Portal.

6.2.8. Understand the process of coding cognitive items

One of the key outcomes of the PISA survey is data on students' performance. PISA is innovative in its attempt to have an authentic assessment of real-life literacy knowledge and skills. The tests' data include a large number of written responses that require manual human coding, and detailed training is required to complete the coding of these items. An overview of these will be provided in the document describing the coding procedures and also presented to countries/economies during the Field Trial International Training in January 2020.

The PISA Technical Standards shown below in Exhibit 6.1 relate to the coding of these test items.

Exhibit 6.1. Item coding – PISA Technical Standards

Standard 14.1 The coding scheme described in the coding guides is implemented according to instructions from the international contractors' item developers.

Standard 14.3 Both the single and multiple coding procedures must be implemented as specified in the *PISA operations manuals* (see Note 14.1). These procedures are implemented in the coding software that countries will be required to use.

Standard 14.4 Coders are recruited and trained following *agreed procedures*.

Note 14.1 Preferred procedures for recruiting and training coders are outlined in the *PISA*

operations manuals.

Comparability within countries/economies and across countries/economies is an important design criterion in PISA. The reliability of coding is established by multiple coding a portion of the responses, as well as through careful monitoring of coding results. These steps are required as quality-assurance measures to determine whether coders are applying the coding rubrics consistently.

A within-country/economy reliability study will be implemented during both the Field Trial and the Main Survey to check the consistency of coding. This study will require a set of responses to be multiple coded by various coders. Across-country/economy reliability study also will be implemented to examine systematic scoring bias across countries/economies. This study will require two bilingual coders (fluent in the testing language and English) per domain to multiple code common English responses provided by Core A Cognitive.

Precise specification of the coding design (number of coders and rotation of coders) will be available in a document describing the coding procedures prior to the Field Trial.

Ensure appropriate staff during coding cognitive items

The PISA coding procedures document for the Field Trial and Main Survey will provide detailed information on coder requirements. You may also wish to nominate administrative staff to support the coding process. It may be the case, for example, that you will need support staff to set up and prepare coding materials at the same time as commencing coder training. Depending on the locations of coders, you may need support during coding to ensure a smooth flow and retrieval of materials.

The Field Trial International Training that will be held in January 2020 is a valuable opportunity for you and national coding experts to closely review and conduct training on the coding materials. It is imperative that the lead coders attend this training.

Understand the item coder query service

During the international item coding period, a coder query service will be available to support coders. It should be used when agreement at your National Centre regarding which code to assign cannot be reached through discussion. Additional information will be provided closer to the coding period. Test developers at Core A Cognitive will make every effort to respond to each query within one working day, but this may not always be possible.

6.2.9. Understand the process of coding occupations

The reliable coding of occupational data from the questionnaires is important because this information is used to form key indicators of student socioeconomic status. A brief overview of the activities, along with information about likely resource needs, is provided below. A full description of the activity will be provided in additional documentation that will be released for

the coder training and operations meeting held before the Field Trial during the Second NPM Meeting.

The Field Trial is an opportunity to improve the quality of coding in preparation for the Main Survey through the identification of difficult-to-code responses and the development of strategies to code them, as well as ways in which instructions given to students might be improved to yield more easily coded responses.

Similar to the coding of test items, supervisors will need to be recruited and trained for the occupation coding team to provide advice on the coding of specific occupations and to help ensure the quality of the data.

If your National Centre does not have previous experience in the coding of occupational data, you are encouraged to secure support from an expert (e.g. from a national statistical organisation that specialises in labour statistics) to resolve more difficult queries, always keeping the confidentiality of questions and responses in mind.

For the collection and coding of occupational data, PISA uses a framework recommended by the International Labour Organisation (ILO). The framework describes the way occupational questions are formulated and how data are processed, and provides guidelines on the choice of classification (the International Standard Classification of Occupations [ISCO]).

For the PISA 2021 survey, the same ISCO coding scheme will be used as for the PISA 2018 survey: ISCO-08. For information in English, French and Spanish on the ISCO-08 structure, definitions and how the ISCO-08 classifications correspond to the ISCO-88 classification, see <http://www.ilo.org/public/english/bureau/stat/isco/isco08/>.

If your country/economy has not previously participated in PISA, you should allocate time for a professional translator familiar with the area of occupations to adapt/translate ISCO-08 or an equivalent instrument. Alternatively, your country/economy's bureau of statistics or equivalent organisation might be able to assist you with this task. You do not need to submit translated coding schemes for verification, but the national version of your ISCO-08 instrument must be equivalent to the international one in terms of the codes and content of the category descriptions.

Unlike the coding of the test items, there are many more occupational codes, and response categories can cover more than one occupation. The response categories do not include detailed descriptions of the occupations within a category. The large number of occupational response categories and their flexible nature do not allow the development of an international coding guide as detailed as that developed for the test items. Instead, more generalised guidelines have been developed, and you will need to adapt them to suit your national context. To do so, you should use the occupation coding guidelines for ISCO-08.

If a national classification code is available, it may be preferable to use it, but the codes used must map back to the ISCO classification, and the auxiliary codes (e.g. house worker, student, missing and invalid responses) must match the coding scheme used in PISA. **The submitted data must be in the form of ISCO-08 codes.**

You are encouraged to consider developing strategies to maximise the efficiency of occupation coding (for example, by producing a list for coders of the 50 or so most commonly used ISCO codes from the previous PISA survey). You are also encouraged to record student responses that are difficult to code or that should be coded using the same rule of thumb by all individuals who apply the coding.

Ensure appropriate staff during coding occupations

When recruiting occupational coders, people with some previous experience in occupation coding are preferable, but this is not always possible. A background in areas such as psychological measurement/assessment is also an advantage because some familiarity with concepts like measurement reliability is likely to be beneficial. Individuals should be able to follow detailed instructions, concentrate for extended periods of time, and work steadily at a reasonable level of productivity. They should also be clerically accurate and careful and know how to raise questions when required.

During the training of your occupation coders at your National Centre, it is recommended that you provide coders with an overview of PISA and explain the following:

- the analytical uses of the occupation data
- the importance of coding the data as reliably as possible
- the content and structure of ISCO-08 (and national equivalent)
- both the general and specific guidelines
- the procedures for coding commonly occurring “problem” occupations in national context (e.g. as learned from previous surveys, other national surveys or an external consultant).

Coders should then review, code and discuss a sample of up to 50 national example occupations.

You should also explain recording and resolution of queries, and any issues regarding the timeline for this work.

Details about this process will be provided at the November 2019 NPM Meeting.

Understand the occupation coder queries and quality assurance

If a coder is unable to determine which code a response should receive, or if the response does not fit into any given score category, the coder should consult the occupation coding supervisor. It can be more efficient to log queries in a central location (such as in a database on your National Centre network), set the questionnaires with queries aside and deal with them in batches.

Details about data entry will be provided during the data management period. It is strongly recommended, particularly in the context of preparing for the Main Survey, that you double code and double enter data for 10% of questionnaire responses. It may not be possible, given time constraints, to improve the occupation coding of the Field Trial data, but the double-coded data should be reviewed in preparation for the Main Survey to refine and improve instructions for occupational coding. Additionally, the data management software provides a series of consistency checks on occupation coding for further verification and validation of entered codes.

6.2.10. Attend the Field Trial International Training in January 2020

The Field Trial International Training will take place in January 2020 and will cover two important aspects of the Field Trial: Data Management and Coder Training for coding of responses to cognitive items that require human coding.

Data management training

Participants will receive training on how to use the data management software and take part in practice exercises using training codebook templates in preparation for the Field Trial data management procedures.

- *Data management training participants:* It is important that either the National Project Manager or National Data Manager, depending on the organisation's structure, attend all of the required data management trainings. Prior to the Field Trial, these trainings will highlight the responsibilities of the National Centre and provide further instruction regarding the required tasks completed during data entry to ensure data quality for the final national database submission. When identifying staff to attend this training, please consider that this training will take place in parallel to the Coder Training.

Coder training for human-coded responses

This meeting will cover the coding procedures and item-by-item coding instructions for all constructed-response cognitive items in the assessment that require human coding. This will include trend for Mathematics, Reading, Science and Financial Literacy domains, as well as new items developed for Mathematics, Financial Literacy and Creative Thinking. Depending on the resources available to you and the structure of your National Centre, it is advisable that the individuals you nominate to attend this meeting be those who will be closely involved in supervising coding activities. The approach during this training will be "train the trainer". Materials will be made available by February 2020.

A detailed breakdown of the meeting schedule will be provided well in advance of the meeting to enable you to consider who should attend, and for which sessions.

PISA Technical Standards 14.2 and 14.3, shown below in Exhibit 6.2, relate to attendance at this international training.

Exhibit 6.2. International coder training – PISA Technical Standards

Standard 14.2 Representatives from each National Centre attend the international PISA coder training session for both the Field Trial and the Main Survey.

Standard 14.3 Both the single and multiple coding procedures must be implemented as specified in the *PISA operations manuals* (see Note 14.1). These procedures are implemented in the coding software that countries will be required to use.

Note 14.1 Preferred procedures for recruiting and training coders are outlined in the *PISA operations manuals*.

Given the multiple training sessions that will be conducted in parallel, you will need to identify the most appropriate staff members to send to this meeting. A detailed breakdown of the meeting schedule will be provided well in advance of the meeting to enable you to consider who should attend, and for which sessions.

Updated source versions of the Field Trial coding guides will be released after the Field Trial International Training. National versions of coding guides will then need to be finalised accordingly and submitted to Core D Translation Verification for verification.

- **Coder training participants**: the National Project Manager and/or Coder Manager for each domain. When identifying staff to attend this training, please consider that coder training may take place through parallel sessions and that the coder training will take place in parallel to the data management training. This information will be provided through the agenda.

Updates for PISA 2022

There will be no in-person Field Trial International Training in January 2021. Instead, a review of the Field Trial Data Management training will take place in January as a webinar to refresh National Data Managers on data collection and management procedures. A coder training will also take place in January as a series of webinars for the coding of responses for New Mathematics, Creative Thinking, and Financial Literacy constructed-response items.

6.2.11. Install and test software, data codebooks and coding software

Soon after the Field Trial data management training, each country/economy will receive a copy of the DME software installation package and a national codebook template that is tailored for that country/economy. There will be only one template per country/economy, established according to the QAT for the majority language. Unless approved by Core A Data Management, all data management operations shall be conducted through a single instance of the DME database and the OECS database (CBA countries/economies only).

The following steps should be taken well in advance of the start of the survey administration:

1. Install the software and establish a project workspace on one or more computing systems
2. Create a data codebook from the template
3. Verify and add all national adaptations and additions in the codebook
4. Test the accuracy of the import and data entry functions with test data

Additionally, each CBA country/economy should install the OECS coding software and use test data to become familiar with the operations of the system. A detailed manual will be released with the tool.

Updates for PISA 2022

All participants who have received national codebooks, but did not collect data, will receive a new Field Trial codebook for review and adaptation in March to July 2021. All data management processing workflows in the portal will be updated to reflect changes in the schedule. Please note, Data Management Manuals may also be updated to reflect any changes. National Centres will be notified via email when resources and materials are released.

6.2.12. Understand data entry operations

Coding and data management will be among the topics discussed and practiced at the January 2020 Field Trial International Training meeting. The staff of the National Centre responsible for these tasks should attend this part of the training meeting. It is recommended that you review the relevant sections of Data Management Manual in advance to allow you to prepare for the various phases of the project. Please note that the manner in which you adapt your instruments (particularly the questionnaires) may have important implications for the structure of your database and how data are entered into the DME. Information on data entry for PISA 2021 will be presented before the Field Trial.

In planning data entry operations for paper-based countries/economies, it should be noted that in countries/economies with standard-size samples, the most typical model for data entry for prior cycles was two to three staff working full time for four weeks following the Field Trial.

Although there will be minimal data entry resources required for computer-based countries/economies, some staff resources will be required for the management of the electronic files that will be imported into the project database. It is recommended that the import of the electronic data start as soon as it is available rather than waiting until the end of the data collection phase. In this way, any issues with the data or the codebook can be addressed before they have a critical impact on the schedule at a later time.

You should build sufficient time into your data management timeline (a minimum of **five working days**) to be able to review and produce validity check reports and to resolve discrepancies as specified in the Field Trial Data Management Manual.

6.2.13. Submit Sampling Task 6 sampling data to Core C Sampling

You will need to enter the participation status of the schools and students selected for your Field Trial into the within-school sampling software and perform some validity checks on these sampling data. Following the resolution of all issues arising from the validity checks, you will need to submit your sampling data and sampling validity reports to Core C Sampling via the within-school sampling software **within four weeks of your last testing date**. Your Sampling Task 6 (ST6) Field Trial sampling data should be approved **before** you submit your database to Core A Data Management. **Core A Data Management will not be able to process your Field Trial data until this task has been approved by Core C Sampling.**

These processes will be explained in detail in the Field Trial Within-School Sampling Manual and in general in the Field Trial Sampling Guidelines.

6.2.14. Submit database to Core A Data Management

You will need to submit your data to Core A Data Management no later than **eight weeks after your last testing date**. This strict timeline is in place as delays to national data submission put the international timeline at risk. During this 8-week period, you will need to process data from all your instruments, code the open-response items and perform reliability checks, code occupations and prepare your national database for submission following all the guidelines provided by Core A Data Management. If you cannot submit your data by this time, please inform Core A Data Management **as soon as possible** and we will work with you to negotiate a new data submission date (needed by Core A Data Management for planning data processing activities) and help resolve any data management problems you may be experiencing.

Relevant supporting documentation as specified in the Data Management Manual should accompany your database. This documentation is needed by Core A Data Management staff to process the data and apply more detailed checks. PISA Contractors will not be able to approve your Field Trial database **if information is missing or excluded** from delivery. Further, **Core A Data Management will not be able to process your data until your Sampling Task 6 has been approved by Core C Sampling.**

Please note that, for additional adjudicated regions that are processed together, the data structures should be identical and in a single data set.

It is important to contact Core A Data Management a day or two before you are ready to submit the data so they can prepare resources for deliveries. Details of the manner in which data can be submitted will be provided in the Data Management Manual.

Exhibit 6.3 below shows the PISA Technical Standards regarding data submission.

Exhibit 6.3. Data submission – PISA Technical Standards

Standard 15.1 Each *PISA participant* submits its data in a single complete database, unless otherwise *agreed upon*.

Standard 15.2 All *data* collected for PISA will be imported into a national database using the Data Management Expert (DME) data integration software provided by the international contractors following specifications in the corresponding operational manuals and international/national record layouts (codebooks). Data are submitted in the DME format.

Standard 15.3 Data for all *instruments* are submitted. This includes the assessment data, questionnaires data, and tracking data as described in the *PISA operations manuals*.

Standard 15.4 Unless *agreed upon*, all data are submitted without recoding any of the original response variables.

Standard 15.5 Each PISA participating country's database is submitted with full documentation as specified in the *PISA operations manuals*.

Standard 19.1 The timeline for submission of national databases to the international contractors is within eight weeks of the last day of testing for the Field Trial and within eight weeks of the last day of testing for the Main Survey, unless otherwise *agreed upon*.

Standard 19.2 National Centres execute data checking procedures as specified in the *PISA operations manuals* before submitting the database.

Standard 19.5 To enable the *PISA participant* to submit a single dataset, all instruments for all *additional adjudicated entities* will contain the same variables as the *primary adjudicated entity* of the *PISA participant*.

6.2.15. Be available during post-submission data processing

Detailed processing checks and re-codings will be conducted at Core A Data Management following the submission of your data. Some of these checks may require National Centres to compare the data against the hard copies of instruments.

You will need to arrange for a Data Manager to be available to work with Core A Data Management during the data processing process **following** data submission. To ensure that the project's international timeline is adhered to, Data Managers should respond to data cleaning queries sent by Core A Data Management within **three working days**.

In some instances, Core A Data Management will not be able to approve or process data without consultation and resolution on data inconsistencies. Therefore, it is important for Data Managers to be available after data submission to avoid any delays in processing and data delivery from Core A Data Management.

You are also encouraged to identify administrative support staff, if they are available to you, to assist in these data processing activities.

The Data Manager Standard is shown in Exhibit 6.4 below.

Exhibit 6.4. Data Managers – PISA Technical Standards

Standard 19.3 National Centres make a data manager available upon submission of the database. The data manager:

- is authorised to respond to international contractor data queries,
- is available for a three-month period immediately after the database is submitted unless otherwise agreed upon,
- is able to communicate in English,
- is able to respond to international contractor queries within three working days, and
- is able to resolve data discrepancies.

6.2.16. Archive your Field Trial materials

It is important for the PISA Contractors to have final versions of all national materials.

For computer-based countries/economies, Core A Cognitive will already have final electronic versions of all your test materials, but you will be asked to submit final version of coding guides, school-level materials and any other relevant material for archiving.

For paper-based countries/economies, Core A Cognitive will have final electronic PDF versions of all your cognitive booklets. However, once your national version(s) of the remaining Field Trial material are finalised, you will be instructed to send the electronic versions of all questionnaires, coding guides and school-level materials, as well as a printed copy of all your assessment materials for archiving purposes, to Core A (detailed instructions will be sent with the task).

Additional information regarding this task will be sent closer to the task deadline.

You should ensure you have easy access to your Field Trial materials because you may need them to respond to queries that arise during data processing or data analysis.

Standards relating to the archiving of materials are shown in Exhibit 6.5.

Exhibit 6.5. Archiving materials – PISA Technical Standards

Standard 19.4 A complete set of PISA paper-based instruments as administered and including any *national options*, is forwarded to the international contractors on or before the first day of testing. The submission must include the electronic PDF and/or Word versions of all instruments

Standard 20.1 The international contractors will maintain a permanent electronic archive of all assessment materials, school-level materials and coding guides, including all national

versions. For documents that are finalised by countries, they are required to upload the latest version to the PISA Portal.

Standard 20.2 The National Project Manager must submit one copy of each of the following adapted and translated Main Survey materials to the international contractors:

- electronic versions (Word and/or PDF) of all administered Test Instruments, including international and national options
- electronic versions (Word and/or PDF) of all administered Questionnaires, including international and national options (paper-based countries only);
- electronic versions of the school-level materials; and
- electronic versions of the Coding Guides.

Standard 20.3 Unless otherwise requested, National Centres will archive all Field Trial materials until the beginning of the Main Survey, and all Main Survey materials until the publication of the international report. Materials to be archived include:

- all respondents' paper-based test booklets and questionnaires (PBA countries) or USB drives containing completed SDS and all associated data (CBA countries)
- sampling forms,
- student lists,
- student tracking instruments, and
- all data submitted to the international contractors.

After completion of a survey, the National Centre will transfer final versions of all national materials to the international contractors who will compile the national archives from all participants and transfer them to OECD after completion of the Main Survey.

6.2.17. Complete and submit the Field Trial Review Questionnaire

You will be asked to complete a Field Trial Review Questionnaire that gathers information about your experiences during the Field Trial preparation and Field Trial phases. The results of this review will be used both for improving the implementation of the Main Survey by the PISA Contractors and for quality monitoring purposes. The PISA Contractors are particularly interested in receiving feedback about your experiences in implementing the project (i.e. what worked well and what did not). These comments will be used to inform developments and make improvements in the Main Survey and in subsequent surveys of PISA. The Field Trial Review

Updates for PISA 2022

An updated Field Trial Review Questionnaire will be released in early March 2021.

Questionnaire and instructions will be released in sections according to the timeline of task activities. You should complete and return it **within four weeks of submitting your database**.

6.2.18. Begin Main Survey sampling preparation

The Main Survey School Sampling Preparation Manual, which details the sampling activities undertaken in preparation for the Main Survey, will be dispatched to you in **March 2020**. During this phase, you should begin to think about preparing and submitting sampling documentation and data files for completing Main Survey Sampling Tasks to Core C Sampling to facilitate the drawing of the school sample for the Main Survey.

CHAPTER 7 – SECOND REVIEW PHASE

7.1. Overview of tasks

The second review phase is very short and you will need to determine the most efficient way of completing all tasks within this narrow timeline.

During the second review phase, you will complete the following:

- review of Field Trial data and data analysis reports
- review of operational procedures
- begin Main Survey school sampling work
- review Main Survey testing period.

Activities during this phase are important for ensuring successful national implementation of the Main Survey. National review of test and questionnaire items will contribute to the selection of the final items for the Main Survey, reflecting a consensus on country/economy views and priorities.

You will notice that few key documents are listed for this phase. The main activity, other than the review of international test and questionnaire items, will be a review of all national documentation and procedures relating to survey implementation. Additionally, depending on your Main Survey school sample schedule, this may be the time when you are also working on the Main Survey sampling forms.

7.2. Key tasks during the second review phase

7.2.1. Review of Field Trial data and data analysis reports

The time available to complete data cleaning and analysis is very short, but critical. Upon data delivery, Core A Data Management will clean and analyse national data. According to the current Field Trial timeline, data submission from countries/economies extends from mid-May 2021 to the end of November 2021, and analyses are expected to start as early as the end of August 2021.

Once the standard Field Trial data cleaning and processing steps are completed by the PISA Contractors, each National Centre will receive a national data package that will include: i) National Field Trial database (SAS and SPSS) that includes preliminary proxies for proficiency; ii) data reports that include background crosstabs, msigs⁶ descriptive statistics on questionnaire

⁶ Countries/Economies will receive means and standard deviations in groups (msigs) that contain descriptive statistics for further analysis. Country/Economy data files will be separated: school data files, student data files, and teacher data files (if applicable). Country/Economy student data files contain cognitive items (raw and scored); Student Questionnaire items, Student optional questionnaires items.

variables and item analysis on cognitive items; iii) documentation regarding item misfit information on which countries/economies need to focus when reviewing national data; and iv) a set of instructions on how to check national data.

National data will be analysed in batches as described below.

- Batch 1 may include data submitted to Core A Data Management by **31 July 2021** and approved for processing and analysis (all files must be included as outlined by the Data Management Manual and the Sampling Task 6 must be approved by Core C Sampling). These databases will be cleaned and available for analysis by the end of August and will contribute to the item selection process for the Main Survey instruments. The Field Trial data package will be delivered to countries/economies in Batch 1 at the end of September 2021.
- Batch 2 may include data submitted from 1 August to **14 September 2021** and approved for processing and analysis (all files must be included as outlined by the Data Management Manual and the Sampling Task 6 must be approved by Core C Sampling). The Field Trial data package will be delivered to countries/economies in Batch 2 in mid-December 2021. These databases will not contribute to the item selection process for the Main Survey instruments.
- Batch 3 may include data submitted 15 September to **30 November 2021** (all files must be included as outlined by the Data Management Manual and the Sampling Task 6 must be approved by Core C Sampling). The Field Trial data package will be delivered to countries/economies in Batch 3 at the end of January 2022 but will not contribute to item selection process for the Main Survey instruments.

Note: Data submission dates are critical dates of delivery to Core A Data Management. Due to time constraints and Main Survey preparation processes, data submissions delivered to Core A Data Management after 30 November 2021 (or not approved for processing and/or analysis for Batch 3) will not receive processed or analysed Field Trial data files from contractors. National Centres should adhere to their scheduled delivery date and perform all consistency checks on the data frequently prior to data submission to avoid any issues during Core A Data Management's data processing.

In addition, around the end of September, countries/economies will also receive draft proposals of the Main Survey instruments. For the cognitive materials, this information will be presented as a document listing the proposed units and items for the Main Survey instruments with an explanation of the rationale and constraints for item selection. For the questionnaires, this information will be presented as PDF files containing the proposed questionnaire content along with a review sheet to collect your feedback.

As the NPM, you should review and check the Field Trial data packages and the proposed instruments, in conjunction with other members of the team that may include the National Data Managers or other experts. The timeline for National Centres to perform these tasks is very limited.

7.2.2. Review of operational procedures

National Project Managers should carefully review the school-level materials in conjunction with any Test Administrator or school staff feedback you may have received (including questions asked by these groups) to consider proposals for clarifying wording, layout or formatting of the national versions of your school-level materials. The Main Survey versions of these will be released in late October 2021. The Test Administrator's Script(s) will be released shortly after the Master SDS is released. This is expected to be early November at the latest. You should also consider the response rates of schools and students — whether these were problematic overall or in specific areas or types of schools — and devise strategies for enhancing response rates for the Main Survey.

You may want to review your informational materials and national communication protocols and consider how these can be improved. Clear, concise informational material in a language and style that appropriately targets schools, students, parents and other groups can be a valuable tool for securing participation. Strategies can be discussed with Core A Survey Operations, which will host a webinar so that countries/economies can share strategies for improving school and student participation. You may also want to use the materials shared by other countries/economies on the PISA Portal resource site.

If, in the course of any part of this review process, you identify issues you think may be of international relevance, please inform Core A Survey Operations at PISA-SurveyOperations@westat.com.

7.2.3. Begin Main Survey school sampling work

The Main Survey School Sampling Preparation Manual will be dispatched to you in March 2021. The sampling requirements for the Main Survey are much more rigorous than those for the Field Trial, so more negotiation time will need to be dedicated to your Main Survey school sampling tasks.

One of the major differences between the Field Trial and Main Survey phases is the school sample design and the technical standards associated with sampling, including those about population coverage, number of assessed students and response rates. Therefore, more detailed documentation of your sampling parameters, in particular a school sampling frame that covers all of the target population in your country/economy, is required. These procedures are explained in full in the Main Survey School Sampling Preparation Manual.

You will work with Core C Sampling to prepare your Main Survey school sampling tasks. The negotiation of your tasks will be based on the PISA Technical Standards as shown in the exhibits below. This will be conducted via a series of sampling forms that will be explained in detail in the Main Survey School Sampling Preparation Manual.

Please note that Core C Sampling will draw your sample of schools for the Main Survey and that any differences in this arrangement must be negotiated with Core C Sampling far in advance.

As discussed in detail in the Main Survey School Sampling Preparation Manual, features of your sampling plan will be agreed upon with Core C Sampling progressively according to an agreed timeline. In most cases, you should allow **two months of intensive communication** (perhaps more, depending on the complexity of the sample design) from the beginning of discussions related to your Main Survey school sample to the selection of the school sample. You should therefore agree on your sampling schedule about **one year** before your Main Survey testing period and begin negotiating your sampling work about **six months before this testing period**. This gives you enough time to provide schools with notice of their inclusion in the sample. You will be asked about this schedule right after your Field Trial sampling forms are completed. This is especially the case for early testing countries/economies, i.e. those planning to test in March or April 2022, and countries/economies wishing to implement sampling options.

The NPM Meeting in November 2021 will be an opportunity to meet in person with Core C Sampling and discuss issues related to your sampling tasks, if desired or requested by Core C Sampling. You should come prepared for this discussion, having thoroughly read the information in the Main Survey Sampling Preparation Manual. You should also discuss any sampling-related issues with relevant persons within your country/economy, such as your national committees and those who manage and maintain school enrolment data. This will maximise the opportunity for issues to be resolved in your face-to-face discussions with Core C Sampling in November 2021.

If you are responsible for the administration of PISA in an additional adjudicated entity, or if your country/economy has some schools or study programmes for which it is difficult to identify the language(s) of testing, your intentions for the Main Survey regarding these situations will form part of your sampling task work. A review of your Field Trial procedures in these particular cases and a discussion of and eventual agreement upon procedures for the Main Survey will form part of the sampling negotiation process you will undertake with Core C Sampling.

One of the most important forms you will be required to submit is your school sampling frame, which is a complete list of the schools in your country/economy that have any possibility of enrolling students who fit the target population definition. It is essential that the data on your sampling frame be complete, accurate and as up to date as possible. Please discuss any issues you may have about your sampling frame preparation with Core C Sampling as soon as you become aware of them.

Once all necessary information regarding your sampling tasks has been received by Core C Sampling and agreed upon, Core C Sampling will draw your sample of schools and send this list to you at the time agreed upon.

The standards regarding sampling are shown in Exhibits 7.1 and 7.2 below. All PISA Technical Standards relating to sampling are discussed in detail in the Main Survey Sampling Preparation Manual.

Exhibit 7.1. Target population and sample sizes – PISA Technical Standards

Standard 1.1 The PISA Desired Target Population is agreed upon through negotiation between the National Project Manager and the international contractors within the constraints imposed by the definition of the *PISA Target Population*. The *Target Population* for PISA starts with students attending all educational institutions located within the country, and in grade 7 or higher. The “standard” PISA target population is further refined to its age basis: students between 15 years and 3 (completed) months and 16 years and 2 (completed) months at the beginning of the testing period.

Standard 1.2 Unless *otherwise agreed upon* only *PISA-eligible students* participate in the test.

Standard 1.8 The student sample size for the **computer-based mode** is a minimum of 6300 assessed students, and 2100 for *additional adjudicated entities*, or the entire *PISA Defined Target Population* where the *PISA Defined Target Population* is below 6300 and 2100 respectively. The student sample size of assessed students for the **paper-based mode** is a minimum of 5250.

Standard 1.7 The *PISA Defined Target Population* covers 95% or more of the *PISA Desired Target Population*. That is, *school-level exclusions* and *within-school exclusions* combined do not exceed 5%.

Standard 1.9 The school sample size needs to result in a minimum of 150 participating schools, and 50 participating schools for *additional adjudicated entities*, or all schools that have students in the *PISA Defined Target Population* where the number of schools with students in the *PISA Defined Target Population* is below 150 and 50 respectively. Countries not having at least 150 schools, but which have more students than the required minimum student sample size, can be permitted, *if agreed upon*, to take a smaller sample of schools while still ensuring enough sampled PISA students overall.

Exhibit 7.2. School and student sampling – PISA Technical Standards

Standard 1.4 Schools are sampled using *agreed upon*, established and professionally recognised principles of scientific sampling.

Standard 1.6 Students are sampled using *agreed upon*, established and professionally recognised principles of scientific sampling and in a way that represents the full population of *PISA-Eligible students*.

Standard 1.11 The final weighted school response rate is at least 85% of sampled eligible and non-excluded schools. If a response rate is below 85% then an acceptable response rate can still be achieved through *agreed upon* use of replacement schools.

Standard 1.12 The final weighted student response rate is at least 80% of all sampled students across responding schools.

7.2.4. Review Main Survey testing period

Part of the preparation of your school sampling work will be the confirmation of your testing dates for the Main Survey. These were initially proposed prior to the Field Trial, but there may have been some changes that you will need to discuss with Core C Sampling. Since eligibility for inclusion in the international database is computed on the basis of student age and testing dates, it is essential that this information displayed on the PISA Portal is correct. Exhibit 7.3 below shows the PISA Technical Standard with regard to the testing period.

Exhibit 7.3. Main Survey testing period – PISA Technical Standards

Standard 1.3 Unless *otherwise agreed upon*, the testing period:

- is no longer than eight consecutive weeks in duration for computer-based testing participants,
- is no longer than six consecutive weeks in duration for paper-based testing participants,
- does not coincide with the first six weeks of the academic year, and
- begins exactly three years from the beginning of the testing period in the previous PISA cycle

Your confirmed testing dates will form the basis for many of the upcoming activities, for example the negotiation of schedules for the preparation of materials for the Main Survey.

CHAPTER 8 – MAIN SURVEY PREPARATION PHASE

8.1. Overview of tasks

During this phase, you will complete the following:

- update and/or prepare more promotional material for education authorities and schools
- attend the third NPM Meeting in November 2021
- negotiate your Main Survey School Sampling Tasks
- prepare the Main Survey instruments
- prepare school-level materials
- finalise non-verified minority language instruments for the Main Survey
- nominate international PISA Quality Monitors
- install Main Survey version of the within-school sampling software
- liaise with schools; select the within-school samples
- recruit and train Test Administrators
- plan staffing and resources for coding
- attend the Main Survey International Training in January 2022.

8.2. Key tasks during the Main Survey preparation phase

8.2.1. Update or prepare promotional material for education authorities and schools

After the Field Trial, you may find that schools and students are more reluctant to participate than you expected. This could be for many reasons such as changes in the political situation in your country/economy, part of your country/economy that does not support PISA or increased resistance to more testing from teachers and parents. If you have problems for the Field Trial, it is likely that the problem will be worse for the Main Survey when you must select a random sample of schools.

Therefore, it is very important that you determine as best you can what the problems are. This will allow you to plan early and prepare promotional material to counteract these problems. It is likely that you will need a variety of materials that target different groups: national, regional and

district education agencies; teacher groups; parent organisations; school administrators; and students.

Apart from the examples of endorsement materials available on the PISA Portal in the PISA Survey Operations Resource folder, it is important that you consult directly with Core A Survey Operations.

8.2.2. Attend the third NPM Meeting in November 2021

The third NPM Meeting in November 2021 will present information about the Field Trial Analysis and an overview of the Main Survey instruments. There will be an opportunity to consult on Main Survey sampling work and to discuss data analysis plans.

A number of documents will be provided to NPMs in preparation for this meeting. These include a document with the updated Main Survey Integrated Design that will detail the proposed number of test forms and questionnaires and their composition, the proposed Main Survey cognitive instruments and questionnaires, as well as documents with the procedures for the Main Survey Materials Preparation with details for all activities relating to the review and verification of the national test instruments. Core A Survey Operations will discuss preparing the school-level materials and the process for nominating PISA Quality Monitors.

Your preparatory activities for this meeting should focus on a review of the operations manuals and proposed test and questionnaire instruments, consulting with your PISA Governing Board member and other national staff/experts where necessary.

Decisions about the representatives to attend this meeting will depend greatly on the structure and resources of the National Centre and the final meeting agenda should be used as your reference but general guidelines are provided below.

- *NPM Meeting 3 Participants*: the National Project Manager and/or any member of the National Team who will assist the National Project Manager, Data Manager or Data Analyst (if involved or interested in understanding the Field Trial analysis) and Project Managers, Translation Coordinators and/or National Team members who are in charge of the production of the national test and questionnaire materials for the Main Survey. If different members of the National Team are in charge of different components, it is recommended that each attend the meeting according to their responsibilities and activities covered in this meeting. Additionally, if there are many participants who switched Data Managers between the Field Trial and the Main Survey, there will be training available for the within-school sampling software.

8.2.3. Negotiate your Main Survey school sampling tasks

As discussed in the last chapter, you will be continuing to work with to Core C Sampling on the negotiation of your Main Survey school sampling tasks and the selection of your school sample during this phase.

8.2.4. Prepare the Main Survey instruments (PBA and CBA)

Preparation of test instruments

A key difference between the Main Survey and Field Trial preparation phases is that you will already have translated and adapted the materials. Therefore, the focus of your activities in this regard will be on reviewing your national statistics for the retained new items and correcting errors. Please note that rephrasing (preferential changes) will not be possible at this time.

There will be revisions to the new test items and related coding guides that are carried through the Main Survey. They will be clearly documented in an errata sheet for you to reference and check. The master versions of the coding guides may also be reviewed before and after the coder training.

The process for preparing national versions of the Main Survey cognitive instruments for both computer- and paper-delivered versions will start after the release of the first set of national Field Trial data reports on at the end of September 2021. This process and timeline will meet the requirement that the assembly of national SDS must start on a rolling basis, beginning mid-November 2021.

For the new cognitive items, countries/economies will be asked to do the following:

- Review any flagged items to see if a translation error can be identified that may have caused differential item functioning. In this process, countries/economies will refer to the Field Trial item information report provided by the PISA Contractors with the Field Trial national data reports. It is to be noted that such issues may not be found at all or may not be linguistic in nature. That is, item misfit may not be due to a possible translation flaw.
- Document any other outright or serious errors and issues (including layout issues) identified after the Field Trial instruments were finalised, and document these carefully with a justification for change in the Change Request Form. Rewording, including preferential changes, will not be possible.
- Check carefully that all errata included in the latest **Field Trial** errata list have been implemented and document any missed errata. Note that revisions and errata spotted after the last released Field Trial errata will be systematically checked and implemented if needed by the verifier.
- Perform a careful proofreading to ensure there are no remaining issues (e.g. typos and grammar issues) PRIOR to SDS assembly.

During the verification process, international verifiers and the Core A Translation Referee will review all requests. Agreed national changes and global revisions made in the source versions will be implemented in the national version centrally by Core D Translation Verification. This process is the same for countries/economies taking the computer-based assessment and for countries/economies taking the paper-based assessment.

The above process will be described in detail in the Main Survey Instruments Preparation document to be released at a later date.

Particular attention should be paid to the review of your national data reports for the retained test items. However, it is likely that there will not be time for an extensive review.

Preparation of questionnaires

In the case of questionnaire items, the review of your data reports should focus on issues such as the distribution of responses across response categories and ensuring cross-checks to other national data sources to confirm that response patterns are as would be expected.

No changes in your national versions of the questionnaire items are expected between the Field Trial and the Main Survey unless there are clear errors in the material. If you detect errors, any corrections will need to be agreed by Core A Questionnaire Content. Moreover, all national options such as additional national questions must have been implemented and tested in the Field Trial. It will not be possible to add any new national questions for the Main Survey only.

As with the cognitive instruments, the process for preparing national versions of the Main Survey questionnaires for both computer- and paper-delivered versions will start after the release of the first set of national Field Trial data reports and the proposed Main Survey questionnaire items on 30 September 2021.

For the questionnaires, countries/economies will be asked to:

- review the national questionnaire data to confirm that response patterns are as would be expected
- document feedback on the proposed Main Survey questionnaire items in a review sheet
- document in the Main Survey Questionnaire Adaptation Spreadsheet (QAS) any errors that must be corrected in the national version and include a justification for the correction from the Field Trial data.

Requests for changes to the national questionnaires will be reviewed by the verifiers and the PISA Contractors and implemented centrally in the Main Survey questionnaires where necessary. In addition, the PISA Contractors will ensure the errata identified after the Field Trial are implemented in the national questionnaires.

Countries/Economies will then be asked to review and test their Main Survey questionnaires and sign off.

The above process will be described in detail in the PISA Newsletter and discussed at the NPM Meeting in November 2021.

Prepare Main Survey paper instruments

To better ensure comparability of the paper-based assessment materials across countries/economies and languages, testing booklets are centrally created by Core A Cognitive and then reviewed and approved by countries/economies. As part of this process, you will be asked to complete the following steps:

- update the cover page in preparation for the Main Survey
- review and approve final clusters, if any revisions were approved by the PISA Contractor
- review and approve finalised booklet files.

Core A Cognitive will provide you with final print-ready files of the booklets that must be used as provided. During printing, it is your responsibility to confirm that your print quality will be the same as in the Field Trial if you are conducting the paper-based assessment or the paper-based Parent Questionnaire, assuming that your Field Trial materials are produced at an acceptable print quality. It is important that the materials received from the printers are of the same standard as agreed upon during the Field Trial phase and are in accordance with the PISA Technical Standard for print quality described in Chapter 5. It is strongly recommended that you send the final set of PDF files that you received from Core A Cognitive to your printer, together with a set of hard copies of the materials as a sample, and check the first run of printing before finalising your print run. Consult with Core A Cognitive if you have concerns or questions about print quality of the materials.

As with the Field Trial, countries/economies implementing PISA as a paper-based survey must print the tests and questionnaire booklets as separate booklets to avoid the possibility of students returning to the test material during the questionnaire session. As the test and questionnaire booklets are separate, care should be taken to make sure that students receive the correctly identified booklets so that these can be matched without error for data entry.

Preparation of Main Survey Student Delivery System and USB drives (CBA instruments)

The Student Delivery System (SDS) is a self-contained set of applications for delivery of the PISA computer-based tests and Student Questionnaires. A master version is assembled first for countries/economies to test within their national IT structure. The goal is for countries/economies to become familiar with the operation of the SDS and to check the compatibility of the software with computers being used to administer the assessment.

With the master SDS, Core A Student Delivery System also releases the System Diagnostics software. The System Diagnostics is a version of the SDS without the tests and questionnaires. It is intended to be given to schools to check the compatibility of the school computers with the PISA software.

Once all components of national materials are finalised, approved and locked, including both the tests and the questionnaires, Core A Student Delivery System assembles and tests the national SDS that is then released to countries/economies for national testing. National Centres are

expected to test the SDS fully following a detailed testing plan that accompanies the SDS. The goal of the national testing is to identify any residual content or layout issues, incompatibilities with hardware and software commonly used in schools, and errors in assembly of the SDS components. Where issues are identified, those are corrected and a second SDS is released. Once countries/economies sign off on their national SDS, their CBA instruments are ready for the Main Survey and can be copied to USB drives for distribution to schools.

See Section 5.2.3 “Assemble test and questionnaire materials” for more information about preparing the USB drives for data collection.

8.2.5. Prepare school-level materials

The school-level materials will require further revision following the Field Trial to improve the quality and efficiency of field operations and make necessary updates based on the Main Survey. Again, these global revisions that are required will be clearly documented.

You will again need to negotiate all adaptations to school-level materials with Core A Survey Operations. As for the Field Trial, countries/economies make adaptations directly to the Microsoft Word documents using the track changes and comments functions. Core A Survey Operations will ask you to update the School-level Materials Adaptation Form (SMAF) to document any updates for the Main Survey and to revise the timeline. Also, unlike the Field Trial, the Test Administrator’s Script will not be verified by Core D Translation Verification.

8.2.6. Finalise non-verified minority languages instruments for the Main Survey

You will have previously indicated, as part of your Field Trial sampling and Translation Plan negotiations, whether you intend to use national versions in more than one national language of instruction and, if so, which languages will be used in your assessment.

National versions that are in a test language used as language of instruction for less than 10% of the sampled students do not need to be submitted for international verification (they are considered non-verified) and must be negotiated directly with the Core A Contractor.

The preparation of minority languages that are non-verified is mostly a national responsibility, with some support from the Core A Contractor in making the versions accessible to the National Centre. In most cases, these will be adapted from another country/economy’s verified version. However, a few non-verified languages are newly developed for the Field Trial or Main Survey and a schedule and process has been agreed with the Core A Contractor. In these few cases, it is expected that the National Centre will implement a national verification process to ensure the quality of materials.

It is also important for National Centres to understand that the work associated with these non-verified minority languages is different for cognitive materials and questionnaires and must be scheduled accordingly. For the cognitive materials, the involvement of the National Centre is restricted to informing the Core A Contractor which files they want to use as source (for translation or adaptation) and in implementing national adaptations and checking layout. The cognitive materials are borrowed as an intact set. For the questionnaires, the National Centre

will first need to finalise its verified language version questionnaires in order to lock the final structure that will match the international version of the questionnaire. At that time, the Core A Contractor will provide a translation workflow with the translation materials for the minority languages and the National Centre will need to insert the translated text. This process will be explained and discussed separately with the involved countries/economies.

8.2.7. Nominate international PISA Quality Monitors

For the Main Survey, international PISA Quality Monitors (PQMs) will be nominated by NPMs for each participating country/economy. Regardless of overall sample size, on average, 15 sessions per country/economy and 5 sessions per adjudicated region (with samples independent of the national sample) will be visited.

Typically, two to four PQMs per country/economy will be appointed depending upon the length of your data collection period. **If the data collection period is short, you will need to nominate enough PQMs to ensure that the required number of schools is observed.** This means, for example, that if you test all schools on the same day, you would need to nominate a large enough pool of PQMs from which 15 or 16 PQMs can be selected by Core A Survey Operations. It may be difficult to nominate enough PQMs to ensure that the required number of schools or sessions can be observed. If that is the case, Core A Survey Operations may need to request that you schedule some schools on different dates.

Core A Survey Operations will provide you with PQM Nomination and Curriculum Vitae Guidelines to assist with nominating PQMs beginning **November 2021**. Note that PQMs should be familiar with assessment procedures and conditions relating to your national education system. They also need to be able to communicate fluently in English, have access to an email account, have access to a high-speed Internet connection, have access to necessary transportation and should attend one of the national Test Administrator training sessions. Most important is that you select candidates that you are confident will be able to work professionally and diplomatically with school staff, Test Administrators and students.

Please nominate PQMs **at least eight weeks prior to your first assessment date** to allow time to complete hiring PQM before your national Test Administrator training sessions.

Note on security: many countries/economies have special security checks required for anyone working in schools with children. Therefore, please only nominate candidates that already meet those requirements or can meet them in time before the start of your Field Trial.

Core A Survey Operations will serve as the international PQM co-ordinator and be responsible for hiring PQMs, training them, overseeing their work and paying them. All PQMs must sign a confidentiality agreement. An electronic copy of this agreement will be sent to National Centres. National Centres are responsible for ensuring that PQMs have all the necessary country/economy-specific security and confidentiality documents.

Training of PQMs will consist of home-study and a test followed by a webinar reviewing PISA, the role of PQMs, the selection of schools, how to conduct observations and example situations PQMs may encounter.

Further details of procedures relating to both PQM and National Centre activities will be provided at the November 2021 NPM Meeting.

Exhibit 8.1 below lists the PISA Technical Standards in relation to international PISA Quality Monitors.

Exhibit 8.1. PISA Quality Monitors – PISA Technical Standards

Standard 12.1 PISA Main Survey test administration is monitored using site visits by trained independent quality monitors.

Standard 12.2 Fifteen site visits to observe test administration sessions are conducted in each PISA participating country, and five site visits in each adjudicated region.

Standard 12.3 Test administration sessions that are the subject of a site visit are selected by the international contractors to be representative of a variety of schools in a country.

8.2.8. Install Main Survey version of the within-school sampling software

Starting in January 2022, the Main Survey version of the within-school sampling software will be dispatched to all National Centres with selected school samples. Changes to this sampling software since the Field Trial will reflect any required changes for the Main Survey procedures. Some procedures regarding the production of validity reports may also change.

Please install this software and familiarise yourself with any changes to procedures prior to using it for drawing student samples (and teacher samples if applicable). Detailed specifications about the installation and functionality of the within-school sampling software are explained in the Main Survey Within-School Sampling Manual. This manual will be updated after the Field Trial as necessary.

8.2.9. Liaise with schools, select within-school samples

As with the Field Trial, for the Main Survey schools will need to provide you with a list of enrolled students whose grades (i.e. grade 7 or above) and dates of birth fit the population definition you negotiated with Core C Sampling. Any additional students for any sampling options you are implementing must also be included in this list. You should plan these activities in such a way as to be able to send schools their Student Tracking Forms containing sampled students **at least two weeks before the assessment day**.

If a central database with **up-to-date and sufficiently detailed student-level information is available**, you can use this instead. However, the database must provide student name, grade, gender, month and year of birth (and, if possible, study programme).

Please review and update your Field Trial procedures for requesting student lists (and teacher lists if applicable) from schools, taking careful note of any changes to the Main Survey version of the within-school sampling software, as noted in the Within-School Sampling Manual, which will be updated after the Field Trial. Some guidelines on instructions to schools, and the information required in the student lists (and teacher lists if applicable), is sent to schools in the

Field Trial preparation phase (see Sub-Section 5.2.5 “Work with schools”, “Obtain student lists from schools”). You should also review this while revising and preparing your materials and procedures.

If you need to send instructions to schools requesting the list of students prior to completing the adaptation/translation of the other sections of your School Co-ordinator’s Manual, this is acceptable. However, please inform Core A Survey Operations of your proposed two-stage approach to schools. To implement this two-stage approach, the letter to the school should be translated into English and sent to Core A Survey Operations for discussion and agreement before it is sent to the school. As the information gathered from schools needs to be as up to date as possible, the collection of student lists should not be done until eight weeks prior to the start of the test period.

It needs to be emphasised to school staff preparing the list of students that all students eligible for participation in PISA (and any additional sampling options) must be listed. This includes students with special educational needs or limited experience in the test language(s), those who are frequently absent, those pending disciplinary measures, and those who may be on work placement programmes at the time of testing. **Incomplete student lists could seriously compromise the quality of the sample and cause your data integrity to become questionable.** Core C Sampling should be consulted if there are any questions about a student’s eligibility for listing.

Unless otherwise agreed upon, the student sample must be selected using the within-school sampling software. This helps to ensure that students are sampled uniformly across countries/economies in accordance with the principles of scientific sampling procedures and that all data coming from that sampling operation are in the same specific format (see Standard 1.13).

Please carefully review the Main Survey Within-School Sampling Manual, which provides a detailed description of how the within-school sampling software samples students (and teachers if applicable). There are a number of preparatory activities that you will need to undertake prior to sampling students (and teachers if applicable), including ensuring that certain school-level information (such as student study programmes) are imported into the within-school sampling software.

Please review Section 5.2.5 “Work with schools” as you review staffing and logistical issues for this aspect of the survey.

8.2.10. Recruit and train Test Administrators

The same PISA Technical Standards apply to the recruitment and training of Test Administrators for both the Field Trial and the Main Survey (see Standards 8.1, 8.2 and 9.4 and also Chapter 5, where these standards were displayed).

As with the Field Trial, Test Administrators should not be the reading, mathematics or science teacher of any students in the assessment sessions. It is preferred that Test Administrators not be staff members in the participating schools. Test Administrators need to be familiar with standardised testing procedures and school conditions in the national context.

It would be a great advantage to recruit individuals involved in test administration during the Field Trial. If you are using Test Administrators who were involved at the Field Trial, you may wish to consult with them prior to finalising your training materials to incorporate any feedback or suggestions they may have.

Shortly before the commencement of PISA testing for the Main Survey, you should organise a training session for Test Administrators. Test Administrators should receive in-person training (see Standard 9.4 and Chapter 5) or training via webinar. Countries/Economies must get permission from Core A Survey Operations if they plan to use another form of training. Core A Survey Operations will host a trainer training webinar to review setting up and conducting these in-person trainings.

The training should preferably be scripted and emphasise that procedures relating to the following features of administration should be both uniform across schools and consistent with the international procedures in the source versions of the school-level materials in respect of the following (among others):

- session timing
- maintaining standard testing conditions
- student tracking
- assigning test booklets/Student Questionnaires or USB drives
- maintaining test and questionnaire security and confidentiality.

Furthermore, experience from previous surveys indicates that providing Test Administrators with an overview of PISA is very useful because it gives them a sense of their important role within the broader context of the survey.

Please carefully review Section 5.2.6 “Recruit and train Test Administrators” as you prepare for your Main Survey Test Administrator training. Keep in mind that as with the Field Trial, you will be asked to provide information on the Test Administrators you hire and your plans for training your Test Administrators. A form will be provided through the PISA Portal.

8.2.11. Plan staffing and resources for coding for the Main Survey

Countries/Economies will be required to assemble a coding team for the open-ended human-coded cognitive items. The coding process will take place after data are collected and prior to data submission. The PISA Contractors will provide a clear coding design and specify characteristics of the coding team. A set of coding designs will be provided that will vary in terms of the number of coders to ensure that countries/economies’ needs are met regarding sample sizes per language. The available designs will assume a coding rate of approximately 1 000 responses per day per coder and a coding period no longer than two weeks. For planning purposes, countries/economies should estimate approximately three weeks: up to one week for coder training plus up to two weeks for response coding. Core A Cognitive will provide each

country/economy with tailored information regarding timing and number of responses per coding after January 2022.

Countries/Economies will also be required to establish a process for coding occupations. For this process, some countries/economies will put in place an internal process while other will rely on outside agencies, such as statistical offices. From experience in previous surveys, occupational coding has required on average approximately 300 hours during the Main Survey period.

Data entry operations vary in length depending on the mode of assessment, sample size, experience of staff and other factors. For the Main Survey, countries/economies that are participating in PISA 2021 as a paper-based country/economy should plan on four to six staff working full time for six weeks following the Main Survey for the standard PISA sample size of 5 250 assessed students. If more students are sampled, they will need to make provisions for more staff because delays in data submission are problematic. Countries/Economies that are conducting CBA will require data entry for the Session Report Form data. Additional time should be factored in to code the Parent Questionnaire responses, if applicable.

Please note that if your sample size is increased because of separate adjudicated regions or additional students due to optional components, you will require more staff for all tasks. Coding and data entry operations are discussed in more detail in the next chapter.

8.2.12. Attend the Main Survey International Training in January 2022

The Main Survey International Training will take place in January 2022 and will cover two main aspects of the Main Survey: Data Management Review and Coder Training for human-coded cognitive items.

Data management review training

This review training is required for all PBA countries/economies, all new CBA participants and all participants who switched Data Managers between the Field Trial and the Main Survey. In addition, the PISA Contractors may recommend that some other countries/economies attend, depending on the quality of their Field Trial data or procedures. Participants will receive a refresher training on how to use the data management software and take part in practice exercises using training codebook templates in preparation for the Main Survey data management procedures.

- ***Data management training participants:*** For some countries/economies, participation in this training is vital for the success of the project and the National Data Manager (NDM) is expected to attend. The main topics of this training, conducted by Core A Data Management, will focus on the DME software and the way it functions in relation to the assessment design. Additionally, NDMs will be trained on how to reflect national adaptations to the background questionnaires in the codebooks and to validate that the adaptations in questionnaires and the codebooks are in agreement. This training may focus on more hands-on activities for practice and preparation.

Coder training for human-coded responses

This meeting will cover the coding procedures and item-by-item coding instructions for all new constructed-response items that require human coding in Mathematics and Creative Thinking. A webinar will be organised for training on new constructed-response Financial Literacy items.

Updated source versions of the coding guides for these units will be released after the Main Survey International Training. National versions of coding guides will then need to be finalised accordingly and submitted to Core D Translation Verification for verification.

Additional coding training for all trend human-coded cognitive items may take place as needed based on the Field Trial results through alternative means (recorded and/or live webinars).

Details about the approach and/or meeting schedule will be provided well in advance of the meeting to enable you to consider who should attend, and for which sessions.

- *Coder training participants*: the National Project Manager and/or Coder Manager for each domain, as applicable. When identifying staff to attend this training, please consider that Coder training may take place through parallel sessions and that the coder training will take place in parallel to the data management training.

CHAPTER 9 – MAIN SURVEY PHASE

9.1. Overview of tasks

This section describes tasks directly associated with the preparations to the Main Survey data collection and Main Survey data processing.

Prior to the testing period:

- print, package and distribute Main Survey materials to schools and Test Administrators as appropriate.

During the testing period:

- co-ordinate activities of Test Administrators and the international PISA Quality Monitors (PQMs)
- continue liaising with schools
- monitor school and student response rates, as well as numbers of assessed students, and also monitor teacher response rates, if applicable
- organise follow-up sessions
- monitor data collection of online questionnaires
- monitor data collection of Parent Questionnaires, if applicable.

Post-testing period:

- return materials to National Centre
- submit your Sampling Task 12 (ST12) sampling data to Core C Sampling
- review item coding and data entry operations
- continue to monitor data collection of online questionnaires (after the testing period)
- recruit item coders
- review guidelines and plan for item coding procedures and coding design
- review guidelines and plan for occupation coding procedures
- process data entry in the DME
- submit database to Core A Data Management

- be available during post-submission data processing
- complete and submit the Main Survey Review Questionnaire
- archive your Main Survey materials
- review your national data and analysis reports
- prepare the international database.

In the Field Trial and Main Survey phases, many aspects of the tasks and procedures are similar. There are also some features that are unique to each phase. To avoid overlap with the Field Trial phase chapter, we do not repeat information here that is equivalent to material already presented. Instead, we refer you to the relevant sections of that chapter, and to key documents, where appropriate. Please take time to review all relevant sections of the Field Trial phase chapter while reviewing this chapter. Make sure you carefully also note the features that are new to the Main Survey phase discussed in this chapter

9.2. Key tasks during the Main Survey phase – prior to the testing period

9.2.1. Print, package and distribute Main Survey materials to schools and Test Administrators as appropriate

In addition to printing, PBA countries/economies have more things to consider in packing and distributing assessment materials than CBA countries/economies. As mentioned in Chapter 6, there is no single best way to package paper materials, prepare USB drives, or distribute materials to schools. Several scenarios were presented and discussed in that section, and by now you should have in place a plan for printing, packing and distributing your material for the Main Survey based on what was done for the Field Trial. If you are uncertain, please discuss this with Core A Survey Operations.

Keep in mind that there are three primary concerns in making plans for the printing, preparing packaging and shipping of PISA assessment materials:

- that materials are secure and confidential at all times
- that materials assigned to each student are the ones that the student uses in the testing session (and clearly identified as such)
- that print quality is of a high standard for PBA instruments and that the USB drives are of acceptable quality for all CBA instruments.

For PBA instruments, it is strongly recommended that you request a sample of each printed instrument and manual and check for print quality before finalising your print run. You will not need to resubmit samples to Core A Cognitive unless there has been a change in your situation.

To protect test security, it is strongly recommended that the paper instruments and USB drives be sent to the Test Administrators rather than to schools. If these materials are sent to participating schools, you should review procedures to ensure that their security is not compromised. Please consult with Core A Survey Operations if you have questions or concerns.

When the student sample is selected in the within-school sampling software, test forms will be assigned automatically to students as the within-school sampling software generates the Student Tracking Forms. Refer once again to the most current version of the Main Survey Within-School Sampling Manual for further details about how to use the within-school sampling software to select the student sample (and teacher sample if applicable).

In addition, NPMs will be responsible for distributing usernames and passwords for the online School and Teacher Questionnaires to schools. NPMs will receive this information from the PISA Contractors 15 days before the Main Survey scheduled starting date.

9.3. Key tasks during the Main Survey phase – during the testing period

9.3.1. Co-ordinate activities of Test Administrators

As for the Field Trial, the co-ordination of the activities of the Test Administrators is a significant task involving the scheduling of testing dates, the provision of contact information for each school, the maintenance of the security of testing materials while in the field and the secure collection and return of these materials. Depending on the number of Test Administrators and the length of your testing period, the assigning of test dates to schools and the co-ordination of these activities may require substantial logistical and communication work on your part because of the larger sample for the Main Survey.

Co-ordination of testing is a special challenge for CBA countries/economies, especially those using laptop computers. If you had problems with logistics during the Field Trial, contact Core A Survey Operations for advice.

Test Administrators should be able to contact the National Centre before, during and after the testing period. **It is essential that the Test Administrator/school staff inform you of any changes to testing dates, as these may affect the international quality monitoring activities.**

9.3.2. Continue liaising with schools

Immediately prior to a school's test date, and also on the date of the test itself, be prepared for a high number of last-minute queries. Many of these queries are likely to relate to final arrangements for the test. This is especially true for the computer-based assessment. Examples of such queries are listed in the Field Trial phase chapter. You are encouraged to review and update your procedures for dealing with such queries based on your experiences from the Field Trial. Consult Core A Survey Operations for answers to queries and support as needed.

As with the Field Trial, you must have a help desk and designate at least two National Centre

staff to liaise with schools. This is even more important for Main Survey CBA countries/economies since Test Administrators will need extensive support with field concerns. It is critical, therefore, that the helpdesk staff be well trained on the SDS and troubleshooting computer problems.

9.3.3. Monitor school and student response rates and number of assessed students

The PISA Technical Standards regarding response rates and the number of assessed students are important in achieving high-quality, unbiased data. Early detection of any problems with response rates or the number of assessed students during the Main Survey is important. Therefore, during the Main Survey testing period you will need to develop and implement a procedure to monitor the school and student response rates, and the number of assessed students.

If you have concerns prior to the Main Survey about expected response rates, please contact Core A Survey Operations to discuss your concerns and plans as soon as possible. Core A Survey Operations will also host webinars on improving response rates, provide resource materials on the PISA Portal and consult with countries/economies on specific issues upon request.

Similarly, if during survey administration you encounter difficulties with response rates, please contact Core A Survey Operations promptly to discuss possible ways to improve them.

In the event that your response rates are at risk of not meeting the standards, then extra resources or effort may be required to address this. The nature of this additional effort will vary, depending on your national context, but might be directed towards ensuring improved participation at follow-up sessions or the involvement of upper-level authorities to encourage higher participation at the school level.

The PISA Technical Standards in relation to school, student and teacher (if applicable) response rates are shown below in exhibit 9.1.

Exhibit 9.1. School, student and teacher (if applicable) response rates – PISA Technical Standards

Standard 1.11 The final weighted school response rate is at least 85% of sampled eligible and non-excluded schools. If a response rate is below 85% then an acceptable response rate can still be achieved through *agreed upon* use of replacement schools.

Standard 1.12 The final weighted student response rate is at least 80% of all sampled students across responding schools.

Standard 1.13 The final weighted teacher response rate is at least 75% of all sampled teachers across responding schools.

Standard 1.14 The final weighted sampling unit response rate for any optional cognitive assessment is at least 80% of all sampled students across responding schools.

Response rates are based on the target population. If you are participating in a national additional sampling option, response rates should not be based on the pooled sample of PISA and additional sample options students. Response rates should be considered separately for students selected for participation in PISA and students selected for participation in the national additional sampling option.

The following should be noted:

- Response rates are based on participation in the test session and the questionnaire session (note: students are not allowed to take the questionnaire if they did not take the test and if this does occur the questionnaire data will not be used).
- If a school has less than or equal to 33% participation among selected students who have not left the school or been excluded due to special educational needs, then that school will be regarded as a non-participant and the students (and teachers, if applicable) will be dropped from the database.
- If a school has more than 33% participation among the selected students who have not left the school or been excluded due to special educational needs, the school is regarded as a respondent.

Student and teacher (if applicable) response rates are calculated across all participating schools, whether sampled schools or replacement schools, and from the participation of students at the originally scheduled sessions and any follow-up sessions that may be required. The student response rate requirement and the teacher response rate requirement must be met at the national level, not necessarily for each participating school.

Further discussion about school, student and teacher response rates can be found in the latest version of the Main Survey School Sampling Preparation Manual. You should ensure that you are familiar with these requirements.

9.3.4. Organise follow-up sessions

It is recommended that as part of your field operations procedures you plan for follow-up sessions in schools as defined in the school-level materials. This is not to be confused with the overall response rate in Standard 1.11 (Exhibit 9.1) but rather is meant as a guideline for you in monitoring response rates throughout your data collection period. Test Administrators should be aware of the need to monitor response rates. The National Centre must also have a monitoring system in place that allows time to intervene should the response rate not be adequate.

The Main Survey source versions of the Test Administrator's Manual, School Associate's Manual and School Co-ordinator's Manual assume that follow-up sessions may need to be implemented. They provide detailed guidelines about how to decide (based on the number of students present) whether or not a follow-up session is needed.

These guidelines are intended to ensure that Test Administrators follow uniform procedures. You should review them carefully, incorporating this information into your Test Administrators' training.

Ensure that Test Administrators notify you as soon as it is known that a follow-up session will be required. Follow-up sessions have implications for the return shipment of materials (i.e. whether you ship material back in one or two batches), which you will need to plan for and convey to Test Administrators.

9.3.5. Monitor data collection of online questionnaires (CBA countries/economies)

During the Main Survey data collection period, NPMs will be responsible for assisting schools with usernames and passwords for the online School and Teacher Questionnaires and monitoring data collection for the online questionnaires. Core A Questionnaire Technical will provide a tool to monitor the progress of users that are taking the questionnaires during the Main Survey. This tool is accessible only by the NPM and NPMs should refer to the School and Teacher Questionnaires Monitoring Manuals for detailed information.

9.3.6. Monitor data collection of Parent Questionnaires, if applicable

Monitoring the collection of the optional Parent Questionnaire is important. As these are paper-based questionnaires, a good approach is to ship the questionnaires to School Co-ordinators and ask them to send the questionnaires home with sampled students. The questionnaires should go home about two weeks before the assessment date and parents asked to return them to the School Co-ordinator via the student no later than the day of the assessment. A few days before the assessment, the School Co-ordinator should remind parents to return the questionnaire. The Test Administrator will then return the questionnaires with the assessment materials. The National Centre should monitor the return and request that the School Co-ordinator follow up as needed. In some cases, the National Centre contacts the parent directly. It is also advisable for the National Centre to include a postage paid return envelope so that the School Co-ordinator can conveniently ship questionnaires that are returned after the assessment date.

9.4. Key tasks during the Main Survey phase – post-testing period

9.4.1. Return materials to National Centre

Following the assessment, all materials must be accounted for and kept secure. It is very important that strict procedures be followed in receiving and returning materials.

To help ensure that the international survey timeline and deliverables are adhered to, Sampling Task 12 (ST12) data should be submitted to Core C Sampling **four weeks after your final test date**, and also at this time, all SDS files (CBA) and questionnaire data (PBA) should be imported to the DME. National data should be submitted to Core A Data Management **eight weeks after your final test date and only after the ST12 Sampling data has been approved by Core C Sampling**. Core A Data Management will not be able to process your data without the ST12 approve from Core C Sampling. It is therefore crucial to plan carefully your national staffing and timeline for returning materials, since the schedule for recording school and student participation codes, instrument coding and data entry is tight. Test Administrators should ship materials back to you as soon as possible after the completion of an assessment. Depending on

the resources available to you and the length of time it takes to return assessment materials, consider engaging the support of two to six staff working together to prepare materials for return depending on whether the mode of administration in your country/economy is paper-based or computer-based and other considerations in your country/economy.

Please note that if there is any breach of security such as a missing test booklet (including unused) or secure materials such as USB drives, it is essential that you take all possible steps to recover it immediately. General breaches of security or missing booklets or USB drives should also be reported to Core A Survey Operations as soon as possible. Core A Survey Operations will then inform the OECD.

Having correct information on the Student Tracking Form and the Session Report Form(s) greatly enhances the efficiency of the materials return process. During training, emphasise to Test Administrators the importance of the completeness and accuracy of this information. The PISA Quality Monitors will review carefully these documents at the schools they visit and report any significant problems.

It is also recommended that you ask Test Administrators to package materials in a specific order, in the manner specified in the Test Administrator's Manual. Note that it is recommended that you revise your national item coding materials by selecting additional local examples of student responses from the Main Survey responses. You may wish to develop a procedure for recording this information at the same time as materials are being checked back.

9.4.2. Submit your Sampling Task 12 (ST12) sampling data to Core C Sampling

After the tracking forms are updated and school and student participation data are entered in the within-school sampling software, the data, along with sampling validity reports, must be submitted to Core C Sampling via the within-school sampling software **within four weeks of the conclusion of testing in your country/economy**. The content of sampling data and sampling validity reports will be described to you in the Main Survey School Sampling Preparation Manual and/or the Main Survey Within-School Sampling Manual (updated after the Field Trial as needed). Expect a substantial number of questions from Core C Sampling back to you from this data submission.

9.4.3. Review item coding and data entry operations

The larger Main Survey sample size has logistical and resource implications. For example, a larger space will be necessary for coding; more administrative support may be required; and more computing resources may be needed for data entry operations. You should review your Field Trial staffing requirements and timeline with reference to the information on resources presented in the paragraphs that follow.

Because of the larger sample size, the Main Survey will require human coding for a larger number of cognitive and occupational responses than the Field Trial. See Section 8.2.11 "Plan staffing and resources for coding for the Main Survey" for additional information regarding planning activities for coding and data entry.

When entering data, validation checks should be performed frequently on the data to check for any data inconsistencies. After all data has been entered, you should also allow at least one week to complete the final validity checks detailed in the Data Management Manual before submitting data to Core A Data Management.

As data inconsistencies may take some time to investigate and resolve, it is best to plan additional time into the data entry schedule for investigation and resolution to any data inconsistency.

9.4.4. Continue to monitor data collection of online questionnaires

After the student data collection period is finalised, the online School and Teacher Questionnaires will remain open for four weeks. NPMs will continue to monitor the progress of users taking the questionnaires using the monitoring tool. In addition, NPMs will be able to upload data weekly to the Data Management Expert (DME) system to review the data for completeness. During this period, NPMs will receive reminders from the PISA Contractors regarding the amount of time the online questionnaires will remain open and should contact schools as needed. Access to the online questionnaires will close four weeks after the student data collection period is completed and cannot be reopened. More information on how to monitor completion of the School and Teacher online questionnaires is provided in documentation that will be released with the online questionnaires.

Please keep in mind that a high response rate is essential so that data can be included in the analysis and reporting.

9.4.5. Recruit item coders

PISA Technical Standards require that item coders be recruited and trained in the manner described in Main Survey Procedures for Coding Constructed-Response Items. See Exhibit 9.2 for the PISA Technical Standard relating to coder recruitment and training.

Exhibit 9.2. Coder recruitment and training – PISA Technical Standards

Standard 14.1 The coding scheme described in the coding guides is implemented according to instructions from the international contractors' item developers.

Standard 14.2 Representatives from each National Centre attend the international PISA coder training session for both the Field Trial and the Main Survey.

Standard 14.3 Both the single and multiple coding procedures must be implemented as specified in the *PISA operations manuals* (see Note 14.1). These procedures are implemented in the coding software that countries will be required to use.

Standard 14.4 Coders are recruited and trained following *agreed procedures*.

Note 14.1 Preferred procedures for recruiting and training coders are outlined in the *PISA operations manuals*.

Note 14.2 The number of Coder Training session participants will depend on factors such as the expertise of National Centre staff, and resource availability.

It will be an advantage if coders from the previous surveys of PISA or from the Field Trial conducted in 2021 can be used for the coding Main Survey responses. As with the Field Trial, coders should have a good understanding of mid-secondary level studies in the relevant subject domains and understand secondary level students and ways that such students express themselves. Remember that coders need to commit their time to the project for the duration of the coding since the coders' work is interdependent.

All people who code test items must undergo the specific PISA training, regardless of whether they have had related experience on other projects or coded for the Field Trial.

Item coders also must sign a confidentiality form obliging them to not disclose the content of the PISA tests beyond the groups of coders and trainers with whom they are working. You will need to update the Field Trial version of your confidentiality form (a generic version is shown in Appendix B) and keep the signed confidentiality forms on file.

9.4.6. Review guidelines and plan for item coding procedures and coding design

Please carefully review the specific guidelines for coding in the key document Main Survey Procedures for Coding Constructed-Response Items. As with the Field Trial, you should indicate whether or not your coding design is the same as the international design **no less than four weeks prior to the commencement of coding**. If it is different, Core A Cognitive will discuss and agree on the details of your design with you.

9.4.7. Review guidelines and plan for occupation coding procedures

The process for coding occupations will be similar to the process the National Centre followed during the Field Trial (see Section 6.2.9 "Understanding the process of coding occupations"). A full description of the activity will be provided in additional documentation that will be released for the occupations coder training and operations meeting held before the Main Survey. NPMs will need to carefully review this documentation in conjunction with the DME Manual, which provides information for exporting and importing occupation coding fields into the database.

9.4.8. Process data entry in the DME

As with the Field Trial, it is a requirement that you use the DME to enter the data because it is customised for PISA and its use reduces data entry errors. Please refer to the Data Management Manual for detailed information relating to installation, configuring instruments, data entry and validity checks and well as information presented prior to the Field Trial.

If there are any significant delays during data entry at your National Centre, contact Core A Data Management **as quickly as possible** so that the international data cleaning schedule may be adjusted to accommodate this.

Although there will be minimal data entry resources required for computer-based countries/economies, some staff resources will be required for the management of the electronic files that will be imported into the project database. It is recommended that the import of the electronic data start as soon as it is available rather than waiting until the end of the data collection phase. In this way, any issues with the data or the codebook can be addressed before they have a critical impact on the schedule at a later time.

You should build sufficient time into your data management timeline (a minimum of five working days) to be able to review and produce validity check reports and to resolve discrepancies as specified in the Data Management Manual.

9.4.9. Submit database to Core A Data Management

Please refer to Exhibit 6.3 in Chapter 6 for the PISA Technical Standards relating to the structural and technical aspects of data submission.

As noted, you should submit your database and related documents in the DME within **eight weeks of the end of the Main Survey** testing period unless another agreed-upon date has been negotiated with Core A Data Management. Standard 19.1 (Exhibit 9.3) details aspects of data operations relating to the timeline and management. The main rationale for this standard is to help ensure adherence to the international timeline for cleaning, analysis and reporting. It is also important in assisting Core A Data Management to plan staffing and resource allocations.

Exhibit 9.3. Timeline for data operations – PISA Technical Standard

Standard 19.1 The timeline for submission of national databases to the international contractors is within eight weeks of the last day of testing for the Field Trial and within eight weeks of the last day of testing for the Main Survey, unless otherwise *agreed upon*.

Please review the Data Management Manual and note any modifications or additions to the DME consistency checks since the Field Trial before executing these checks on your data.

All data files, including all coding reliability files (OERS or OECS) and data notes/supporting documentation, should be uploaded to the confidential PISA 2021 FTP site as outlined in the Data Management Manual. Along with the exported DME database, the supporting files and documentation are essential in evaluating the data quality during the initial checks of data processing. Please be sure to notify Core A Data Management regarding your data submission.

In addition to your delivery of data to Core A Data Management, it is important that you carefully plan the organisation and storage of your hard-copy materials to ensure easy access should questions or concerns arise regarding your data. Often during data processing, Core A Data Management may have specific requests or inquires on your data that may involve extensive investigation of specific issues against hard copies or electronic copies of materials. As such, it is important to keep these materials and resources stored in a secured place for future access.

9.4.10. Be available during post-submission data processing

It is critical that the country/economy Data Managers are available after data submission to work with Core A Data Management. Frequently, Core A Data Management correspond **with** countries/economies for specific requests or to inquire about data issues or inconsistencies. As a result, the Data Manager **needs to be prepared to respond** to any data management requests within **three working days**. To resolve any significant issue or inconsistency, the Data Manager may also need to be supported by administrative staff if they are available. It may be best to plan for the availability of one to two support staff to assist the Data Manager in the event of a data issue or concern.

In some instances, Core A will not be able to approve or begin to process data without consultation and resolution of data inconsistencies. Therefore, it is important for Data Managers to be available to avoid any delays in processing and data delivery from Core A Data Management.

Please refer to Chapter 6 for the PISA Technical Standard 19.3 for more information on the Data Manager's role and responsibility during this period.

9.4.11. Complete and submit the Main Survey Review Questionnaire

You will be asked to complete and submit the Main Survey Review Questionnaire. A PDF form will be emailed to you. Along with the other quality monitoring activities, the Main Survey Review Questionnaire contributes to the overall assessment of the quality of the implementation of PISA in your country/economy and provides useful information for data adjudication. In addition, your feedback about your experiences in implementing the project — what worked well and what did not — will be used by the PISA Contractors to consider changes in subsequent surveys of PISA.

The Main Survey Review Questionnaire will be available shortly before the launch of data collection, and you will be asked to complete and submit your feedback **within four weeks of submitting your database**.

9.4.12. Archive your Main Survey materials

Following the coding and data entry procedures, you will need to archive your Main Survey test and questionnaire materials.

For computer-based countries/economies, the Core A Cognitive will already have final electronic versions of all your test materials, but you will be asked to submit final version of coding guides, school-level materials and any other relevant material for archiving.

For paper-based countries/economies, Core A Cognitive will have final electronic versions of all your assessment materials (i.e. booklets). However, once your national version(s) of the material are finalised, you will be instructed to send the electronic versions of all questionnaires, coding guides and school-level materials, as well as a printed copy of all your assessment materials, for archiving purposes, to Core A (detailed instructions will be sent with the task).

Please refer to Exhibit 6.5 in Chapter 6 for the PISA Technical Standards relating to the archiving of your national materials.

9.4.13. Review your national data and analysis reports

To ensure a high level of quality for Main Survey data, an interim data file is released to countries/economies following the completion of data management Main Survey cleaning and analysis procedures. For this delivery, each National Centre will receive a national data package that will include: i) National, unmasked Main Survey database (SAS and SPSS) that includes preliminary proxies for proficiency; ii) data reports that include questionnaire crosstabs, msigs⁷ descriptive statistics on questionnaire variables and item analysis on cognitive items; and iii) a set of instructions on how to check national data. This interim delivery of national preliminary results will provide National Centres with the opportunity to review their data before the official release of the International Masked database, which will include plausible values, weights and replicate weights, and questionnaire indices.

For this interim database delivery, national data will be cleaned, analysed and returned to countries/economies in batches, similar to the Field Trial, based on the data collection timeline. According to the current Main Survey timeline, data submission from countries/economies is expected to extend from mid-May 2022 to February 2023. Data will be analysed in batches as outlined below.

- Batch 1 may include data **submitted** by countries/economies to Core A Data Management **by 31 July 2022** and approved for processing and analysis (all files must be included as outlined by the Data Management Manual and the Sampling Task 12 must be approved by Core C Sampling). Countries/Economies in this batch can expect Core A data files and reports (for example, questionnaire crosstabs and msigs among other information; cognitive item analysis) by the end of October 2022.
- Batch 2 may include data **submitted** by countries/economies to Core A Data Management **on or before 31 October 2022** and approved for processing and analysis (all files must be included as outlined by the Data Management Manual and the Sampling Task 12 must be approved by Core C Sampling). Countries/Economies in this batch can expect Core A data delivery and reports (questionnaire crosstabs and msigs; cognitive item analysis) by the end of January 2023.
- Batch 3 may include data **submitted** by countries/economies to Core A Data Management **by 9 February 2023** and approved for processing and analysis (all files must be included as outlined by the Data Management Manual and the Sampling Task 12 must be approved by

⁷Countries/Economies will receive means and standard deviations in groups (msigs) that contain descriptive statistics for further analysis. Country/Economy data files will be separated: school data files, student data files, and teacher data files (if applicable). Country/Economy student files contain cognitive items (raw and scored); context questionnaire items, and optional questionnaire items.

Core C Sampling). Countries/Economies in this batch can expect Core A data delivery and reports (questionnaire crosstabs and msigs; cognitive item analysis) by early April 2023.

Note: Data submission dates are critical for Core A Data Management. For the Main Survey, the PISA Contractors are bound to provide deliverables to the OECD following their reporting timeline. Therefore, delays in data submission are particularly concerning for the late testing countries/economies (those starting the Main Survey Data Collection after 1 August 2022), and delays may result in a modified processing and analysis timeline.

When National Centres receive the interim, national data delivery from Core A Data Management, it is important that country/economy National Project Managers and National Data Managers review the files completely for any inconsistent or incorrect information. National Centres will have only a short time to relay any data issues or concerns to Core A Data Management before preparations begin for the International Database release. Careful and timely review of these files is important to the quality and accuracy of your final Main Survey data.

9.4.14. Prepare the international database

Soon following the final batch release of national, interim data files to National Centres, Core A Data Management will begin preparations for the International Database release. While specific details about the International Database are discussed in Chapter 10 of this manual, it is important for countries/economies to observe these two key deliverables – the interim national database files and the International Database files – during the Main Survey cycle before the public release of information.

The International Database, masked to maintain country/economy anonymity, will include raw variables, questionnaire indices, as well as sampling and replicate weights. In brief, the International Database provides National Centres with the opportunity to review their national data with an international structure of variables names consistent across all countries/economies.

Most importantly, the International Database contains a similar structure to the public use files that are disseminated to the public at the end of the Main Survey. As such, National Centres are able to review their data earlier with this masked international structure, before the release of Main Survey data to the public. Further, National Centres may use data from the International Database release to begin writing national reports. As with any data delivery, a data file review period will follow the release of this information and National Centres will be required to carefully review their data in this format for any data issues or inconsistencies.

CHAPTER 10 – REVIEW AND REPORTING PHASE

10.1. Overview of tasks

This phase mainly concerns review of data and indicators; consultation and discussion with your PISA Governing Board (PGB) members; other national groups or committees; and the development, revision and release of your national analyses.

During this phase, you will complete the following:

- review international databases and prepare national reports
- analyse national data
- prepare for and document data adjudication process
- prepare international report and the public use files
- co-ordinate national dissemination.

10.2. Key tasks during the review and reporting phase

10.2.1. Review international databases and prepare national reports

PISA Contractors, in consultation with NPMs, test developers, members of the Technical Advisory Group (TAG) and the OECD will agree on item treatments for cognitive and questionnaire data (e.g. national or international item deletions or recodes) and further refine proposed cognitive and questionnaire scales. Scaling will take place between May and June, once the first set of weights is available at the end of April 2023. Below is a proposed process for the international databases, using PISA 2018 as a reference.

- International Database 1 – Masked Country/Economy ID (July 2023): This database will include all raw variables, questionnaire indices, sampling and replicate weights from the end of April, and plausible values. The international database is a set of individual, national files with an international structure of variable names consistent across all countries/economies. Scripts or further instruction on merging these files will be provided to countries/economies. Computer-based country/economy variables will be consistent across all computer-based countries/economies. Additionally, paper-based country/economy variables will be consistent across all paper-based countries/economies.
- International Database 2 – Masked Country/Economy ID (September 2023): This database will include all raw variables, questionnaire indices, sampling and replicate weights from the end of May, and updated plausible values. The International Database 2 will follow the same

structure as the International Database 1 and may incorporate data updates as a result of the International Database 1 review.

These databases should be used to assist in the drafting of national analyses. Note, however, that these two databases will be masked so you will only be able to identify your own country/economy in this database. The OECD Secretariat, as part of its own dissemination strategy, will share identification information at the time the draft report is shared with countries/economies.

10.2.2. Analyse national data

Similar to PISA 2018, PISA 2021 will also offer the PISA Data Explorer (PISA-DX), which is a web-based application that can be accessed by users to conduct analysis of the PISA data from any remote location with an Internet connection. The PISA-DX can generate report-ready tables and graphics. Countries/Economies will be provided with a login ID to view the international variables as well as their own national variables (i.e. country/economy-adapted or national additions that are numeric and categorical) within this preliminary PISA-DX.

The first version of the PISA-DX (Masked Country/Economy ID) is expected to be available after the release of the first International Masked Database. The second version (Masked Country/Economy ID) will be made available to countries/economies after the release of the second International Masked Database. Release dates will be provided to countries/economies during the Main Survey.

In addition, to assist countries/economies in analysing their databases as they prepare their national reports, ETS will sponsor data analysis workshops for 2022 participating countries/economies. These workshops will take place soon after data file and Data Explorer release dates, thus, around July 2023.

10.2.3. Prepare for and document data adjudication process

As an introduction to data adjudication, it may be useful to recall that the PISA 2022 Technical Standards were developed with four interrelated goals in mind:

- **Consistency:** Data should be collected in an equivalent fashion in all countries/economies, using equivalent test materials that were translated and/or adapted as appropriate. Comparable samples of each country/economy's student population should perform under test conditions that are as similar as possible. Given consistent data collection (and sufficiently high response rates), test results are likely to be comparable across regions and countries/economies. The test results in different countries/economies will reflect differences in the performance of the students measured, and will not be caused by factors which are un-related to performance.
- **Precision:** Data collection and submission practices should leave as little room as possible for spurious variation or error. This holds for both systematic and random error sources, e.g. when the testing environment differs from one group of students to another, or when data entry procedures are questionable. An increase in precision relates directly to the quality of results one can expect: The more precise the data, the

more powerful the (statistical) analyses, and the more trustworthy the results to be obtained.

- **Generalisability:** Data are collected from specific individuals, in a specific situation, and at a certain point in time. Individuals to be tested should be selected, and test materials and tasks etc. be developed in a way that will ensure that the conclusions reached from a given set of data do not simply reflect the setting in which the data were collected but hold for a variety of settings and are valid in the target population at large. Thus, collecting data from a representative sample of the population, for example, will be essential, but not sufficient, for the results to accurately reflect the level of literacy of fifteen-year-old students in a country/economy.
- **Timeliness:** Consistency, precision and generalisability of the data can be obtained in a variety of ways. However, the tight timelines and budgets in PISA, as well as the sheer number of participating countries/economies, preclude the option of developing and monitoring local solutions to be harmonised at a later stage in the project. Therefore, the standards specify one clear-cut path along which data collection, coding and data submission should progress.

A general principle underlying the process of data adjudication is early identification and rectification of any data quality issues wherever possible.

The PISA Contractors monitor the implementation of data collection procedures by drawing from a range of sources such as data from your national profile on the PISA Portal and more specific quality monitoring procedures (e.g. PISA Quality Monitor reports and Main Survey Review Questionnaires). In addition, some of the standards are evaluated using information from the submitted data (e.g. coverage of the population, number of assessed students, school and student response rates, analysis of multiple marked data and session timing).

The information collected for monitoring the standards is grouped into specific areas or roles as shown below. A database is used to collate information arising from the following sources:

- management and administration of the group of PISA Contractors
- analyses
- tests
- questionnaires
- translation and verification
- sampling
- field operations
- quality monitoring.

In preparation for data adjudication, PISA Contractor staff members responsible for each area/role above consider the available quality assurance information for their area as it relates to specific standards.

These individual areas, which commonly cut across multiple standards, are then collated into the data adjudication report. PISA Contractors' staff members collaborate with the OECD Secretariat and the TAG to address any identified areas of concern. Where appropriate, the NPM is contacted through either PISA Contractors or the OECD Secretariat to discuss any issues identified. Members of the TAG then draw on this information and draft a recommendation about the data. Once any remaining issues are clarified, the TAG makes its recommendation to the OECD Secretariat/PGB.

In previous surveys, the TAG has endorsed the adjudicated data set in the great majority of countries/economies. In some instances, specific recommendations are made regarding the treatment or limitations of the data. Examples of recommendations include the following:

- rectifying action to be performed by the NPM, for example:
 - in instances where school or student response rates do not meet the standards, providing additional evidence to demonstrate whether or not there is non-response bias
 - in instances where problems with coding procedures have been identified and deemed to affect the quality of the data, rescored constructed-response items
- recommending that specific data not be published in some tables of the OECD report(s)
- requesting that the data not be included in the international database.

It is difficult to be more precise about outcomes since a wide range of scenarios is possible. Moreover, the data sources and standards need to be evaluated collectively since not reaching one single standard does not have the same implications as not reaching multiple standards.

Data adjudication is an ongoing process that assesses the suitability of a country/economy's data for reporting purposes. **Final outcomes of adjudication are determined by the PGB by October 2023**, based upon advice and input from the PISA Contractors, the TAG, the Sampling Referee and the OECD Secretariat.

10.2.4. Prepare international report and the public use files

The OECD Secretariat is responsible for the international report and is expected to release a first draft **under embargo** of this report for review by PGB members only around **July-August 2023**. You are encouraged to see with your PGB member to review this draft, consulting with national committee groups and other partners where appropriate once this report is released.

Between the availability of the International Database 2 and the dissemination of results tentatively scheduled for early December 2023, Core A Data Management will prepare files for public release. Starting with the release of the International Database 1 in July, Core A will work with countries/economies on suppression requests for variables affected by technical errors or issues of confidentiality that could jeopardise the anonymity of schools, students and teachers. It is your responsibility to ensure that any requests for data suppression are communicated to Core A during this phase that is expected to last until September 2023. In preparation for this work, Core A will notify countries/economies and provide a variable list for country/economy

review and comment. All suppression requests will be forwarded to the OECD for final approval. Please note that requests made after this official phase may not be honoured by Core A Data Management due to the timeline.

At the time of the international dissemination expected for **early December 2023** when the OECD will release the international report, Core A will prepare the following two major deliverables:

- **Public use files (PUFs):** The PUFs will be distributed in SPSS and SAS data file formats that will exclude national variables as well as international variables identified through the suppression requests by countries/economies.
- **Public PISA Data Explorer Unmasked:** This version of the PISA Data Explorer will include international variables as well as trend data from previous cycles. Core A will collaborate with countries/economies in order to adhere to any identified suppression requests by countries/economies.

Please note that results are still embargoed until the official dissemination date. Take all necessary steps to ensure that there are no “leaks” of the results by putting appropriate measures in place concerning all individuals with whom you may consult about the report.

10.2.5. Co-ordinate national dissemination

It is recommended that you develop a national dissemination strategy that accounts for the international reporting timeline. To ensure that you get your national policy messages across to the appropriate groups and to secure adequate national media coverage, you may wish to release your national results at the same time as the international report, perhaps following up with more in-depth secondary analyses in the following year. On the other hand, it may be preferable to release your national report sometime after the OECD report, if this is likely to result in more successful dissemination of results in your national context.

The level of detail in your initial report is, of course, dictated by national priorities and constraints. Some countries/economies produce a very short initial report that draws key findings from the initial international report; other countries/economies undertake detailed analyses drawing on secondary data sources.

It is likely to be beneficial to use a multi-channelled dissemination strategy, and this may require the preparation of different types of materials for different target audiences.

APPENDIX A. PISA NATIONAL PROJECT MANAGER ROLES AND RESOURCES

Introduction

A National Project Manager (NPM) is required for each country/economy participating in PISA. The NPM has overall responsibility for the implementation of the project within the country/economy, ensuring that tasks are carried out on schedule and in accordance with the specified international standards. Additionally, the NPM is responsible for working in liaison with the country/economy's PISA Governing Board (PGB) member.

This document provides PISA participants with a description of the scope of the NPM's duties and the national resources required to complete this work. These managers play a vital role in developing and validating the international assessment instruments and implementing the survey. As such, they are expected to have appropriate levels of financial and human resources to be able to perform their tasks in accordance with all international technical standards to ensure that PISA results are of high quality.

Profile of NPM

The NPM is responsible for overseeing all national tasks related to the development and implementation of PISA throughout the entire cycle, so it is desirable for the position to be full time.

Although not desirable, a NPM could work on the project half time depending on the availability of other support staff that might include a co-NPM, administrative assistant, information technology (IT) specialist, data manager, translator co-ordinator, coding specialist, and/or various subject area specialists.

It is strongly recommended that a NPM works on the project year round to ensure continuity of activities. ***It is highly desirable that the person appointed as the NPM remains throughout the entire PISA cycle.*** If a change of NPM cannot be avoided, a transition period should be planned in order to facilitate the transfer of knowledge.

It is essential for the NPM to have:

- a high level of oral and written communication skills in English (all meetings and communications with the PISA Contractors are in English)
- previous experience in planning, organising, and conducting large-scale surveys
- skills in identifying, selecting, and managing a team of project staff with the experience and capability to multi-task
- familiarity with survey quality control and data collection procedures

- experience with Microsoft applications such as Word and Excel.

It may be acceptable for a qualified NPM candidate to have familiarity with only some of the following areas if members of the national team collectively possess the required expertise:

- sufficient knowledge of, and experience with, the overall PISA design, processes, and procedures to represent the country/economy at international meetings where aspects of the project will be discussed
- knowledge of, and experience dealing with, national and regional government agencies, school staff, parents, and students within their own countries/economies
- knowledge of:
 - statistics
 - sampling
 - data file structures, data management, data processing procedures, and data analysis and reporting
- ability to oversee translation, adaptation, and verification activities.

It is desirable that the NPM also has:

- previous work experience in an education system, educational assessment, and survey implementation
- familiarity with relational databases (such as Microsoft Access) and statistical packages such as SPSS or SAS.

The PISA Survey Period

PISA 2021 will be implemented in a five-year cycle that involves instrument development, two data collections (Field Trial and Main Survey), data analysis, and dissemination of results. An overview of the key activities of the PISA 2021 survey period is presented below.

- **2018:** Development and review of all frameworks as well as development and review of cognitive items and questionnaires
- **2019:** Preparation for Field Trial data collection including sampling, school-level materials, translation, adaptation, verification, testing of Student Delivery System, etc.
- **2020 (and 2021):** Implementation of the Field Trial, coding of open-constructed response questions, Field Trial data preparation and submission, and Field Trial data analysis
- **2021-2022:** Preparation for the Main Survey data collection including sampling, school-level materials, translation, adaptation, verification, testing of Student Delivery System, etc.

- **2022:** Main Survey data collection, coding of open-constructed response questions, Main Survey data preparation and submission, and Main Survey data analysis
- **2023:** Analysis of Main Survey results, preparation and review of national and international databases, and preparation of reports and dissemination products.

PISA ‘Core’ and ‘Optional’ Components

The core components of PISA are the test and questionnaires administered to students and a School Questionnaire administered to participating schools. International options, which may include additional domains or questionnaires, may be offered at the international level. In the past, these have ranged from additional domains, such as Financial Literacy, to additional questionnaires, such as the ICT Familiarity Questionnaire, the Well-Being Questionnaire, the Teacher Questionnaire and the Parent Questionnaire.

In addition, countries/economies may want to implement national components that may require a prior agreement or contract with the PISA Contractors. Countries/Economies implementing optional components or variations, of course, will require additional national resources.

As stated above, NPMs are expected to have appropriate levels of financial and human resources to be able to perform their tasks in accordance with the international standards and guidelines. An estimate of the staffing and material resources is described below.

Human Resources

National Centre Staff

Each participating country/economy must establish a National Centre that will be responsible for managing the survey implementation. At National Centres, the work associated with PISA will require at least the equivalent of three to four full-time staff members on average over the course of the project, plus administrative and clerical support.

If the NPM is working full time on PISA and has expertise in survey design and data management and analysis, the second full-time equivalent staff member could be a combination of an administrative officer (possibly half time), a Data Manager (one-quarter time) who manages all data-related tasks, and an IT co-ordinator (one-quarter time) if your country/economy is participating in the PISA 2021 computer-based mode. Translation activities will require close supervision from March 2019 until January 2020 and, to a lesser extent, from August to November 2020 depending on your testing period. At times, there will be need for additional administrative support.

Committee/Expert Groups

PISA assessments comprise materials for three recurring domains: Reading, Mathematical, and Scientific Literacy. In addition, Creative Thinking is a core domain in PISA 2021. Within each PISA survey period, new item development is focused on one of these recurring domains. The

focus area for PISA 2021 is Mathematical Literacy. Additionally, item development will occur for the new domain of Creative Thinking. Therefore, representative groups of national experts experienced with computer-based assessments (CBAs) in particular should be organised to contribute to and review the development of the new PISA 2021 assessment items for Mathematical Literacy and Creative Thinking.

Countries/Economies may consider establishing national advisory committees composed of leading national experts in, for example, survey research and education management. These individuals could offer advice for the project and ensure that national views are represented.

The PISA survey involves the administration of school and student questionnaires and possibly optional questionnaires, which need to be reviewed by national experts.

Many countries/economies rely on input from national advisory committees and expert groups to review progress, procedures, and results throughout the project. If applicable, these groups should meet on a regular basis, and these costs should be factored into the national PISA budget.

Translators and Reconcilers/Adaptors

All test and questionnaire materials are prepared by the PISA Contractors in English and French. For translation into other languages, PISA Standards require a process of double independent translation followed by reconciliation to merge the independent versions. This means National Centres will need a minimum of three translators for these procedures. In addition, translation and/or adaptation of school-level materials and coding guides are required.

The translators producing the two independent translations should have a professional background with adequate qualifications (including, but not limited to, a master's degree in translation, translation science, or linguistics) and/or at least five years' experience. The reconciler, who merges the two translations, should combine adequate qualifications with specific experience in translating/adapting survey materials. In-depth understanding of the main 2021 domain (Mathematical Literacy) and familiarity with psychometrics are desirable. Note that if one translator translates from English and the second from French into the language of instruction, then the reconciler should be proficient in both English and French.

For versions that are adapted from one of the source versions⁸, a centrally-produced reference version, or a verified borrowed version, the adaptor (the person in charge of adapting the material) should have the same profile as reconcilers, i.e. adequate qualification combined with experience in adapting survey material and in-depth understanding of the PISA 2021 main domain.

The NPM is responsible for the following translation and adaptation activities:

⁸ Source or master version(s): The version(s) of a document released by the international contractors for translation and adaptation by the National Centre. These may refer to English version or English and French versions, depending on the material.

- monitor and co-ordinate the translation and adaptation of instruments and supporting materials in accordance with international specifications
- document proposed changes to instruments and supporting materials for further verification
- communicate with the PISA Contractors on translation and adaptation issues
- organise translation/adaptation of all training and school-level materials as needed.

Data Managers and Processing Staff

A National Data Manager will be responsible for managing all the data-related activities within the country/economy for both the Field Trial and Main Survey and will serve as the primary contact with PISA Contractors regarding all Data Management activities. In particular, the Data Manager will be expected to attend one within-school sampling software training prior to the Field Trial (November 2019) and two Data Management training sessions – one prior to the Field Trial in January 2020 and one prior to the Main Survey in January 2022.

Additionally, a number of data-processing operations that occur during the PISA survey period will require additional staffing. For example:

- coders of constructed-response (i.e., open-ended) items
- coders of occupational response data
- data entry staff (paper-based instruments only).

The NPM is responsible for the following data file preparation activities:

- train staff on data entry procedures and supervise data entry operations (paper-based instruments only)
- conduct validation checks of data from the survey instruments in accordance with PISA guidelines
- organise the dispatch of data files to the PISA Contractors
- acknowledge receipt of queries within one working day and respond to data queries in a timely fashion.

Information Technology (IT)

As PISA is implemented as a computer-based survey in most countries/economies, IT personnel are needed to manage PISA's IT-related activities in the country/economy and the implementation of the survey within schools. This team should be knowledgeable about IT and familiar with survey operations in their country/economy, the IT infrastructure used within schools, and the challenges of using school computers for testing. IT work will be concentrated

in the periods of instrument development as well as data collection, and during these times the IT team should work full time on PISA. The work will involve testing the delivery system of tests and questionnaires, testing and monitoring the data collection in schools, duplication, and distribution of PISA software, and collection and management of data returned from schools.

An IT Co-ordinator should have experience in:

- troubleshooting hardware and networking problems
- resolving web-based and web service problems with nationally used operating systems
- extracting and transmitting data from computers
- maintaining data and communications security in an internet environment
- training others on computer use
- supporting field staff and schools.

It is highly recommended that the same Data Manager and IT Co-ordinator work during both the Field Trial and Main Survey preparations, data collections, and processing.

Sampling

The NPM is responsible for monitoring or implementing the following sampling activities for both the Field Trial and Main Survey:

- develop a comprehensive file of schools that includes the entire PISA student population
- work closely with the PISA Contractors to ensure that the sample design meets all national requirements
- determine what the national requirements are for implementing international options and/or national options, including oversampling, which have an impact on school and/or student sampling
- monitor the school sample selection process to ensure there are no unexpected issues with the final school sample
- obtain lists of PISA-eligible students from each participating school and ensure the lists are of high quality
- use the within-school sampling software provided by the PISA Contractors to select the student sample in each school
- when necessary for the Main Survey, conduct a non-response bias analysis in accordance with specifications provided by the PISA Contractors

- acknowledge receipt of queries within one working day and respond to inquiries from the PISA Contractors concerning sampling issues after submission of the assessment data.

School Co-ordinators

A staff member from each sampled school will need to be recruited as a School Co-ordinator. The work of the School Co-ordinator involves collecting and recording information about the target population within the school, disseminating information to the school community, and assisting the Test Administrator in organising the assessment activity.

Test Administrators/School Associates

Test administrators will be recruited to administer the assessment at participating schools for both the Field Trial and the Main Survey. They are preferably external to the schools in which they will do PISA work. The PISA Standards require that all Test Administrators are trained in person or in web-based trainings. They also should be comfortable working with computers if your country/economy is administering PISA on the computer.

The number of required Test Administrators will vary depending on several factors such as: the sample size in your country/economy, the length of your data collection period, the location of the schools, the number of testing sessions within schools, the number of school computers and/or external laptops that are available (for countries/economies participating in the computer-based assessment), and other national and local considerations.

In certain countries/economies, Test Administrators also fulfil the role of School Co-ordinators. Such individuals are called School Associates and receive the training that both School Co-ordinators and Test Administrators receive.

Facilities

When a National Centre is established, it is important to ensure that the following facilities are available to the NPM and the National Centre staff:

- PCs running Windows with Microsoft Office applications. Two applications are especially important for data processing – Excel and Word
- access to a reliable, high-bandwidth Internet connection and email facilities. Nearly all communication between the National Centre and PISA Contractors occurs via email. Thus, access to reliable email facilities is highly important. The PISA Contractors maintain a secure website that contains key dates, documents, and survey tools. Access to this site is essential for NPMs to be kept up to date and involved with the progress of the survey
- secure space for conducting the Field Trial and Main Survey coding operations;
- secure space for the storage of equipment and materials at all times.

Production of Materials

The following tasks regarding materials are to be undertaken in preparation for both the Field Trial and Main Survey:

- finalise materials:
 - for computer-based assessment (CBA) countries/economies, review and testing of the Student Delivery System
 - for paper-based assessment (PBA) countries/economies, review and printing of assessment materials and questionnaires
- dispatch materials: dispatch of manuals, associated materials, and USB drives with the Student Delivery System (CBA countries/economies) or paper booklets (PBA countries/economies) to test administrators and schools.

Promotional Materials and Presentations

An important strategy in raising the awareness of PISA is the dissemination of promotional material and the reporting of survey results. This could involve:

- production of national and local promotional and publicity materials
- promotion of PISA with a national website
- promotion of PISA through meetings with national and regional governmental, business, and educational leaders and other concerned parties
- production of national reports of the survey results (Main Survey only). It is recommended that a national dissemination strategy be developed that takes the international reporting timeline into account (the final international report is due to be released in December 2022 and all the national and international data are under embargo before the released date). Some countries/economies aim to release their national reports at the same time as the international report.

Meeting and Training Attendance

NPM meetings: It is required that NPMs and other key national staff attend international meetings in person up to four times during the survey period (five times for new participating countries/economies). A tentative schedule of these meetings is as follows:

- January 2019 (new NPMs only)
- March 2019
- November 2019
- November 2021

- June-July 2023

Training sessions: NPMs and other key national staff are required to attend training sessions, held twice during the five-year survey period:

- Field Trial International Training in January 2020 (and January 2021)
- Main Survey International Training in January 2022

Webinars: In addition to the in-person meetings, there may be multiple webinars throughout the cycle to cover specific issues related to the project. It is required that NPMs and other key national staff participate in these webinars as appropriate.

APPENDIX B. SAMPLE NATIONAL CENTRE CONFIDENTIALITY AGREEMENT

OECD/PISA 2021 Confidentiality Agreement⁹

First Name _____

Last Name _____

Phone number _____

Email _____

Address _____

Country/Economy _____

I understand that by signing this form I hereby acknowledge my professional responsibility to maintain the security and confidentiality for the PISA 2021 project. I declare that I will not divulge any project information, trial materials, test materials, processes, contents or results, or any other materials, documents or information pertaining to the project that are stated to be confidential. I also will not disclose the names of clients, participating schools, school staff or students, to any person or organisation as directed under the terms of the project unless I have prior written approval from the OECD and/or the <National Centre>. I will also not exchange confidential material via email or save confidential files on unsecured cloud storage services. I understand that the above does not apply to information that is in the public domain. Furthermore, I will endeavour to act professionally and diplomatically in my role as a <insert role>.

Signature _____ Date _____

⁹ Adapt for project staff as appropriate.

APPENDIX C. PISA ACRONYMS AND GLOSSARY

This appendix is for reference only as the most current version of this glossary can be found on the PISA Portal under the link “Glossary”.

List of Acronyms

ACER	Australian Council for Educational Research
CAS	Coding Guide Adaptation Spreadsheet
CB	Computer-Based
CBA	Computer-Based Assessment
CCC	Country/Economy three-letter identification variable used in filenames and emails
CNT	Country/Economy three-letter identification variable used in Maple files
CQ	Coder Query
CT	Creative Thinking
CTEG	Creative Thinking Expert Group
DME	Data Management Expert software
DMM	Data Management Manual
ETS	Educational Testing Service
FAQ	Frequently Asked Questions
FC	Final Check
FT	Field Trial
FL	Financial Literacy
FTE	Free Text Entry response
FTP	File Transfer Protocol
ICTQ	Information and Communication Technology (ICT) Familiarity Questionnaire
ID	Identification (number)

ISCED	International Standard Classification of Education
IRT	Item Response Theory
ISCO	International Standard Classification of Occupations
ITC	Information Technology Co-ordinator
LQA	Linguistic Quality Assurance
LQC	Linguistic Quality Control
MAF	Materials Adaptation Form
MEG	Mathematics Expert Group
MS	Main Survey
NC	National Centre
NDM	National Data Manager
NPM	National Project Manager
NRBA	Non-response bias analysis
NSM	National Sampling Manager
OECD	Organisation for Economic Co-operation and Development
OECS	Open-Ended Coding System
OERS	Open-Ended Reporting System
OLT	Open Language Tool
PB	Paper-Based
PBA	Paper-Based Assessment
PDF	Portable Document Format
PGB	PISA Governing Board
PISA	Programme for International Student Assessment
PQ	Parent Questionnaire
PQM	PISA Quality Monitor
PVS	Preferred Verification Schedule
QAS	Questionnaire Adaptation Spreadsheet
QAT	Questionnaire Authoring Tool
QEG	Questionnaire Expert Group

REG	Reading Expert Group
SA	School Associate
SC	School Co-ordinator
ScQ	School Questionnaire
SDS	Student Delivery System
SEG	Science Expert Group
SEN	Special Educational Need
SF	Sampling Form
SMAF	School-level Materials Adaptation From
SMEG	Subject Matter Expert Groups
SPS	Study Programme Sheet
SRF	Session Report Form
STF	Student Tracking Form
StQ	Student Questionnaire
TA	Test Administrator
TAG	Technical Advisory Group
TAS	Test Adaptation Spreadsheet
TCS	Target Cluster Size
TP	Translation Plan
TQ	Teacher Questionnaire
UH	Une Heure (One Hour)
WBQ	Well-Being Questionnaire
WSSM	Within-School Sampling Manual
XLIFF	XML Localisation Interchange File Format
XML	Extensible Markup Language

Glossary

ACER Maple	Software that assists with within-school sampling, student/teacher tracking and data submission practices that meet the PISA 2021 Technical Standards
ACT	PISA Contractor for Core B3 responsible of the PISA 2021 assessment instruments for creative thinking
Accommodation	A change to how a test is administered to a student with special educational needs (SEN) or a change in how a SEN student communicates a response to a test item. PISA allows only limited accommodations, which must be approved in consultation with PISA Contractors.
Adaptation	Changes to test instruments and manuals proposed by a National Centre during the translation and adaptation process. Adaptations need to be in line with the Translation and Adaptation Guidelines and need to be documented. For questionnaires and manuals, they need to be agreed upon by the PISA Contractors.
Adjudicated entity	A country/economy, geographic or economic region, or similarly defined population for which the PISA Contractor fully implements quality assurance and quality control mechanisms and endorses, or not, the publication of separate PISA results
Agreed-upon procedures	Procedures that are specified in the PISA operations manuals and Technical Standards, or variations that are agreed upon between the National Project Manager and the PISA Contractors
Agreed-upon timelines	Timelines that are specified for each PISA task, or variations agreed upon between the National Project Manager and the PISA Contractors
Archive	An electronic or hard-copy store of materials to be used for future reference
Assessment rate	The number of students that participate/respond divided by the number of sampled students. The assessment rate takes into account all student losses. This rate differs from the response rate which does not include ineligible nor excluded students in its denominator
Australian Council for Educational Research (ACER)	PISA Contractor for Core E responsible for country/economy support and implementation for PISA participants who signed up to the Core E component PISA Contractor on the Core C Sampling team that is responsible for the within-school sampling software in PISA 2021, as well as

	components of Main Survey school sampling for PISA 2021
Booklet shell	The booklet parts common to all test booklets (including the cover pages, General Directions section, Formula Page, Acknowledgments and any other common part for the particular cycle)
cApStAn	PISA Contractor for Core D Translation Verification, responsible for linguistic quality assurance (LQA) and linguistic quality control (LQC), and equivalence checks of the PISA 2021 instruments
Closed-response test item	An item with a restricted pool of responses that are coded with little or no human judgement. When implemented as a computer-based item, these are automatically scored.
Cluster	A group of specified units of test items. A number of clusters are put together to form a booklet (PBA) or testlet (CBA) according to the specified test design
Coder	A person qualified and trained to examine and classify the student responses to open-response test items in PISA (for both the cognitive and the questionnaire parts)
Coder query (CQ)	A question from a National Centre about a coding issue for a specific response. Coding queries are directed to the International Core A Contractor for advice
Codes	The set of separate student response categories defined for each test item
Coding design	A formal description of the coding process. A National Centre can adopt the Field Trial and Main Survey coding designs provided by the PISA Contractors in the Coding Procedures and Guidelines documents or, if necessary, can propose alternatives, which must be agreed upon before use.
Cognitive items	The test questions in the “cognitive” part of PISA (not the questionnaire items)
Complex multiple choice items	Complex multiple-choice items require the following: i) responses to a series of related “Yes/No” or “True/False” questions that are treated for scoring as a single item; ii) selection of more than one response from a list; iii) completion of a sentence by selecting drop-down choices to fill multiple blanks; or iv) “drag and drop” responses, allowing students to move elements on screen to complete a task of matching, ordering or categorising.
Computer-based assessment (CBA)	Assessment instruments that are delivered via the computer. A country/economy implementing PISA as a computer-based assessment is often referred to as a CBA country/economy.
Constructed-	Items for which students must produce their own response (as

response items	opposed to selecting from given optional responses) that may range from a phrase to a short paragraph (e.g. two to four sentences of explanation). Usually there is a variety of possible responses that may include drawing or graphing.
Country/Economy three-letter identification variable (CCC)	Three-letter ISO (International Organisation for Standardisation) Country/Economy code by which PISA Contractors refer to countries/economies
Country/Economy numeric identification variable (CNT)	Three-digit ISO (International Organisation for Standardisation) Country/Economy code for PISA participants. For most of countries/economies, this ISO code is based on the ISO 3166, which is the international standard for country/economy codes and codes for their subdivisions.
Creative Thinking	“The capacity to effectively engage in a process of generating, implementing, and evaluating novel and contextually useful ideas, solutions, or insights” (Rosen & Tager, 2014)
Creative Thinking Expert Group (CTEG)	A group of experts that contribute to the development of the assessment frameworks and instruments for Creative Thinking. The CTEG assists the PISA Contractors in linking PISA’s policy objectives with substantive and technical expertise
Data adjudication	The process of checks and cross-checks undertaken by the PISA Contractors and the Technical Advisory Group to support the decision about which data can be included in the main data set
Data Management Expert software (DME)	Software developed specifically for PISA for the entry, editing and management of all response and coded data. The software is installed and operates on a computer system within the National Centre and is managed by the National Data Manager.
Data Management Manual (DMM)	A document describing the usage of the DME software and the operational procedures for the entry, import and export of data through the software. There are separate documents for computer- and paper-based countries/economies.
Data validity checks	A series of checks done by the National Centre prior to data submission to guarantee the validity of the data from their perspective
Difficulty	The level of difficulty of a test question or questionnaire item. It expresses the proportion or percentage of students who answered the item correctly.
Dispatch	A delivery performed by the PISA Contractors of materials related to PISA, usually in electronic form
Domain	An area of assessment within the PISA study. The three standard

	domains are Reading, Mathematics and Science. PISA 2021 will also include Creative Thinking as the innovative domain
Educational Testing Service (ETS)	Core A Contractor responsible of the PISA 2021 design, development of mathematics assessment and questionnaires, computer platform, implementation and analysis as well as for the PISA Contractor for Core B2 responsible for the development of the PISA 2021 Questionnaire Framework
Excluded students	The sampling standards permit countries/economies to exclude up to 5% of the PISA relevant population. If students with special educational needs meet specific criteria specified in the School Co-ordinator's Manual (or School Associate's Manual), they may be excluded from participating in PISA.
Field Trial (FT)	First period of data collection. The Field Trial is conducted to validate and optimise the PISA test and processes. All aspects of the survey are reviewed both nationally and internationally after the Field Trial. Recommended adaptations and changes are then made for the Main Survey.
File transfer protocol (FTP) site	Secure Internet site used for transferring large data files
Final check (FC)	Performed after the verification of the translation and adaptation to record whether all verifier interventions requiring follow-up were correctly and consistently addressed. The final check is done for both the cognitive and questionnaire instruments.
Financial Literacy Questionnaire (FLQ)	An international option offered in PISA 2021 that covers topics on financial literacy.
Follow-up session	A second PISA test session that must be held if, for some reason, the absence rate was too high
Framework	A document that provides a definition of the domain(s) of study to be assessed, provides a description of the approach to assessment and provides a blueprint of what the assessment should cover
Free text entry response (FTE)	A response that allows the respondent to enter alphanumeric text characters into the computer for CBA countries/economies. It implies typing the characters on a keyboard.
ICT Familiarity Questionnaire (ICQ)	An international option offered in 2021 that covers topics such as the use of ICT to support mathematics instruction and learning. ICT-based or ICT-supported learning may include, for instance, educational games, drilling activities, simulations, tutorials and the use of social media. This questionnaire is offered only as a computer-based

	instrument.
International option	An element of the international PISA assessment/questionnaires that a National Centre can choose to participate in
International Standard Classification of Education (ISCED)	A standard framework used to categorise and report cross-nationally comparable education statistics. As national education systems vary in structure and curricular content, it can be difficult to benchmark performance across countries/economies over time or monitor progress toward national and international goals. To understand and properly interpret the inputs, processes and outcomes of education systems from a global perspective, it is vital to ensure that data are comparable. This can be done by applying the International Standard Classification of Education (ISCED).
International Standard Classification of Occupations (ISCO)	An International Labour Organisation (ILO) classification structure for organising information on labour and jobs. It is a tool for organising jobs into a clearly defined set of groups according to the tasks and duties undertaken in the job. It is intended for use in statistical applications and in a variety of client oriented applications.
Item	A question within the PISA cognitive instruments or questionnaires
Item ID	An item-specific code used to identify a test question, e.g. CR420Q02
Item pool	Group of items; for example, the Field Trial item pool consists of all items to be used in the Field Trial
Item response theory (IRT)	Paradigm used in PISA for the analysis and scoring of cognitive tests and questionnaires. Unlike simpler alternatives for creating scales evaluating test and questionnaire responses, it does not assume that each item is equally difficult.
Language distribution	The languages spoken within a country/economy and the proportion of the population of 15-year-olds for whom each language is the language of instruction. The decision about testing languages is based upon the language distribution in a country/economy.
Layout	Part of graphic design that deals in the arrangement of visual elements on an item page
Link(ing) item	An item that appeared in exactly the same format in the previous survey administration period(s) of PISA and is used to make possible comparisons of the results from one cycle to the next. Also referred to as trend item.
Local examples of student responses	Item responses used by a National Centre during coder training that come directly from students within that country/economy, that is, real student responses

Main Survey (MS)	Second period of data collection
Materials Adaptation Form (MAF)	The form used by the National Centre and the PISA Contractor for survey operations to track the progress of school-level material adaptation and review
Mathematics Expert Group (MEG)	A group of mathematics experts who contribute to the development of the assessment frameworks and instruments. The MEG assists the PISA Contractors in linking PISA's policy objectives with substantive and technical expertise.
Multiple choice test item or question	A test question that requires respondents to select the best possible answer (or answers) from a set of options
Multiple coding	Process whereby a subset of responses are recoded (i.e. coded multiple times) by different coders. This is part of PISA's inter-coder reliability checks. See also single coding.
National Centre (NC)	The centre responsible for the implementation of PISA in a country/economy. The NC is managed by a National Project Manager.
National options	Additional elements of the test or questionnaires that a National Centre can develop and implement subject to the PISA Contractors' approval. These can range from additional instruments to special sampling options. If additional instruments, the national option is always administered after the main test. Upon review, some national options may result in a separate national option contract.
National Data Manager (NDM)	The National Data Manager will be responsible for the day-to-day data management tasks within the country/economy.
National Project Manager (NPM)	The manager of a National Centre who oversees the implementation of PISA in a country/economy.
National Sampling Manager (NSM)	The National Sampling Manager will be responsible for the sampling tasks within the country/economy.
Occupational response data	The data from the questionnaires that derive from the responses to the questions about work/occupations. These are later coded according to the International Standard Classification of Occupation (ISCO).
OECD Secretariat	The OECD body that oversees and monitors the implementation of PISA by the PISA Contractors, on behalf of the PISA Governing Board
Open-source translation editor: OmegaT	Computer-aided translation (CAT) tool used to edit the XLIFF files used in CBA
Open-Ended	The software system used to code computer-based open-ended

Coding System (OECS)	responses for CBA countries/economies
Open-Ended Reporting System (OERS)	The software system used to code paper-based open-ended responses for PBA countries/economies
Open-ended questionnaire items	The questionnaire items for which possible responses are not pre-defined
Open-ended test items	The constructed-response test items for which possible responses are not pre-defined for the respondent
Organisation for Economic Co-operation and Development (OECD)	The OECD is an international economic organisation of 36 countries/economies, founded in 1961. The mission of the OECD is to promote policies that will improve the economic and social well-being of people around the world. The OECD provides a forum in which governments can work together to share experiences and seek solutions to common problems.
Pagination	The relationship between layout and page numbering
Paper-based assessment (PBA)	Assessment instruments that are delivered in paper-and-pencil form. A country/economy implementing PISA as a paper-based assessment is often referred to as a PBA country/economy.
Parent Questionnaire (PAQ)	An international option in PISA 2021 that provides information on parent background, the student and family, the student's school, and the student's educational pathway. It is a paper-based questionnaire.
PISA Assessment Framework	A document that defines the domain to be assessed, describes the breadth of each of the domains and the sub-areas and skills associated with each, and describes the approach to assessment. This document is published by the OECD.
PISA Contractors	The organisations that, as a group, are in charge of the development of the test instruments, questionnaires and the implementation of PISA
PISA-defined target population	All PISA-eligible students in the schools that are listed on the school sampling frame; that is, the PISA desired population minus excluded schools and their students
PISA desired target population	The PISA target population that provides the most exhaustive coverage of PISA-eligible students in the participating economy
PISA-eligible students	Students who are in the PISA target population as defined by birth dates and the time of testing
PISA Governing	The PISA Governing Board is composed of representatives of OECD

Board (PGB)	member countries/economies and PISA associates (associates are economies that are not OECD members but have membership rights and obligations in regard to specific OECD bodies and programmes). Guided by the OECD's education objectives, the Board determines the policy priorities for PISA and makes sure they are respected during the implementation of each PISA survey.
PISA operations manuals	<p>Manuals provided by the PISA Contractors as follows:</p> <ul style="list-style-type: none"> ● National Project Manager Manual ● School-level materials (e.g. Test Administrator's Manual) ● School Sampling Preparations Manual ● Within-School Sampling Manual ● Data Management Manual ● Student Delivery System Manual ● All other key documents referenced within the National Project Manager Manual. <p>The preparation of the PISA operations manuals will be carried out by the PISA Contractors and will describe procedures developed by the PISA Contractors. The manuals will be prepared following consultation with participating countries/economies, the OECD Secretariat, the Technical Advisory Group and other stakeholders.</p>
PISA participant	An administration centre, commonly called a National Centre, that is managed by a person or persons, commonly called a National Project Manager, who is/are responsible for administering PISA in the country/economy. The National Project Manager must be authorised to communicate with the PISA Contractors on all operational matters relating to the adjudicated entities for which a National Project Manager is responsible.
PISA Portal	The PISA website often referred to as "portal". It can be accessed at http://pisa.ets.org/portal . This website is one of the principal means of PISA Contractor communication with National Centres and contains the source versions of instruments, manuals and other documents and information relating to National Centres.
PISA Quality Monitor (PQM)	A person nominated by a National Project Manager and employed by Core A Survey Operations to monitor test administration quality in an adjudicated entity
PISA school-level materials	<p>Materials provided by the PISA Contractors describing the procedures to carry out the survey in schools:</p> <ul style="list-style-type: none"> ● Test Administrator's Manual ● School Co-ordinator's Manual

	<ul style="list-style-type: none"> • School Associate’s Manual • Test Administrator’s Scripts • Forms, including Session Report Form and Student Tracking Form.
PISA target population	Students aged between 15 years and 3 (completed) months and 16 years and 2 (completed) months at the beginning of the testing period, attending educational institutions located within the adjudicated entity, <u>and</u> in grade 7 or higher. The age range of the population may vary up to one month, either older or younger, but the age range must remain 12 months in length. That is, the population can be as young as between 15 years and 2 completed months and 16 years and 1 (completed) month at the beginning of the testing period; or as old as between 15 years and 4 (completed) months and 16 years and 3 (completed) months at the beginning of the testing period.
PISA Technical Standards	The set of standards related to PISA quality assurance measures. These are published by the OECD.
Portable Document Format (PDF)	A file format with a “.pdf” extension
Preferred Verification Schedule (PVS)	A form for negotiating the country/economy-specific timeline for the verification of the questionnaires and cognitive items
Programme for International Student Assessment (PISA)	PISA is a triennial international survey that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students.
Quality	PISA has developed three inter-related aspects of quality: quality control, quality monitoring and quality assurance. Quality control measures are used to ensure that data conform to the specifications in the Technical Standards. Quality monitoring procedures are used to evaluate whether Technical Standards have been achieved as planned. One quality monitoring procedure is PQM observation of test session activities during the Main Survey. Quality assurance is achieved during the data adjudication process, whereby issues that may compromise the quality of the data are reviewed and corrective actions are taken, if appropriate.
Questionnaire Adaptation Spreadsheet (QAS)	The QAS is an Excel spreadsheet where all questionnaire items are listed. The QAS is used as part of the negotiations and documentation of national adaptations.

Questionnaire Authoring Tool (QAT)	The QAT is an online tool used to adapt the master questionnaires (English) and to produce national versions of the PISA 2021 computer-based questionnaires.
Questionnaire Expert Group (QEG)	A group of experts who contribute to the development of the questionnaires. The QEG assists the PISA Contractors in linking PISA's policy objectives with substantive and technical expertise.
Questionnaire items	The questions in the Student and School Questionnaires
RTI-International	PISA Contractor for Core B1 responsible of the PISA 2021 Assessment Framework for Mathematics
Reading Expert Group (REG)	A group of reading experts who contribute to the development of the assessment frameworks and instruments. The REG assists the PISA Contractors in linking PISA's policy objectives with substantive and technical expertise.
Response option	One of the possible responses in a multiple choice item, indicated by a letter A, B, C, etc.
Response rate	The numerator of the response rate is the number of respondents. The denominator of this rate is the number of respondents plus the number of nonrespondents. The denominator does not include ineligible nor excluded cases.
Sample	The group of students selected to take part in PISA
School Associate (SA)	A person who is employed at a school who both co-ordinates the logistics for scheduling the test and also administers the test to students
School Co-ordinator (SC)	A person who is employed at a school who communicates with the National Centre and the Test Administrator about the logistics of scheduling the test
School-level exclusions	Exclusion of schools from the sampling frame because: <ul style="list-style-type: none"> • of geographical inaccessibility (but not part of a region that is omitted from the PISA desired target population) • administration of PISA within the school would not be feasible • all students in the school would be within-school exclusions, or of other reasons as agreed upon.
School-level Materials Adaptation Form (SMAF)	An Excel form used to collect information about a country/economy's survey operations timeline, quality control procedures and other data needed for completing the school-materials adaptation process

School Questionnaire (ScQ)	A questionnaire for school principals. It collects information about the school context information, the school management, the teaching staff, the assessment and evaluation, the targeted group and the school climate. It's a computer- and paper-based questionnaire.
Science Expert Group (SEG)	A group of science experts who contribute to the development of the assessment frameworks and instruments. The SEG assists the PISA Contractors in linking PISA's policy objectives with substantive and technical expertise.
Session ID	A code used to identify test and questionnaire sessions
Session Report Form (SRF)	A form used to document the timing of the session and any problems that may have arisen
Single coding	Process whereby responses are coded (i.e. classified) according to the coding guides. See also multiple coding.
Simple multiple-choice	Items requiring the following: i) selection of a single response from four options; or ii) selection of a "hot spot", an answer that is a selectable element within a graphic or text.
Source or master version(s)	The version(s) of a document released by the PISA Contractors for translation and adaptation by the National Centre. These may refer to English versions or English and French versions, depending on the material.
Special educational needs (SEN)	Students with special educational needs include those with functional disabilities, cognitive, behavioural or limited test language proficiency. It also includes students for whom there are no test materials available in their language of instruction. Students with special educational needs may be excluded from the assessment depending on the guidelines provided by the PISA Contractors.
Standard	A statement related to a process within PISA that provides a basis for comparison. A National Centre must comply with all relevant PISA Technical Standards to ensure that its data are included in the main international data set
Stimulus	The text, tables, pictures or diagrams that students use to answer the test questions but are not part of the questions themselves
Stratum	A division within an educational system, such as rural/urban, used in school sampling
Student Delivery System (SDS)	The software that delivers the PISA assessments and questionnaires to students in schools for CBA countries/economies, typically run from USB drives

Student Questionnaire (STQ)	A questionnaire for students administered after the cognitive assessment. It collects information about the student and their family and home, mathematical learning in school, views on mathematics, school experiences. It is both a computer-based and paper-based questionnaire.
Subject Matter Expert Groups (SMEG)	A collective term, of which REG, MEG, QEG, GEG and SEG are specific instances. The TAG may also be referred to as SMEG. See individual entries
Study Programme Sheet (SPS)	A file used by the within-school sampling software that lists the study programmes and their associated grades and which covers the programmes for all PISA students in the country/economy.
Student Questionnaire (StQ)	A questionnaire for students. It collects information about the student's family, home, school, school schedule and learning time, view on reading, etc. It is either a computer- or paper-based questionnaire.
Student Tracking Form (STF)	A form produced by the within-school sampling software that lists the sampled students at a school
Target cluster size (TCS)	The number of students who are to be sampled from schools where not all students are to be included in the sample
Target language	The language into which the source version of material is being translated
Teacher Questionnaire (TCQ)	An international option in PISA 2021 that provides information on teacher background, education and professional development, collaboration, beliefs and attitudes, teaching practices and school environment.
Technical Advisory Group (TAG)	The aim of the Technical Advisory Group is to ensure the technical quality of the PISA programme. It has a permanent role across survey cycles and includes those who have a leading operational role in the project.
Technical Standard	A PISA Technical Standard that is subject to quality assurance measures
Test Adaptation Spreadsheet (TAS)	The Test Adaptation Spreadsheet is a form in which adaptations to assessment units are documented. Adaptations will be checked for compliance with the PISA Translation and Adaptation Guidelines by international verifiers, and verifiers' recommendations will be vetted by the Core A Translation Referee.
Test Administrator (TA)	A person hired by the National Centre to administer the test in schools
Test instruments	Test forms, questionnaires and coding guides (i.e. the instruments)

	used in data collection)
TestFlow	The components of the SDS are controlled by a TestFlow for CBA countries/economies. A TestFlow includes the screens for logging into the SDS, selecting languages (if necessary) and moving among the components of the student assessments and questionnaires.
Test period	The period of time during which data is collected. The Main Survey test period cannot exceed six weeks for PBA countries/economies and cannot exceed eight weeks for CBA countries/economies, and is different from the test window. The test period may also be referred to as “data collection period”
Test window	The three-month period for which a set of population birth dates is valid for testing
Testlet	A testlet is a number of clusters that are put together according to the specified design and used to represent a cognitive instrument that is administered as a computer-based form.
'Track changes' mode	A mode within Microsoft Word where the changes made to a document over time remain visible
Translation Plan (TP)	Documentation of all the processes that are intended to be used for all activities related to translation, adaptation and languages, and international options
Translation reconciler	The translator who compares and merges the two separate versions of translated material to ensure linguistic comparability with source versions
Trend item	An item that appeared in exactly the same format in the previous survey administration period(s) of PISA and is used to make possible comparisons in the results from one cycle to the next. Also referred to as a link(ing) item.
UH form	"Une heure" (one hour) form and short questionnaire for students with special educational needs. Countries/Economies may select this as one of the national options.
Unit	A related set of stimuli, one or more items (i.e. questions), and response coding guides together. A cluster is formed from the stimuli and questions from a number of selected units and forms an element of the test design.
Verification	A linguistic check of test instruments performed by the PISA Contractors
Verification co-ordinator	The organisation in charge of the verification process. For all testing materials and questionnaires, the verification co-ordinator is Core D

	Translation Verification (cApStAn).
Verifier	A person qualified and trained to verify equivalency between the source and the target versions and to document the verification outcomes
Westat	PISA Contractor responsible for the survey operations as part of Core A and sampling as Core C
Within-School Sampling Manual (WSSM)	Explains in detail how to use the within-school sampling software to complete the within-school sampling procedures for PISA. It describes the preparation, sampling and updates and verification for all assessment arrangements and also how sampling data after data collection is to be prepared and submitted.
Workflow	A sequence of activities performed by a specific person or group of persons according to a detailed timeline. In PISA, workflows are mainly used to manage the negotiation, translation and verification of the questionnaires and cognitive instruments for CBA countries/economies. The PISA Portal has a part that is used to set up and monitor the different defined tasks arranged as a workflow.
XML Localisation Interchange File Format (XLIFF)	A format used to exchange localisation data between participants in a translation project. This special format enables translators to concentrate on the text to be translated without worrying about text layout. The XLIFF file has the .xlf extension and is used to translate the cognitive instruments.

APPENDIX D. TENTATIVE SCHEDULE OF TASKS, BY PHASES AND AREA

This Appendix includes a tentative schedule of tasks organised by the following phases:

- First Review Phase (described in Chapter 4 and Exhibit D.1)
- Field Trial Preparation Phase (described in Chapter 5 and Exhibit D.2)
- Field Trial Phase (described in Chapter 6 and Exhibit D.3)
- Second Review Phase (described in Chapter 7 and Exhibit D.4)
- Main Survey Preparation Phase (described in Chapter 8 and Exhibit D.5)
- Main Survey Phase (described in Chapter 9 and Exhibit D.6)
- Review and Reporting Phase (described in Chapter 10 and Exhibit D.7)

Additionally, within these phases, tasks are organised by areas. The schedule presented below is tentative and shared only for planning purposes. It will be adjusted as needed. Detailed timelines will be communicated to countries/economies at the appropriate time through emails, manuals and workflows. The following colour scheme is used in exhibits D.1 to D.7:

General Tasks	Subject Matter Expert Group Meetings: <i>Mathematics Expert Group (MEG), Creative Thinking Expert Group (CTEG), Questionnaire Expert Group (QEG)</i>
Data Collection Periods	
NPM Meetings or International Trainings	Technical Advisory Group (TAG) Meetings

Exhibit D.1 – Schedule of tasks for the First Review Phase

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
General Tasks	Prepare and submit consolidated timeline for PISA 2021	Contractors	Mar-18	Jul-18
General Tasks	Develop, test and release the PISA 2021 Portal	Core A Platform	Mar-18	Sep-18
General Tasks	Decide which international options (questionnaires and cognitive domains) will be offered in PISA 2021	OECD	Apr-18	May-18
General Tasks	Develop statement of NPM Roles and Responsibilities	Core A Survey Operations	May-18	Jul-18
General Tasks	Prepare and release NPM manual (Version 1)	Contractors	May-18	Nov-18
General Tasks	Prepare Technical Standards (Version 1)	Contractors	May-18	Jul-18
General Tasks	Nominate NPMs and establish National Centres	Participants	Jun-18	Oct-18
General Tasks	School Readiness Tool released to new CBA participants, including PBA participants from 2018 that are CBA participants in 2021	Core A Platform	Jun-18	Jul-18
General Tasks	Prepare and submit PISA 2021 assessment design and computer platform design (DRAFT)	Core A Cognitive	Jul-18	Jul-18
General Tasks	Prepare and submit PISA 2021 assessment design and computer platform design (FINAL)	Core A Cognitive	Sep-18	Sep-18
General Tasks	Decide on participation in international options	Participants	Oct-18	Dec-18
General Tasks	Translation Plan: Complete and submit Translation Plan	Participants	Dec-18	Feb-19
General Tasks	**Prepare and submit revised consolidated timeline for PISA 2022	Participants	Jul-20	Jul-20
General Tasks	**Prepare Technical Standards (Version 2)	Contractors and OECD	Jul-20	Nov-20
Meetings and Trainings	QEG Virtual Meeting 1: Project Introduction, roles and responsibilities, and timeline	Core B2	Feb-18	Feb-18
Meetings and Trainings	CTEG Meeting 1: Expert Group defines general directions of the framework	OECD	Feb-18	Feb-18

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Meetings and Trainings	MEG Meeting 1: Discuss and generate the first draft frameworks	Core B1	Feb-18	Feb-18
Meetings and Trainings	QEG Meeting 1 (Face-to-face): Discuss and generate the first draft frameworks	Core B2	Mar-18	Mar-18
Meetings and Trainings	Test Development Workshop 1 (Mathematics)	Core A Cognitive	May-18	May-18
Meetings and Trainings	QEG Virtual Meeting 2: Focus on revisions to the questionnaire framework based on questions and comments received from the Senior QEG advisors	Core B2	May-18	May-18
Meetings and Trainings	CTEG Meeting 2: Expert Group reviews a first set of developed units and provides directions on scoring, analysis and reporting	OECD and Core B3	May-18	May-18
Meetings and Trainings	Test Development Workshop 2 (Mathematics)	Core A Cognitive	Jun-18	Jun-18
Meetings and Trainings	QEG Virtual Meeting 3: Focus on Economic, Social and Cultural Status (ESCS)	Core B2	Jun-18	Jun-18
Meetings and Trainings	QEG Virtual Meeting 4: Focus on Social and Emotional Characteristics	Core B2	Jul-18	Jul-18
Meetings and Trainings	MEG Meeting 2: Discuss frameworks and review sample tasks	Core B1	Jul-18	Jul-18
Meetings and Trainings	TAG Meeting 1: PISA 2021 Goals, Roles and Responsibilities of TAG, Timeline, Design and analytical plans for the Field Trial and Main Survey	OECD and Contractors, as needed	Aug-18	Aug-18
Meetings and Trainings	CTEG Virtual Meeting 1: Expert Group reviews the complete first draft of test units and provide directions for finalisation and validation before national review	Core B3 / OECD	Sep-18	Sep-18
Meetings and Trainings	QEG Meeting 2 (Face-to-face): Finalise frameworks and approve proposed Field Trial instruments	Core A Questionnaire	Oct-18	Oct-18
Meetings and Trainings	MEG Virtual Meeting 1: Review illustrative items and finalise framework	Core B1	Nov-18	Nov-18

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Meetings and Trainings	CTEG Meeting 3: Expert Group reviews the proposed instruments for the Field Trial	OECD and Core B3	Dec-18	Dec-18
Meetings and Trainings	MEG Virtual Meeting 2: Overview of characteristics of the Field Trial instruments	Cores A and B1	Jan-19	Jan-19
Meetings and Trainings	Meeting for New NPMs: General information, timeline, PISA Portal and Communication tools, survey operations, overview of sampling, and overview of translation and adaptation procedures and associated guidelines Location: Westat, Rockville, Maryland, USA <i>(Note: Individual consultations on other aspects of the project will be arranged as needed and may be requested by participants.)</i>	Contractors and Participants	Jan-19	Jan-19
Meetings and Trainings	NPM Meeting 1: General information, timeline, integrated assessment design, survey operations, sampling, proposed Field Trial instruments, translation and adaptation procedures, translation workflow, initiation to the translation editor, beginning of questionnaire adaptation period <i>(Note: this meeting includes individual consultations with Core A questionnaire content, Core A questionnaire technical, Core A data management, Core C and Core D)</i>	Contractors and Participants	Mar-19	Mar-19
Framework	First draft of frameworks for Creative Thinking	OECD	Feb-18	Mar-18
Framework	First draft of frameworks for Mathematics	Core B1	Mar-18	Mar-18
Framework	First draft of frameworks for Questionnaires	Core B2	Mar-18	Mar-18
Framework	Second draft of frameworks for Questionnaires	Core B2	Jul-18	Sep-18
Framework	Second draft of frameworks for Creative Thinking	OECD	Sep-18	Sep-18
Framework	Second draft of frameworks for Mathematics	Core B1	Sep-18	Sep-18
Framework	Final draft of frameworks for Creative Thinking	OECD	Dec-18	Dec-18
Framework	Final draft of frameworks for Mathematics	Core B1	Dec-18	Dec-18
Framework	Final draft of frameworks for Questionnaires	Core B2	Dec-18	Dec-18

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Development of Field Trial instruments	Prepare item submission guidelines (Mathematics)	Core A Cognitive	Mar-18	May-18
Development of Field Trial instruments	Development and revision of new materials (Creative Thinking)	Core B3 and Participants	Mar-18	Dec-18
Development of Field Trial instruments	Develop first draft of Field Trial questionnaires in English	Core A Questionnaire	Apr-18	Oct-18
Development of Field Trial instruments	Development and revision of new materials (Mathematics)	Core A Cognitive and Participants	Apr-18	Dec-18
Development of Field Trial instruments	Authoring and testing master ENG version (Creative Thinking)	Core B3	May-18	Jan-19
Development of Field Trial instruments	Item submission by participants (Mathematics)	Core A Cognitive, Core D and Participants	May-18	Aug-18
Development of Field Trial instruments	Prepare and issue call for Creative Thinking stimuli submission: PISA 2021 Stimulus Submission Guide: Creative Thinking (Creative Thinking)	Core B3	Jun-18	Jul-18
Development of Field Trial instruments	Develop Creative Thinking analysis & reporting plan for the Field Trial and Main Survey and submit to the OECD for review	Core B3	Jun-18	Aug-18
Development of Field Trial instruments	Revise creative thinking questionnaire items based on data collection results with U.S. high school students	Core B3	Jul-18	Jul-18
Development of Field Trial instruments	Translatability Assessment (Creative Thinking) <i>(Note: This task will take place in Batches)</i>	Core B3, Core D and Core A Translation referee	Jul-18	Dec-18
Development of Field Trial instruments	Stimuli submission by participants (Creative Thinking)	Core B3, Core D and Participants	Jul-18	Aug-18
Development of Field Trial instruments	Cog lab of Creative Thinking QQ items and revision of QQ items based on results	Core B3	Jul-18	Aug-18
Development of Field Trial instruments	Submit Creative Thinking QQ units to CTEG for review	Core B3	Aug-18	Aug-18

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Development of Field Trial instruments	Submit Creative Thinking QQ items to Core B2 for QEG review	Core B3 and Core B2	Sep-18	Sep-18
Development of Field Trial instruments	Authoring and review of Creative Thinking Translatability Assessment outcomes; Finalising files for submission to ETS for National Review	Core B3	Sep-18	Oct-18
Development of Field Trial instruments	National review (Mathematics) <i>(Note: This task will take place in batches between September and December, with 2 weeks review period per batch)</i>	Core A Cognitive and Participants	Sep-18	Dec-18
Development of Field Trial instruments	Translatability Assessment (Mathematics) <i>(Note: This task will take place in Batches)</i>	Core A Cognitive and Translation referee; Core D	Sep-18	Dec-18
Development of Field Trial instruments	National review of first draft of Field Trial questionnaires (including the Creative Thinking module prepared by Core B3)	OECD, Participants, QEG	Oct-18	Oct-18
Development of Field Trial instruments	Translatability Assessment of first draft of Field Trial questionnaires (including the Creative Thinking module prepared by Core B3)	Core A Questionnaire and Core D	Oct-18	Oct-18
Development of Field Trial instruments	National review (Creative Thinking) <i>(Note: This task will take place in batches between September and December, with 2 weeks review period per batch)</i>	Core B3 and Participants	Oct-18	Dec-18
Development of Field Trial instruments	Authoring and testing of master ENG version (Mathematics)	Core A Platform	Nov-18	Jan-19
Development of Field Trial instruments	Develop second draft of Field Trial questionnaires in English with revisions after QEG	Core A Questionnaire, Core D	Nov-18	Dec-18
Development of Field Trial instruments	Development of the French source version of the Field Trial questionnaires and preparations of translation and adaptation materials for all instruments	Core A Cognitive and Core D	Dec-18	Mar-19
Development of Field Trial instruments	National review of proposed Field Trial questionnaires	Participants	Dec-18	Jan-19
Development of Field Trial instruments	Finalise Master QAS	Core A Questionnaire, Core D	Feb-19	Feb-19

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Development of Field Trial instruments	Prepare training videos and user guides for QAT and questionnaire adaptation process	Core A Questionnaire, Core D	Feb-19	Mar-19
Development of Field Trial instruments	Develop Field Trial Questionnaires testing scenarios	Core A Questionnaire	Feb-19	Apr-19
Development of Field Trial instruments	Finalisation of the Field Trial questionnaires in paper and authoring into QAT	Core A Questionnaire	Feb-19	Apr-19
Development of Field Trial instruments	Create participant QAS files	Core A Questionnaire	Feb-19	Mar-19
Development of Field Trial instruments	Creative Thinking Field Trial instruments finalised, documented and presented to NPMs/PGB	Core B3	Mar-19	Mar-19
Development of Field Trial instruments	Finalise all Creative Thinking materials for translation, including all supporting documentation	Core B3 and Core D	Mar-19	Mar-19
Development of Field Trial instruments	Field Trial Questionnaires finalised, documented and presented to NPMs/PGB	Core A Questionnaire	Mar-19	Mar-19
Development of Field Trial instruments	Mathematics Field Trial instruments finalised, documented and presented to NPMs/PGB	Core A Cognitive	Mar-19	Mar-19
Development of Field Trial instruments	Submit final proposal for Field Trial tests and questionnaires	Cores A, B3 and D	Mar-19	Mar-19
Development of Field Trial instruments	Set up of translation workflows and finalise and release New Mathematics CBA items for national translation <i>(Note: Math units may be released in batches between 1 April and 1 May, with the majority of units released on 1 April)</i>	Core A and Core D	Mar-19	Apr-19
Development of Field Trial instruments	Create national QAT and transfer trend structure	Core A Platform, Core A Questionnaire	Apr-19	TBD
Development of Field Trial instruments	Create participant QAT and transfer trend structure	Core A Platform, Core A Questionnaire	Apr-19	TBD

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Development of Field Trial instruments	Finalise and release New Mathematics Coding Guides for national translation <i>(Note: Coding guides are only released after both ENG and FRA sources are finalised.)</i>	Core A, Core B3, and Core D	Apr-19	Jun-19
Development of Field Trial instruments	Set up of translation workflows and finalise and release Creative Thinking CBA items for national translation	Core A, Core B3, and Core D	Apr-19	May-19
Development of Field Trial instruments	Create questionnaire xliif files <i>(Note: These will be created on rolling basis as participants complete QAT adaptations)</i>	Core A Platform	May-19	Jul-19
Development of Field Trial instruments	Finalise and release Creative Thinking Coding Guides for national translation <i>(Note: Coding guides are only released after both ENG and FRA sources are finalised.)</i>	Core A, Core B3, and Core D	May-19	Jun-19
Development of Field Trial instruments	**Develop first draft of FT GCM questionnaire module in English	Core A	May-20	May-20
Development of Field Trial instruments	**National review of first draft of FT GCM questionnaire module	Participants	May-20	Jun-20
Development of Field Trial instruments	**Translatability Assessment of first draft of FT GCM questionnaire module	Core D	May-20	Jun-20
Development of Field Trial instruments	**Develop second draft of FT GCM questionnaire module in English with revisions after QEG	Core A	Jun-20	Jun-20
Development of Field Trial instruments	**National review of 2021 FT questionnaires	Participants	Jun-20	Jun-20
Development of Field Trial instruments	**Create QAT for FT GCM questionnaire module	Core A Platform, Core A Questionnaire	Jun-20	Jul-20
Development of Field Trial instruments	**Development of the French source version of the FT questionnaires and preparations of translation and adaptation materials for all instruments	Jun-20	Jun-20	Jun-20
Development of Field Trial instruments	**Finalise Master QAS for FT GCM questionnaire module	Core A	Jul-20	Jul-20

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Development of Field Trial instruments	**Finalization of the FT GCM questionnaire module in paper and authoring into QAT	Core A Platform, Core A Questionnaire	Jul-20	Jul-20
Development of Field Trial instruments	**Create participant QAS files (FT GCM questionnaire module)	Core A	Jul-20	Jul-20
Development of Field Trial instruments	**Create participant QAT and transfer trend structure (FT GCM questionnaire module)	Core A Platform, Core A Questionnaire	Jul-20	Nov-20
Development of Field Trial instruments	**Create FT GCM questionnaire module xliif files <i>(Note: These will be created on rolling basis as participants complete QAT adaptations)</i>	Core A Platform, Core A Questionnaire	Jul-20	Nov-20
Development of Field Trial instruments	**Develop revised FT Questionnaires testing scenarios	Core A	Aug-20	Sep-20
Translation and Linguistic Quality Control	Transfer of trend materials from PBA to CBA for Participants switching from PBA to CBA in this cycle	Core D	Oct-18	Mar-19
Translation and Linguistic Quality Control	Development of the French source version of the Field Trial cognitive new materials for Creative Thinking and preparations of translation and adaptation materials for Creative Thinking. This task may be completed in batches as the units become available.	Core B3, Translation Referee and Core D	Dec-18	Mar-19
Translation and Linguistic Quality Control	Development of the French source version of the Field Trial cognitive new materials for Mathematics and preparations of translation and adaptation materials for mathematics. This task may be completed in batches as the units become available.	Core A Cognitive and Translation referee; Core D	Jan-19	Mar-19
Translation and Linguistic Quality Control	Discuss Preferred Verification Schedule (PVS)	Core D Translation Verification and Participants	Jan-19	Mar-19
Translation and Linguistic Quality Control	Submit translation manual for National Centre	Core D	Mar-19	Mar-19

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Sampling and Weighting	Complete, submit, and work towards approval, cycle-wide Sampling Task 0 (ST0) – Field Trial and Main Survey testing languages	Core C Sampling, Core A Translation Referee, and Participants	Oct-18	Nov-18
Sampling and Weighting	Preparation of Field Trial student sampling software and Within-School Sampling Manual (WSSM)	Core C Sampling	Jan-19	Sep-19
Sampling and Weighting	Country/Economy-specific cycle-wide sampling plans are released for Participants to review and to specify all options that will impact sampling	Core C Sampling and Participants	Jan-19	Apr-19
Sampling and Weighting	Negotiate Study Programme Sheets (SPS) for both the Field Trial and Main Survey	Core C Sampling and Participants	Jan-19	Jan-19
Sampling and Weighting	Prepare Field Trial sampling forms and develop initial Field Trial Sampling Guidelines	Core C Sampling	Jan-19	Feb-19
Sampling and Weighting	Release Field Trial Sampling Guidelines document	Core C Sampling	Mar-19	Mar-19
Sampling and Weighting	Finalise and release first two cycle-wide sampling forms	Core C Sampling	May-19	May-19
Sampling and Weighting	Complete and submit cycle-wide Sampling Task 1 (ST1) - testing dates and population definition for both Field Trial and Main Survey	Participants	Jun-19	Jun-19
Sampling and Weighting	Review and finalise ST1	Core C Sampling and Participants	Jun-19	Mar-20
Sampling and Weighting	Complete and submit cycle-wide Sampling Task 2 (ST2) - school and student information for both Field Trial and Main Survey	Participants	Jul-19	Jul-19
Sampling and Weighting	Review and finalise ST2	Core C Sampling and Participants	Jul-19	Mar-20
Sampling and Weighting	**Country-specific cycle-wide sampling plans are released for Participants to review and to update all options that will impact sampling for the 2021 FT	Core C Sampling	Jun-20	Jun-20

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Sampling and Weighting	**Update and submit cycle-wide Sampling Task 1 (ST1) - testing dates and population definition for both 2021 FT and 2022 MS, as necessary	Participants	Jun-20	Jun-20
Sampling and Weighting	**Update and finalise ST1 with FT and MS test dates, as necessary	Participants	Jun-20	Mar-21
Sampling and Weighting	**Update and finalise ST2, as necessary	Core C Sampling and Participants	Jul-20	Mar-21
Sampling and Weighting	**Update and submit cycle-wide Sampling Task 2 (ST2) - school and student information for both FT and MS, as necessary	Participants	Jul-20	Jul-20

Exhibit D.2 – Tentative schedule of tasks for the Field Trial Preparation Phase

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Development of Field Trial instruments	Finalise all Mathematics CBA materials for translation, including all supporting documentation	Core A Cognitive and Core D	Mar-19	Apr-19
Translation and Linguistic Quality Control	Questionnaire adaptation negotiations	Core A Questionnaire Content and Participants	Mar-19	Jul-19
Translation and Linguistic Quality Control	Translation Period: New Mathematics <i>(Note: As agreed by PVS based on LQC and data collection periods)</i>	Participants	Apr-19	Nov-19
Translation and Linguistic Quality Control	Translation Period: Trend materials for Mathematics, Reading and Science <i>(Note 1: New Participants or Participants switching from PBA to CBA; Note 2: As agreed by PVS based on LQC and data collection periods)</i>	Participants	Apr-19	Nov-19
Translation and Linguistic Quality Control	Translation Period: Creative Thinking Items <i>(Note: As agreed by PVS based on LQC and data collection periods)</i>	Participants	May-19	Nov-19
Translation and Linguistic Quality Control	Translation Period: National questionnaires xlift <i>(Note: As agreed by PVS based on translation period and data collection periods)</i>	Participants	May-19	Sep-19
Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of all trend materials (stimuli and items) for Mathematics, Reading and Science <i>(Note 1: New Participants or Participants switching from PBA to CBA; Note 2: As agreed by PVS based on LQC and data collection periods)</i>	Core A Cognitive, Translation Referee, Core D Translation Verification, and Participants	Jul-19	Feb-20
Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of creative thinking materials (stimuli and items) <i>(Note: As agreed by PVS based on translation period and data collection periods)</i>	Core B3, Translation Referee, Core D Translation Verification, and Participants	Jul-19	Feb-20
Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of new mathematics materials (stimuli and items) <i>(Note: As agreed by PVS based on translation period and data collection periods)</i>	Core A Cognitive, Translation Referee, Core D Translation Verification, and Participants	Jul-19	Feb-20

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of questionnaires	Core A Questionnaire, Core D Translation Verification, and Participants	Jul-19	Dec-19
Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of Test Administrator Scripts	Core A Survey Operations, Core D Translation verification and Participants	Dec-19	Nov-20
Translation and Linguistic Quality Control	**Questionnaire adaptation negotiations (GCM Module)	Core A Questionnaire Content and Participants	Aug-20	Sep-20
Translation and Linguistic Quality Control	**Centralised translation of new Global Crises Module by Core D	Core D	Aug-20	Sep-20
Survey Operations	Release draft Field Trial School-level Materials for NPM review	Core A Survey Operations	Jul-19	Aug-19
Sampling and Weighting	Release templates for Field Trial Sampling Task 3 and 3a (ST3 and ST3a)	Core C Sampling	Jul-19	Jul-19
Sampling and Weighting	Complete and submit Sampling Tasks 3A and 3B (ST3A and ST3B) – detailed Field Trial sample design	Participants	Jul-19	Sep-19
Sampling and Weighting	Release Field Trial Sampling Task 4 (ST4) template	Core C Sampling	Aug-19	Aug-19
Sampling and Weighting	Review and finalise ST3A and ST3B	Core C Sampling and Participants	Sep-19	Mar-20
Sampling and Weighting	Complete and submit Sampling Task 4 (ST4) - List of sampled schools	Participants	Nov-19	Nov-19
Sampling and Weighting	Review and finalise ST4	Core C Sampling and Participants	Nov-19	Mar-20

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Sampling and Weighting	Review and approve Field Trial Sampling Task 5 (ST5)	Core C Sampling and Participants	Dec-19	Mar-20
Sampling and Weighting	**Update and submit Sampling Tasks 3A and 3B (ST3A and ST3B) – detailed FT sample design, as necessary	Participants	Jul-20	Sep-20
Sampling and Weighting	**Review and finalise updated ST3A and ST3B	Core C Sampling and Participants	Sep-20	Mar-21
Sampling and Weighting	**Review and finalise ST4, as necessary	Core C Sampling and Participants	Nov-20	Mar-21
Sampling and Weighting	**Complete and submit updated Sampling Task 4 (ST4) - List of sampled schools	Participants	Nov-20	Nov-20
Sampling and Weighting	**Review and approve updated FT Sampling Task 5 (ST5)	Core C Sampling and Participants	Dec-20	Mar-21

Exhibit D.3 – Tentative schedule of tasks for the Field Trial Phase

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Meetings and Trainings	NPM Meeting 2: Student/teacher sampling software training, coding questionnaires, overview of CBA systems, and survey operations <i>(Note: Individual consultations on other aspects of the project can be arranged upon request, pending contractors' availability.)</i>	Contractors and Participants	Nov-19	Nov-19
Meetings and Trainings	Field Trial International Coder and Data Management Training: Training on coding procedures, item-by-item coder training for cognitive items, and data management <i>(Note: Individual consultations on other aspects of the project can be arranged upon request, pending contractors' availability.)</i>	Core A, Core B3 and Participants	Jan-20	Jan-20
Meetings and Trainings	**Webinars for review of various 2021 FT procedures	Contractors and Participants	Jul-20	Dec-20
Meetings and Trainings	**2021 FT International Coder and Data Management Training: Virtual training on coding procedures, item-by-item coder training for new cognitive items, and data management	Core A, Core B3 and Participants	Jan-21	Jan-21
Development of Field Trial instruments	Finalise Field Trial Coding Guides for Creative Thinking: Update Field Trial coding guides following Field Trial coder training	Core B3	Jan-20	Feb-20
Development of Field Trial instruments	Finalise Field Trial Coding Guides for Mathematics: Update Field Trial coding guides following Field Trial coder training	Core A Cognitive	Jan-20	Feb-20
Translation and Linguistic Quality Control	Translation Period: Coding guides for Trend Materials for Reading Mathematics and Science (New Participants or New Participants or Participants switching from PBA to CBA)	Participants	Jun-19	Feb-20
Translation and Linguistic Quality Control	Translation Period: Creative Thinking Field Trial coding guides prior to updates (all CBA Participants) (per PVS)	Participants	Jun-19	Feb-20
Translation and Linguistic Quality Control	Translation Period: New Mathematics Field Trial coding guides prior to updates (all CBA Participants) (per PVS)	Participants	Jun-19	Feb-20

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Translation and Linguistic Quality Control	Update of French Source of Field Trial coding guides for Creative Thinking	Core D and Translation Referee	Feb-20	Feb-20
Translation and Linguistic Quality Control	Update of French Source of Field Trial coding guides for Mathematics	Core D and Translation Referee	Feb-20	Feb-20
Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of coding guides for Trend Materials for Reading Mathematics and Science (New Participants or New Participants or Participants switching from PBA to CBA)	Core D and Translation Referee	Mar-20	Oct-20
Translation and Linguistic Quality Control	Translation Period: Creative Thinking Field Trial coding guides following updates	Participants	Mar-20	Apr-20
Translation and Linguistic Quality Control	Translation Update Period: Implementation of revisions in the New Mathematics Field Trial coding guides following updates from the Coders Training Meeting	Participants	Mar-20	Apr-20
Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of Field Trial coding guides for Creative Thinking following updates	Core A Translation Referee, Core D Translation Verification, and Participants	Mar-20	May-20
Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of Field Trial coding guides for New Mathematics following updates	Core A Translation Referee, Core D Translation Verification, and Participants	Mar-20	Oct-20
Instrumentation (Field Trial)	Assemble and test international master Field Trial SDS (CBA Participants)	Core A Cognitive and Participants	Aug-19	Nov-19
Instrumentation (Field Trial)	Assemble and test national Field Trial SDS (CBA Participants), on a rolling basis, based on agreed-upon schedule dependent on Field Trial dates	Core A Platform and Participants	Nov-19	Apr-20
Instrumentation (Field Trial)	Assemble Field Trial paper booklets (PBA Participants), on a rolling basis based on agreed-upon schedule dependent on Field Trial dates	Core A Cognitive and Participants	Nov-19	Mar-20

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Instrumentation (Field Trial)	Prepare international servers for Field Trial online questionnaires	Core A Platform	Jan-20	Jan-20
Instrumentation (Field Trial)	Prepare draft Field Trial Analysis Plan for creative thinking (prepared by Core B3)	Core B3 / OECD (Creative Thinking)	Feb-20	Mar-20
Instrumentation (Field Trial)	Prepare draft Field Trial Analysis Plan for the core cognitive domains (prepared by Core A)	Core A (Core Domains)	Feb-20	Mar-20
Instrumentation (Field Trial)	Prepare draft Field Trial Analysis Plan for the questionnaires	Core A Questionnaires	Feb-20	Mar-20
Instrumentation (Field Trial)	Release Field Trial online questionnaire passwords to participants and monitor progress (two weeks before the data collection) <i>(Note: These are released on a rolling basis, based on participant Field Trial dates)</i>	Core A Questionnaires	Feb-20	Nov-20
Instrumentation (Field Trial)	Coder query service for cognitive data (Field Trial)	Core A Cognitive, Core B3, and Participants	May-20	Oct-20
Instrumentation (Field Trial)	**Prepare updated draft FT Analysis Plan for the questionnaires	Core A Questionnaires	Jun-20	Sep-20
Instrumentation (Field Trial)	**Assemble and test international master 2021 FT SDS (CBA Participants)	Core A Cognitive and Participants	Aug-20	Oct-20
Instrumentation (Field Trial)	**Analyse limited 2020 FT data (Mathematics)	Core A Cognitive	Aug-20	Sep-20
Instrumentation (Field Trial)	**Analyse limited 2020 FT data (Creative Thinking)	Core B3	Aug-20	Sep-20
Instrumentation (Field Trial)	**Assemble and test national 2021 FT SDS (CBA Participants), on a rolling basis, based on agreed-upon schedule dependent on FT dates	Core A Platform and Participants	Nov-20	Apr-21
Instrumentation (Field Trial)	**Assemble 2021 FT paper booklets (PBA Participants), on a rolling basis based on agreed-upon schedule dependent on FT dates	Core A Cognitive and Participants	Nov-20	Mar-21

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Instrumentation (Field Trial)	**Prepare international servers for 2021 FT online questionnaires	Core A Platform	Jan-21	Jan-21
Instrumentation (Field Trial)	**Prepare draft FT Analysis Plan for the core cognitive domains (prepared by Core A)	Core A (Core Domains)	Feb-21	Mar-21
Instrumentation (Field Trial)	**Prepare updated draft FT Analysis Plan for creative thinking (prepared by Core B3)	Core B3 / OECD (Creative Thinking)	Feb-21	Mar-21
Instrumentation (Field Trial)	**Release 2021 FT online questionnaire passwords to participants and monitor progress (two weeks before the data collection) <i>(Note: These are released on a rolling basis, based on participant FT dates)</i>	Core A Questionnaires	Feb-21	Nov-21
Instrumentation (Field Trial)	**Prepare draft updated FT Analysis Plan for the core cognitive domains (prepared by Core A)	Core A (Core Domains)	Mar-21	Mar-21
Instrumentation (Field Trial)	**Coder query service for cognitive data (2021 Field Trial)	Core A Cognitive, Core B3, and Participants	May-21	Oct-21
Survey Operations	Prepare and release Field Trial Review Questionnaire	Contractors	Sep-19	Mar-20
Survey Operations	Prepare and release final Field Trial school materials for NPM	Core A Survey Operations	Sep-19	Nov-19
Survey Operations	Webinar: Field Trial Gaining Co-operation	Core A Survey Operations and Participants	Sep-19	Oct-19
Survey Operations	Webinar: Field Trial Adapting School-level Materials	Core A Survey Operations and Participants	Nov-19	Nov-19
Survey Operations	Adaptation of Field Trial School-level Materials	Core A Survey Operations and Participants	Nov-19	Jul-20
Survey Operations	Webinar: Field Trial Preparing for Test Administrator/School Associate Trainings	Core A Survey Operations and Participants	Nov-19	Dec-19

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Survey Operations	Field Trial Data Collection Period (6 weeks per participant)	Participants	Mar-20	Aug-20
Survey Operations	Complete Field Trial Review Questionnaire	Participants	May-20	Sep-20
Survey Operations	**Prepare and release revised Field Trial Review Questionnaire	Contractors	Sep-20	Mar-21
Survey Operations	**Adaptation of updated 2021 FT School-level Materials	Core A Survey Operations and Participants	Dec-20	Jul-21
Survey Operations	**Webinar: 2021 FT Preparing for TA/SA Trainings	Core A Survey Operations and Participants	Dec-20	Dec-20
Survey Operations	**2021 Field Trial Data Collection Period (6 weeks per participant)	Participants	Mar-21	Aug-21
Survey Operations	**Complete Field Trial Review Questionnaire	Participants	May-21	Sep-21
Survey Operations	*Prepare and release Field Trial Review Report	Contractors	Aug-21	Oct-21
Sampling and Weighting	Student sampling helpdesk (Field Trial)	Core C Sampling and Participants	Jan-20	Aug-20
Sampling and Weighting	Receive, review, and finalise Field Trial Sampling Task 6 (ST6) sampling data	Core C Sampling and Participants	Apr-20	Oct-20
Sampling and Weighting	**Student sampling helpdesk (2021 FT)	Core C Sampling and Participants	Jan-21	Aug-21
Sampling and Weighting	**Receive, review, and finalise 2021 FT Sampling Task 6 (ST6) sampling data	Core C Sampling and Participants	Apr-21	Oct-21
Data Preparation, Management, and Analysis	National Field Trial data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 1 Participants, Field Trial)	Participants	Apr-20	Jul-20
Data Preparation, Management, and Analysis	Field Trial Data cleaning, data analysis and release of certified data (Batch 1 Participants, Field Trial)	Core A Data Management, Cognitive	Aug-20	Sep-20

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
		and Questionnaire Content		
Data Preparation, Management, and Analysis	National Field Trial data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 2 Participants, Field Trial)	Participants	Aug-20	Sep-20
Data Preparation, Management, and Analysis	Field Trial Data cleaning, data analysis and release of certified data (Batch 2 Participants, Field Trial)	Core A Data Management, Cognitive and Questionnaire Content	Sep-20	Dec-20
Data Preparation, Management, and Analysis	National Field Trial data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 3 Participants, Field Trial)	Participants	Sep-20	Nov-20
Data Preparation, Management, and Analysis	**National 2021 FT data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 1 Participants, Field Trial)	Participants	Apr-21	Jul-21
Data Preparation, Management, and Analysis	**2021 FT Data cleaning, data analysis and release of certified data (Batch 1 Participants, Field Trial)	Core A Data Management, Cognitive and Questionnaire Content	Aug-21	Sep-21
Data Preparation, Management, and Analysis	**National 2021 FT data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 2 Participants, Field Trial)	Participants	Aug-21	Sep-21
Data Preparation, Management, and Analysis	**2021 FT Data cleaning, data analysis and release of certified data (Batch 2 Participants, Field Trial)	Core A Data Management, Cognitive and Questionnaire Content	Sep-21	Dec-21
Data Preparation, Management, and Analysis	**National 2021 FT data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 3 Participants, Field Trial)	Participants	Sep-21	Nov-21

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Data Preparation, Management, and Analysis	*2021 FT Data cleaning, data analysis and release of certified data (Batch 3 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Nov-21	Jan-22

Exhibit D.4 – Tentative schedule of tasks for the Second Review Phase

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
General Tasks	*Prepare and release an updated version of the NPM Manual (Version 2)	Contractors	Jan-19	Jan-19
General Tasks	**Prepare and release Version 4 of the NPM Manual	Contractors	Jun-20	Sep-20
General Tasks	Prepare and submit PISA 2021 integrated assessment design for the Main Survey	Core A Cognitive	Sep-21	Oct-21
Meetings and Trainings	**CTEG Virtual Meeting 2: Expert Group reviews the results of the Field Trial Analysis and provides recommendations for the selection of items for Main Survey	OECD and Core B3	Oct-20	Oct-20
Meetings and Trainings	**QEG Virtual Meetings: Series of meetings to cover the new Global Crises Module and FT analysis plans	Core A Questionnaire	May-20	Oct-20
Meetings and Trainings	**TAG Virtual Meeting 1: Review limited 2020 FT analyses and proposed changes to the Technical Standards	OECD and Contractors, as needed	Oct-20	Oct-20
Meetings and Trainings	**MEG Virtual Meeting 3: Update on limited 2020 FT analyses	Core A	Oct-20	Oct-20
Meetings and Trainings	*QEG Meeting 3 (Face-to-face): Review Field Trial results and finalise Main Survey instruments to be shared with NPMs and PGB	Core A Questionnaire	Oct-20	Oct-20
Meetings and Trainings	*MEG Meeting 3: Finalise Main Survey instruments to be shared with NPMs and PGB	Cores A	Oct-21	Oct-21
Meetings and Trainings	*TAG Meeting 2: Review Field Trial analyses, and results and proposed Main Survey instruments	OECD and Contractors, as needed	Oct-21	Oct-21
Meetings and Trainings	*CTEG Virtual Meeting 3: Expert Group reviews the results of the Field Trial Analysis and provides recommendations for the selection of items for Main Study	OECD and Core B3	Oct-21	Oct-21
Sampling and Weighting	Prepare and release PISA 2021 Main Survey sampling forms	Core C Sampling	Jan-20	Mar-20

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Sampling and Weighting	Release PISA 2021 Main Survey School Sampling Preparation Manual	Core C Sampling	Mar-20	Mar-20
Sampling and Weighting	**Release PISA 2021 MS School Sampling Preparation Manual (Overview, ST7AB, ST8A and ST8b)	Core C Sampling	Mar-20	Mar-20
Sampling and Weighting	**Release PISA 2021 MS School Sampling Preparation Manual (ST9-11)	Core C Sampling	May-20	Mar-21
Sampling and Weighting	*Send out 1-month MS sampling form submission reminder for upcoming samples	Core C Sampling	Mar-21	Mar-22
Sampling and Weighting	*Complete and submit MS sampling forms 2 months before negotiated sample delivery date	Participants	Apr-21	Mar-22
Sampling and Weighting	*Review and finalise participant MS sampling forms	Core C Sampling and Participants	Apr-21	Mar-22
Sampling and Weighting	*Preparation of MS student sampling software and Within-School Sampling Manual (WSSM)	Core C Sampling	Jul-21	Dec-21
Sampling and Weighting	*Deliver MS school samples	Core C Sampling	Jul-21	Apr-22
Instrumentation (Main Survey)	*Analyse Field Trial data and propose Main Survey Instruments (Creative Thinking)	Core B3	Aug-21	Sep-21
Instrumentation (Main Survey)	*Analyse Field Trial data and propose Main Survey Instruments (Mathematics)	Core A Cognitive	Aug-21	Sep-21
Instrumentation (Main Survey)	*Prepare first draft of proposed Main Survey Questionnaires based on Field Trial analysis <i>(Note: This task and all decisions regarding the Main Survey questionnaires rely only on data from participants in Batch 1 - those that had their submitted data approved by 31 July 2020.)</i>	Core A Questionnaires	Aug-21	Sep-21
Instrumentation (Main Survey)	*Prepare national Main Survey Questionnaire Adaptation Sheet (QAS)	Core A Questionnaires, Core D	Aug-21	Oct-21

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Instrumentation (Main Survey)	*Create national Main Survey Questionnaire adaptation workflows and release to Participants	Core A Questionnaires, Core A Platform	Oct-21	Nov-21
Instrumentation (Main Survey)	*National review of proposed Creative Thinking Main Survey instruments	Participants	Oct-21	Oct-21
Instrumentation (Main Survey)	*National review of proposed Mathematics Main Survey instruments	Participants	Oct-21	Oct-21
Instrumentation (Main Survey)	*National review of proposed Main Survey Questionnaires	Participants	Oct-21	Oct-21
Instrumentation (Main Survey)	*Propose Main Survey Questionnaires	Core A	Oct-21	Oct-21
Instrumentation (Main Survey)	*Create Main Survey Questionnaire testing scenarios	Core A Questionnaires	Oct-21	Oct-21
Instrumentation (Main Survey)	*Correct errors or implement central revisions from Field Trial to Main Survey for Creative Thinking	Core B3, Core D Translation Verification, Core A Translation referee, and Participants	Oct-21	Dec-21
Instrumentation (Main Survey)	*Correct errors or implement central revisions from Field Trial to Main Survey for Mathematics	Core A Cognitive and Translation referee, Core D Translation Verification, and Participants	Oct-21	Dec-21
Instrumentation (Main Survey)	*Review and final approval of Main Survey Instruments (cognitive instruments and questionnaires)	OECD and PGB	Oct-21	Nov-21
Instrumentation (Main Survey)	*Prepare international servers for Main Survey online questionnaires	Core A Platform	Jan-22	Feb-22

Exhibit D.5 – Tentative schedule of tasks for the Main Survey Preparation Phase

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Meetings and Trainings	*NPM Meeting 3: Review Field Trial results, review Main Survey proposed instruments, Main Survey school sampling procedures and process for finalising instruments for the Main Survey, survey operations and student/teacher sampling software training <i>(Note: This meeting includes individual consultations with Core A questionnaire content, Core A questionnaire technical, Core A data management and Core C)</i>	Contractors and Participants	Nov-21	Nov-21
Meetings and Trainings	*Main Survey International Coder and Data Management Training: Coding procedures, item-by-item coding training for cognitive items, and data management training. <i>(Note: Individual consultations on other aspects of the project can be arranged upon request, pending contractors' availability.)</i>	Contractors and Participants	Jan-22	Jan-22
Framework	*Final frameworks for Creative Thinking	OECD	Dec-21	Dec-21
Framework	*Final frameworks for Mathematics	Core B1	Dec-21	Dec-21
Development of Field Trial instruments	*Finalise Main Survey coding guides for Creative Thinking following Main Survey coder training	Core B3	Jan-22	Feb-22
Development of Field Trial instruments	*Update of French Source of Main Survey coding guides for Creative Thinking	Core D and Translation Referee	Jan-22	Feb-22
Development of Field Trial instruments	*Finalise Main Survey coding guides for Mathematics following Main Survey coder training	Core A Cognitive	Jan-22	Feb-22
Development of Field Trial instruments	*Update of French Source of Main Survey coding guides for Mathematics	Core D and Translation Referee	Feb-22	Feb-22
Translation and Linguistic Quality Control	*Translation Period: Mathematics and Creative Thinking Main Survey coding guides following updates	Participants	Mar-22	Apr-22

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Translation and Linguistic Quality Control	*Linguistic Quality Control (Verification) of Main Survey coding guides for Mathematics and Creative Thinking following updates	Core A Translation Referee, Core D Translation Verification, and Participants	Mar-22	May-22
Survey Operations	*Release draft Main Survey School Materials for NPM review	Core A Survey Operations	May-21	Aug-21
Survey Operations	*Release draft PQM Materials for NPM review	Core A Survey Operations	Sep-21	Oct-21
Instrumentation (Main Survey)	*Assemble and test international master Main Survey SDS (CBA Participants)	Core A Platform	Nov-21	Nov-21
Instrumentation (Main Survey)	*Final Main Survey Questionnaires authored in QAT (Master Version and Automatic changes)	Core A Questionnaires	Nov-21	Nov-21
Instrumentation (Main Survey)	*Negotiate Main Survey Questionnaire adaptations and translation updates	Core A Questionnaires, Core D, Participants	Nov-21	Apr-22
Instrumentation (Main Survey)	*Assemble and test national Main Survey SDS (CBA Participants), based on agreed-upon schedule dependent on Main Survey dates	Core A Platform and Participants	Dec-21	Apr-22
Instrumentation (Main Survey)	*Prepare draft Main Survey Analysis Plan for the questionnaires	Core A Questionnaires	Feb-22	Feb-22
Instrumentation (Main Survey)	*Release Main Survey online questionnaire passwords to Participants and monitor progress (<i>Note: This task is completed on a rolling basis, based on Participant Main Survey dates</i>)	Core A Questionnaires	Feb-22	Jan-23

Exhibit D.6 – Tentative schedule of tasks for the Main Survey Phase

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Survey Operations	*Prepare and release final Main Survey School-level Materials	Core A Survey Operations	Sep-21	Nov-21
Survey Operations	*Prepare and release Main Survey Review Questionnaire	Contractors	Sep-21	Mar-22
Survey Operations	*Webinar: Main Survey Gaining Co-operation	Core A Survey Operations and Participants	Sep-21	Oct-21
Survey Operations	*Webinar: Main Survey Adapting School-level Materials	Core A Survey Operations and Participants	Nov-21	Nov-21
Survey Operations	*Adaptation of Main Survey school-level materials	Core A Survey Operations and Participants	Nov-21	Sep-22
Survey Operations	*Assemble Main Survey paper booklets (PBA Participants), based on agreed-upon schedule dependent on Main Survey dates	Core A Cognitive and Participants	Nov-21	Mar-22
Survey Operations	*Release PQM Nomination Packet to NPMs	Core A Survey Operations	Dec-21	Dec-21
Survey Operations	*Webinar: Main Survey Preparing for Test Administrator/School Associate Trainings	Core A Survey Operations and Participants	Nov-21	Dec-21
Survey Operations	*Release final PQM Materials to NPM review	Core A Survey Operations	Dec-20	Dec-20
Survey Operations	*PQM training: Disseminate PQM Manuals/Self-Training Materials to PQMs, monitor completion of PQM self-trainings, and conduct follow-up webinars	Core A Survey Operations	Jan-22	Oct-22
Survey Operations	*Main Survey Data Collection Period (6 weeks per participant)	Participants	Mar-22	Dec-22

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Survey Operations	*Complete Main Survey Review Questionnaire	Participants	May-22	Sep-22
Survey Operations	*Prepare and release Main Survey Review Report	Contractors	Aug-22	Oct-22
Sampling and Weighting	*Student sampling helpdesk (Main Survey)	Core C Sampling and Participants	Jan-22	Dec-22
Sampling and Weighting	*Receive, review, and finalise Main Survey sampling data	Core C Sampling and Participants	Apr-22	Dec-22
Data Preparation, Management, and Analysis	*National Main Survey data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 1 Participants, Main Survey)	Participants	May-22	Jul-22
Data Preparation, Management, and Analysis	*Coder query service for cognitive data (Main Survey)	Core A Cognitive, Core B3, and Participants	May-22	Feb-23
Data Preparation, Management, and Analysis	*Main Survey Data cleaning, data analysis and release of certified data (Batch 1 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Aug-22	Oct-22
Data Preparation, Management, and Analysis	*National Main Survey data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 2 Participants, Main Survey)	Participants	Aug-22	Oct-22
Data Preparation, Management, and Analysis	*Main Survey Data Review (Batch 1 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Oct-22	Nov-22
Data Preparation, Management, and Analysis	*Main Survey Data cleaning, data analysis and release of certified data (Batch 2 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Nov-22	Jan-23

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Data Preparation, Management, and Analysis	*National Main Survey data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 3 Participants, Main Survey)	Participants	Nov-22	Feb-23
Data Preparation, Management, and Analysis	*Main Survey Data Review (Batch 2 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Jan-23	Feb-23

Exhibit D.7 – Tentative schedule of tasks for the Review and Reporting Phase

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
General Tasks	*Submission of all PISA resources, documents, materials and database to the OECD Archive	Core A	Mar-24	Mar-24
Meetings and Trainings	* CTEG Virtual Meeting3: Expert Group reviews results of the Main Survey and develops descriptors for levels of proficiency in the assessment as defined in the Framework and the analysis and reporting plan.	OECD and Core B3	Jun-23	Jun-23
Meetings and Trainings	* TAG Meeting 3: Review Main Survey analyses, and results and discuss adjudication results	OECD and Contractors, as needed	Jun-23	Jun-23
Meetings and Trainings	* MEG Meeting 4: Review Main Survey results and finalise described proficiency scales	Cores A	Jun-23	Jun-23
Survey Operations	*Prepare and release PQM Report	Core A Survey Operations	Sep-22	Jan-23
Sampling and Weighting	*Complete weighting steps 1-2 for all participants and step 3 for those with finalised sampling data	Core C Sampling	May-22	Aug-22
Sampling and Weighting	*Complete revisions for weighting steps 4-12	Core C Sampling	Jul-22	Sep-22
Sampling and Weighting	*Contact NPMs to explain data discrepancies	Core C Sampling and Participants	Jul-22	Mar-23
Sampling and Weighting	*Receive cleaned student data for step 4 and onward weighting	Core C Sampling	Jul-22	Mar-23
Sampling and Weighting	*Contact NPMs for non-response bias analysis when needed	Core C Sampling and Participants	Oct-22	Mar-23
Sampling and Weighting	*Continue with weighting	Core C Sampling	Oct-22	Mar-23
Sampling and Weighting	*Review results of NPM non-response bias analyses	Core C Sampling	Jan-23	Apr-23

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Sampling and Weighting	*Finalise NRBA and submit NRBA Analysis	Affected participants/adjudicated regions	Apr-23	Apr-23
Sampling and Weighting	*Submit weights for international database	Core C Sampling	Apr-23	Apr-23
Sampling and Weighting	*Deliver weighting summaries to each participant	Core C Sampling	May-23	May-23
Data Preparation, Management, and Analysis	*Data adjudication process	Contractors and OECD	Apr-23	Jul-23
Data Preparation, Management, and Analysis	*Preparation of first draft database (merging weights in preparation of scaling)	Core A Data Management	Apr-23	May-23
Data Preparation, Management, and Analysis	*Scaling (both cognitive and questionnaires)	Core A Psychometrics	May-23	Jun-23
Data Products	*Participants are required to contact the OECD regarding the withdrawal of national data for participant-specific reasons. Participants should contact the OECD with these requests and indicate any information that would assist with the understanding of this withdrawal of data.	OECD and Participants	Oct-22	Apr-23
Data Products	*Prepare and submit a first set Chapters for the Technical Report	Contractors	Nov-22	Mar-23
Data Products	*Deliver Interim database (with weights)	Core A	Apr-23	Apr-23
Data Products	*Prepare and submit a second set Chapters for the Technical Report	Contractors	Apr-23	Oct-23
Data Products	*OECD informs ETS of any data withdrawal requests	OECD	Apr-23	Apr-23
Data Products	*International Database 1 (participant ID masked) and participant national data files with preliminary plausible values and weights	Core A Data Management and Analysis	Jul-23	Jul-23

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Data Products	*Final feedback on International Database 1	Participants, OECD and Contractors	Jul-23	Jul-23
Data Products	*Preparation and release of Masked Data Explorer 1 (with data from the International Database 1)	Core A Data Management and Analysis	Jul-23	Jul-23
Data Products	*Period for participants to request masking of variables from the public use files (PUFs). <i>(Note: Participants that request masking to maintain anonymity of respondents including the masking of region/stratum identifiers (replaced by a common missing value) must submit an official request to the Core 3 during this masking-request period. Please note, region/stratum identifiers can be masked, but cannot be suppressed entirely from the database.)</i>	Core A Data Management and Analysis	Jul-23	Sep-23
Data Products	*International Database 2 (participant ID masked) and national data files with updated plausible values and weight. Released by the OECD, participants will receive information, which will enable them to convert the masked ID codes to actual Participant names for all Participants.	Core A Data Management and Analysis	Sep-23	Sep-23
Data Products	*Final feedback on International Database 2	Participants, OECD and Contractors	Sep-23	Sep-23
Data Products	*Preparation and release of Masked Data Explorer 2 (with data from the International Database 2)	Core A Data Management and Analysis	Sep-23	Sep-23
Data Products	*Approval of participant suppression request	Participants, OECD and Core A	Sep-23	Sep-23
Data Products	*Draft Data File 3 (OECD and Core A Questionnaire review only)	Core A	Sep-23	Oct-23
Data Products	*Preliminary (national) PUF (includes any final changes to data after International database review; applies all suppression requests)	Core A Data Management	Sep-23	Oct-23
Data Products	*Final files delivered to the OECD [OECD will prepare data for any separate releases, if needed (e.g., Financial Literacy or Creative Thinking or special variables)]	Core A Data Management	Oct-23	Nov-23

Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
Data Products	*Final feedback on Preliminary (national) PUF	Participants, OECD and Contractors	Nov-23	Nov-23
Data Products	*Final feedback on Preliminary Compendia	OECD	Nov-23	Nov-23
Data Products	*Preliminary Compendia	Core A Data Management	Nov-23	Nov-23
Data Products	*Final Compendia	Core A Data Management	Nov-23	Nov-23
Data Products	*PISA 2021 Official Release Data	OECD	Dec-23	Dec-23
Data Products	*Publication of Initial Report	OECD	Dec-23	Dec-23
Data Products	*Release of all data products	Core A Data Management	Dec-23	Dec-23

APPENDIX E. TENTATIVE SCHEDULE OF TASKS, CHRONOLOGICAL

This Appendix includes a tentative schedule of the same tasks presented in Appendix D, now organised chronologically to facilitate planning. The schedule presented below is tentative and shared only for planning purposes. It will be adjusted as needed. Detailed timelines will be communicated to countries/economies at the appropriate time through emails, manuals and workflows.

The following colour scheme is used in exhibits E.1 below:

General Tasks
Data Collection Periods
NPM Meetings or International Trainings
Subject Matter Expert Group Meetings: Mathematics Expert Group (MEG), Creative Thinking Expert Group (CTEG), Questionnaire Expert Group (QEG)
Technical Advisory Group (TAG) Meetings

Exhibit E.1 –Tentative schedule of tasks, chronologically

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	QEG Virtual Meeting 1: Project Introduction, roles and responsibilities, and timeline	Core B2	Feb-18	Feb-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	CTEG Meeting 1: Expert Group defines general directions of the framework	OECD	Feb-18	Feb-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	MEG Meeting 1: Discuss and generate the first draft frameworks	Core B1	Feb-18	Feb-18
1. First Review Phase (Chapter 4 of NPM Manual)	Framework	First draft of frameworks for Creative Thinking	OECD	Feb-18	Mar-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Prepare item submission guidelines (Mathematics)	Core A Cognitive	Mar-18	May-18
1. First Review Phase (Chapter 4 of NPM Manual)	Framework	First draft of frameworks for Questionnaires	Core B2	Mar-18	Mar-18
1. First Review Phase (Chapter 4 of NPM Manual)	Framework	First draft of frameworks for Mathematics	Core B1	Mar-18	Mar-18
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Prepare and submit consolidated timeline for PISA 2021	Contractors	Mar-18	Jul-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	QEG Meeting 1 (Face-to-face): Discuss and generate the first draft frameworks	Core B2	Mar-18	Mar-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Development and revision of new materials (Creative Thinking)	Core B3 and Participants	Mar-18	Dec-18

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Develop, test and release the PISA 2021 Portal	Core A Platform	Mar-18	Sep-18
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Decide which international options (questionnaires and cognitive domains) will be offered in PISA 2021	OECD	Apr-18	May-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Develop first draft of FT questionnaires in English	Core A Questionnaire	Apr-18	Oct-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Development and revision of new materials (Mathematics)	Core A Cognitive and Participants	Apr-18	Dec-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Authoring and testing master ENG version (Creative Thinking)	Core B3	May-18	Jan-19
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Prepare Technical Standards (Version 1)	Contractors	May-18	Jul-18
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Develop statement of NPM Roles and Responsibilities	Core A Survey Operations	May-18	Jul-18
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Prepare and release NPM manual (Version 1)	Contractors	May-18	Nov-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Item submission by participants (Mathematics)	Core A Cognitive, Core D and Participants	May-18	Aug-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	Test Development Workshop 1 (Mathematics)	Core A Cognitive	May-18	May-18

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	QEG Virtual Meeting 2: Focus on revisions to the questionnaire framework based on questions and comments received from the Senior QEG advisors	Core B2	May-18	May-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	CTEG Meeting 2: Expert Group reviews a first set of developed units and provides directions on scoring, analysis and reporting	OECD and Core B3	May-18	May-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Prepare and issue call for Creative Thinking stimuli submission: PISA 2021 Stimulus Submission Guide: Creative Thinking (Creative Thinking)	Core B3	Jun-18	Jul-18
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	School Readiness Tool released to new CBA participants, including PBA participants from 2018 that are CBA participants in 2021	Core A Platform	Jun-18	Jul-18
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Nominate NPMs and establish National Centres	Participants	Jun-18	Oct-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	Test Development Workshop 2 (Mathematics)	Core A Cognitive	Jun-18	Jun-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Develop CT analysis & reporting plan for the FT and MS and submit to the OECD for review	Core B3	Jun-18	Aug-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	QEG Virtual Meeting 3: Focus on Economic, Social and Cultural Status (ESCS)	Core B2	Jun-18	Jun-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Revise creative thinking questionnaire items based on data collection results with U.S. high school students	Core B3	Jul-18	Jul-18
1. First Review Phase (Chapter 4 of NPM Manual)	Framework	Second draft of frameworks for Questionnaires	Core B2	Jul-18	Sep-18

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Prepare and submit PISA 2021 assessment design and computer platform design (DRAFT)	Core A Cognitive	Jul-18	Jul-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Translatability Assessment (Creative Thinking, Batch 1)	Core B3, Core D and Core A Translation referee	Jul-18	Dec-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Stimuli submission by participants (Creative Thinking)	Core B3, Core D and Participants	Jul-18	Aug-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	QEG Virtual Meeting 4: Focus on Social and Emotional Characteristics	Core B2	Jul-18	Jul-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	MEG Meeting 2: Discuss frameworks and review sample tasks	Core B1	Jul-18	Jul-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Cog lab of Creative Thinking QQ items and revision of QQ items based on results	Core B3	Jul-18	Aug-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	TAG Meeting 1: PISA 2021 Goals, Roles and Responsibilities of TAG, Timeline, Design and analytical plans for the FT and MS	OECD and Contractors, as needed	Aug-18	Aug-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Submit Creative Thinking QQ units to CTEG for review	Core B3	Aug-18	Aug-18
1. First Review Phase (Chapter 4 of NPM Manual)	Framework	Second draft of frameworks for Mathematics	Core B1	Sep-18	Sep-18
1. First Review Phase (Chapter 4 of NPM Manual)	Framework	Second draft of frameworks for Creative Thinking	OECD	Sep-18	Sep-18

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Submit Creative Thinking QQ items to Core B2 for QEG review	Core B3 and Core B2	Sep-18	Sep-18
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Prepare and submit PISA 2021 assessment design and computer platform design (FINAL)	Core A Cognitive	Sep-18	Sep-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Authoring and review of Creative Thinking Translatability Assessment outcomes; Finalizing files for submission to ETS for National Review	Core B3	Sep-18	Oct-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	CTEG Virtual Meeting 1: Expert Group reviews the complete first draft of test units and provide directions for finalization and validation before national review	Core B3 / OECD	Sep-18	Sep-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Translatability Assessment (Mathematics) (Note: This task will take place in Batches)	Core A Cognitive and Translation referee; Core D	Sep-18	Oct-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	National review (Mathematics) (Note: This task will take place in batches between September and December, with 2 weeks review period per batch)	Core A Cognitive and Participants	Sep-18	Dec-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Translatability Assessment of first draft of FT questionnaires (including the CT module prepared by Core B3)	Core A Questionnaire and Core D	Oct-18	Oct-18
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Decide on participation in international options	Participants	Oct-18	Dec-18

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Translation and Linguistic Quality Control	Transfer of trend materials from PBA to CBA for Participants switching from PBA to CBA in this cycle	Core D	Oct-18	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	National review of first draft of FT questionnaires (including the CT module prepared by Core B3)	OECD, Participants, QEG	Oct-18	Oct-18
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Complete, submit, and work towards approval, cycle-wide Sampling Task 0 (ST0) – FT and MS testing languages	Core C Sampling, Core A Translation Referee, and Participants	Oct-18	Nov-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	National review (Creative Thinking) (Note: This task will take place in batches between September and December, with 2 weeks review period per batch)	Core B3 and Participants	Oct-18	Nov-18
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	QEG Meeting 2 (Face-to-face): Finalise frameworks and approve proposed FT instruments	Core A Questionnaire	Oct-18	Oct-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Authoring and testing of master ENG version (Mathematics)	Core A Platform	Nov-18	Jan-19
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	MEG Virtual Meeting 1: Review illustrative items and finalise framework	Core B1	Nov-18	Nov-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Develop second draft of FT questionnaires in English with revisions after QEG	Core A Questionnaire, Core D	Nov-18	Dec-18
1. First Review Phase (Chapter 4 of NPM Manual)	Framework	Final draft of frameworks for Creative Thinking	OECD	Dec-18	Dec-18

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Framework	Final draft of frameworks for Mathematics	Core B1	Dec-18	Dec-18
1. First Review Phase (Chapter 4 of NPM Manual)	Framework	Final draft of frameworks for Questionnaires	Core B2	Dec-18	Dec-18
1. First Review Phase (Chapter 4 of NPM Manual)	Translation and Linguistic Quality Control	Development of the French source version of the FT cognitive new materials for Creative Thinking and preparations of translation and adaptation materials for Creative Thinking. This task may be completed in batches as the units become available.	Core B3, Translation Referee and Core D	Dec-18	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	CTEG Meeting 3: Expert Group reviews the proposed instruments for the Field Trial	OECD and Core B3	Dec-18	Dec-18
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	National review of proposed FT questionnaires	Participants	Dec-18	Jan-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Development of the French source version of the FT questionnaires and preparations of translation and adaptation materials for all instruments	Core A Cognitive and Core D	Dec-18	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	Translation Plan: Complete and submit Translation Plan	Participants	Dec-18	Feb-19
4. Second Review Phase (Chapter 7 of the NPM Manual)	General Tasks	*Prepare and release an updated version of the NPM Manual (Version 2)	Contractors	Jan-19	Jan-19
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	MEG Virtual Meeting 2: Overview of characteristics of the FT instruments	Cores A and B1	Jan-19	Jan-19

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Preparation of FT student sampling software and Within-School Sampling Manual (WSSM)	Core C Sampling	Jan-19	Sep-19
1. First Review Phase (Chapter 4 of NPM Manual)	Translation and Linguistic Quality Control	Discuss Preferred Verification Schedule (PVS)	Core D Translation Verification and Participants	Jan-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Translation and Linguistic Quality Control	Development of the French source version of the FT cognitive new materials for Mathematics and preparations of translation and adaptation materials for mathematics. This task may be completed in batches as the units become available.	Core A Cognitive and Translation referee; Core D	Jan-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	Meeting for New NPMs: General information, timeline, PISA Portal and Communication tools, survey operations, overview of sampling, and overview of translation and adaptation procedures and associated guidelines Location: Westat, Rockville, Maryland, USA <i>(Note: Individual consultations on other aspects of the project will be arranged as needed and may be requested by participants.)</i>	Contractors and Participants	Jan-19	Jan-19
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Negotiate Study Programme Tables (SPT) for both the FT and MS	Core C Sampling and Participants	Jan-19	Jan-19
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Prepare FT sampling forms and develop initial FT Sampling Guidelines	Core C Sampling	Jan-19	Feb-19
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Country-specific cycle-wide sampling plans are released for Participants to review and to specify all options that will impact sampling	Core C Sampling and Participants	Jan-19	Apr-19

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Finalise Master QAS	Core A Questionnaire, Core D	Feb-19	Feb-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Prepare training videos and user guides for QAT and questionnaire adaptation process	Core A Questionnaire, Core D	Feb-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Finalization of the FT questionnaires in paper and authoring into QAT	Core A Questionnaire	Feb-19	Apr-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Develop FT Questionnaires testing scenarios	Core A Questionnaire	Feb-19	Apr-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Create participant QAS files	Core A Questionnaire	Feb-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Submit final proposal for FT tests and questionnaires	Cores A, B3 and D	Mar-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Creative Thinking FT instruments finalised, documented and presented to NPMs/PGB	Core B3	Mar-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Finalise all Creative Thinking materials for translation, including all supporting documentation	Core B3 and Core D	Mar-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Mathematics FT instruments finalised, documented and presented to NPMs/PGB	Core A Cognitive	Mar-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	FT Questionnaires finalised, documented and presented to NPMs/PGB	Core A Questionnaire	Mar-19	Mar-19

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Development of FT instruments	Finalise all Mathematics CBA materials for translation, including all supporting documentation	Core A Cognitive and Core D	Mar-19	Apr-19
1. First Review Phase (Chapter 4 of NPM Manual)	Translation and Linguistic Quality Control	Submit translation manual for National Centre	Core D	Mar-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Release FT Sampling Guidelines document	Core C Sampling	Mar-19	Mar-19
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Questionnaire adaptation negotiations	Core A Questionnaire Content and Participants	Mar-19	Jul-19
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	NPM Meeting 1: General information, timeline, integrated assessment design, survey operations, sampling, proposed FT instruments, translation and adaptation procedures, translation workflow, initiation to the translation editor, beginning of questionnaire adaptation period <i>(Note: this meeting includes individual consultations with Core A questionnaire content, Core A questionnaire technical, Core A data management, Core C and Core D)</i>	Contractors and Participants	Mar-19	Mar-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Set up of translation workflows and finalize and release New Mathematics CBA items for national translation <i>(Note: Math units may be released in batches between 1 April and 1 May, with the majority of units released on 1 April)</i>	Core A and Core D	Mar-19	Apr-19

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Finalize and release New Mathematics Coding Guides for national translation <i>(Note: Codings guides are only released after both ENG and FRA sources are finalized.)</i>	Core A, Core B3, and Core D	Apr-19	Jun-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Create national QAT and transfer trend structure	Core A Platform, Core A Questionnaire	Apr-19	TBD
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Create participant QAT and transfer trend structure	Core A Platform, Core A Questionnaire	Apr-19	TBD
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Translation Period: New Mathematics <i>(Note: As agreed by PVS based on LQC and data collection periods)</i>	Participants	Apr-19	Nov-19
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Translation Period: Trend materials for Mathematics, Reading and Science <i>(Note 1: New Participants or Participants switching from PBA to CBA; Note 2: As agreed by PVS based on LQC and data collection periods)</i>	Participants	Apr-19	Nov-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Set up of translation workflows and finalize and release Creative Thinking CBA items for national translation	Core A, Core B3, and Core D	Apr-19	May-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Create questionnaire xcliff files <i>(Note: These will be created on rolling basis as participants complete QAT adaptations)</i>	Core A Platform	May-19	Jul-19

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Translation Period: National questionnaires xliiff (<i>Note: As agreed by PVS based on translation period and data collection periods</i>)	Participants	May-19	Sep-19
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Translation Period: Creative Thinking Items (<i>Note: As agreed by PVS based on LQC and data collection periods</i>)	Participants	May-19	Nov-19
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	Finalize and release Creative Thinking Coding Guides for national translation (<i>Note: Codings guides are only released after both ENG and FRA sources are finalized.</i>)	Core A, Core B3, and Core D	May-19	Jun-19
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Finalise and release first two cycle-wide sampling forms	Core C Sampling	May-19	May-19
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Translation Period: Creative Thinking FT coding guides prior to updates (all CBA Participants) (per PVS)	Participants	Jun-19	Feb-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Translation Period: New Mathematics FT coding guides prior to updates (all CBA Participants) (per PVS)	Participants	Jun-19	Feb-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Translation Period: Coding guides for Trend Materials for Reading Mathematics and Science (New Participants or New Participants or Participants switching from PBA to CBA)	Participants	Jun-19	Feb-20
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Complete and submit cycle-wide Sampling Task 1 (ST1) - testing dates and population definition for both FT and MS		Jun-19	Jun-19

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Review and finalise ST1	Core C Sampling and Participants	Jun-19	Mar-20
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Complete and submit cycle-wide Sampling Task 2 (ST2) - school and student information for both FT and MS	Participants	Jul-19	Jul-19
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	Release templates for FT Sampling Task 3 and 3a (ST3 and ST3a)	Core C Sampling	Jul-19	Jul-19
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	Review and finalise ST2	Core C Sampling and Participants	Jul-19	Mar-20
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of questionnaires	Core A Questionnaire, Core D Translation Verification, and Participants	Jul-19	Dec-19
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of creative thinking materials (stimuli and items) <i>(Note: As agreed by PVS based on translation period and data collection periods)</i>	Core B3, Translation Referee, Core D Translation Verification, and Participants	Jul-19	Feb-20
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of new mathematics materials (stimuli and items) <i>(Note: As agreed by PVS based on translation period and data collection periods)</i>	Core A Cognitive, Translation Referee, Core D Translation Verification, and Participants	Jul-19	Feb-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of all trend materials (stimuli and items) for Mathematics, Reading and Science <i>(Note 1: New Participants or Participants switching from PBA to CBA; Note 2: As agreed by PVS based on LQC and data collection periods)</i>	Core A Cognitive, Translation Referee, Core D Translation Verification, and Participants	Jul-19	Feb-20
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	Complete and submit Sampling Tasks 3A and 3B (ST3A and ST3B) – detailed FT sample design	Participants	Jul-19	Sep-19
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Survey Operations	Release draft FT School-level Materials for NPM review	Core A Survey Operations	Jul-19	Aug-19
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	Assemble and test international master 2020 FT SDS (CBA Participants)	Core A Cognitive and Participants	Aug-19	Nov-19
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	Release FT Sampling Task 4 (ST4) template	Core C Sampling	Aug-19	Aug-19
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	Prepare and release final FT school materials for NPM	Core A Survey Operations	Sep-19	Nov-19
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	Prepare and release Field Trial Review Questionnaire	Contractors	Sep-19	Mar-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	Review and finalise ST3A and ST3B	Core C Sampling and Participants	Sep-19	Mar-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	Webinar: FT Gaining Cooperation	Core A Survey Operations and Participants	Sep-19	Oct-19
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Meetings and Trainings	NPM Meeting 2: Student/teacher sampling software training, coding questionnaires, overview of CBA systems, and survey operations (Note: Individual consultations on other aspects of the project can be arranged upon request, pending contractors' availability.)	Contractors and Participants	Nov-19	Nov-19
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	Webinar: FT Adapting School-level Materials	Core A Survey Operations and Participants	Nov-19	Nov-19
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	Assemble 2020 FT paper booklets (PBA Participants), on a rolling basis based on agreed-upon schedule dependent on FT dates	Core A Cognitive and Participants	Nov-19	Mar-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	Assemble and test national 2020 FT SDS (CBA Participants), on a rolling basis, based on agreed-upon schedule dependent on FT dates	Core A Platform and Participants	Nov-19	Apr-20
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	Complete and submit Sampling Task 4 (ST4) - List of sampled schools	Participants	Nov-19	Nov-19

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	Review and finalise ST4	Core C Sampling and Participants	Nov-19	Mar-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	Adaptation of FT School-level Materials	Core A Survey Operations and Participants	Nov-19	Jul-20
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of TA Scripts	Core A Survey Operations, Core D Translation verification and Participants	Dec-19	Nov-20
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	Review and approve FT Sampling Task 5 (ST5)	Core C Sampling and Participants	Dec-19	Mar-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	Webinar: 2020 FT Preparing for TA/SA Trainings	Core A Survey Operations and Participants	Dec-19	Dec-19
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Meetings and Trainings	2020 FT International Coder and Data Management Training: Training on coding procedures, item-by-item coder training for cognitive items, and data management (Note: Individual consultations on other aspects of the project can be arranged upon request, pending contractors' availability.)	Core A, Core B3 and Participants	Jan-20	Jan-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	Prepare international servers for 2020 FT online questionnaires	Core A Platform	Jan-20	Jan-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
4. Second Review Phase (Chapter 7 of the NPM Manual)	Sampling and Weighting	Prepare and release PISA 2021 Main Survey sampling forms	Core C Sampling	Jan-20	Mar-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Sampling and Weighting	Student sampling helpdesk (FT)	Core C Sampling and Participants	Jan-20	Aug-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Development of FT instruments	Finalise FT Coding Guides for Creative Thinking: Update FT coding guides following FT coder training	Core B3	Jan-20	Feb-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Development of FT instruments	Finalise FT Coding Guides for Mathematics: Update FT coding guides following FT coder training	Core A Cognitive	Jan-20	Feb-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	Prepare draft FT Analysis Plan for the core cognitive domains (prepared by Core A)	Core A (Core Domains)	Feb-20	Mar-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	Prepare draft FT Analysis Plan for creative thinking (prepared by Core B3)	Core B3 / OECD (Creative Thinking)	Feb-20	Mar-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	Prepare draft FT Analysis Plan for the questionnaires	Core A Questionnaires	Feb-20	Mar-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	Release FT online questionnaire passwords to participants and monitor progress (two weeks before the data collection) <i>(Note: These are released on a rolling basis, based on participant FT dates)</i>	Core A Questionnaires	Feb-20	Nov-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Update of French Source of FT coding guides for Creative Thinking	Core D and Translation Referee	Feb-20	Feb-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Update of French Source of FT coding guides for Mathematics	Core D and Translation Referee	Feb-20	Feb-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	Field Trial Data Collection Period (6 weeks per participant)	Participants	Mar-20	Aug-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Translation Update Period: Implementation of revisions in the New Mathematics FT coding guides following updates from the Coders Training Meeting	Participants	Mar-20	Apr-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of coding guides for Trend Materials for Reading Mathematics and Science (New Participants or New Participants or Participants switching from PBA to CBA)	Core D and Translation Referee	Mar-20	Oct-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Translation Period: Creative Thinking FT coding guides following updates	Participants	Mar-20	Oct-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of FT coding guides for Creative Thinking following updates	Core A Translation Referee, Core D Translation Verification, and Participants	Mar-20	May-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Translation and Linguistic Quality Control	Linguistic Quality Control (Verification) of FT coding guides for New Mathematics following updates	Core A Translation Referee, Core D Translation Verification, and Participants	Mar-20	Oct-20
4. Second Review Phase (Chapter 7 of the NPM Manual)	Sampling and Weighting	**Release PISA 2021 MS School Sampling Preparation Manual (Overview, ST7AB, ST8A and ST8b)	Core C Sampling	Mar-20	Mar-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	National FT data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 1 Participants, Field Trial)	Participants	Apr-20	Jul-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Sampling and Weighting	Receive, review, and finalise FT Sampling Task 6 (ST6) sampling data	Core C Sampling and Participants	Apr-20	Oct-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Develop first draft of FT GCM questionnaire module in English	Core A	May-20	May-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**National review of first draft of FT GCM questionnaire module	Participants	May-20	Jun-20
4. Second Review Phase (Chapter 7 of the NPM Manual)	Meetings and Trainings	**QEG Virtual Meetings: Series of meetings to cover the new Global Crises Module and FT analysis plans	Core A Questionnaire	May-20	Oct-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	Coder query service for cognitive data (2020 Field Trial)	Core A Cognitive, Core B3, and Participants	May-20	Oct-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
4. Second Review Phase (Chapter 7 of the NPM Manual)	Sampling and Weighting	**Release PISA 2021 MS School Sampling Preparation Manual (ST9-11)	Core C Sampling	May-20	Mar-21
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Translatability Assessment of first draft of FT GCM questionnaire module	Core D	May-20	Jun-20
4. Second Review Phase (Chapter 7 of the NPM Manual)	General Tasks	**Prepare and release Version 4 of the NPM Manual	Contractors	Jun-20	Sep-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Prepare updated draft FT Analysis Plan for the questionnaires	Core A Questionnaires	Jun-20	Sep-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Develop second draft of FT GCM questionnaire module in English with revisions after QEG	Core A	Jun-20	Jun-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**National review of 2021 FT questionnaires	Participants	Jun-20	Jun-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Development of the French source version of the FT questionnaires and preparations of translation and adaptation materials for all instruments	Core D	Jun-20	Jun-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Create QAT for FT GCM questionnaire module	Core A Platform, Core A Questionnaire	Jun-20	Jul-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	Prepare and release updated final 2021 FT school materials for NPM	Core A Survey Operations	Jun-20	Nov-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	**Country-specific cycle-wide sampling plans are released for Participants to review and to update all options that will impact sampling for the 2021 FT	Core C Sampling	Jun-20	Jun-20
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	**Update and submit cycle-wide Sampling Task 1 (ST1) - testing dates and population definition for both 2021 FT and 2022 MS, as necessary	Participants	Jun-20	Jun-20
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	**Update and finalise ST1 with FT and MS test dates, as necessary	Participants	Jun-20	Mar-21
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Finalise Master QAS for FT GCM questionnaire module	Core A	Jul-20	Jul-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Finalization of the FT GCM questionnaire module in paper and authoring into QAT	Core A Platform, Core A Questionnaire	Jul-20	Jul-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Create participant QAS files (FT GCM questionnaire module)	Core A	Jul-20	Jul-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Meetings and Trainings	**Webinars for review of various 2021 FT procedures	Contractors and Participants	Jul-20	Dec-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Create participant QAT and transfer trend structure (FT GCM questionnaire module)	Core A Platform, Core A Questionnaire	Jul-20	Nov-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Create FT GCM questionnaire module xlift files <i>(Note: These will be created on rolling basis as participants complete QAT adaptations)</i>	Core A Platform, Core A Questionnaire	Jul-20	Nov-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	**Update and submit cycle-wide Sampling Task 2 (ST2) - school and student information for both FT and MS, as necessary	Participants	Jul-20	Jul-20
1. First Review Phase (Chapter 4 of NPM Manual)	Sampling and Weighting	**Update and finalise ST2, as necessary	Core C Sampling and Participants	Jul-20	Mar-21
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	**Update and submit Sampling Tasks 3A and 3B (ST3A and ST3B) – detailed FT sample design, as necessary	Participants	Jul-20	Sep-20
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	**Prepare and submit revised consolidated timeline for PISA 2022	Participants	Jul-20	Jul-20
1. First Review Phase (Chapter 4 of NPM Manual)	General Tasks	**Prepare Technical Standards (Version 2)	Contractors and OECD	Jul-20	Nov-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	National FT data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 2 Participants, Field Trial)	Participants	Aug-20	Sep-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	FT Data cleaning, data analysis and release of certified data (Batch 1 Participants, Field Trial)	Core A Data Management, Cognitive and Questionnaire Content	Aug-20	Sep-20
1. First Review Phase (Chapter 4 of NPM Manual)	Development of FT instruments	**Develop revised FT Questionnaires testing scenarios	Core A	Aug-20	Sep-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Analyse limited 2020 FT data (Mathematics)	Core A Cognitive	Aug-20	Sep-20
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	**Questionnaire adaptation negotiations (GCM Module)	Core A Questionnaire Content and Participants	Aug-20	Sep-20
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Translation and Linguistic Quality Control	**Centralised translation of new Global Crises Module by Core D	Core D	Aug-20	Sep-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Analyse limited 2020 FT data (Creative Thinking)	Core B3	Aug-20	Sep-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Assemble and test international master 2021 FT SDS (CBA Participants)	Core A Cognitive and Participants	Aug-20	Oct-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	**Prepare and release revised Field Trial Review Questionnaire	Contractors	Sep-20	Mar-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	FT Data cleaning, data analysis and release of certified data (Batch 2 Participants, Field Trial)	Core A Data Management, Cognitive and Questionnaire Content	Sep-20	Dec-20

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	**Review and finalise updated ST3A and ST3B	Core C Sampling and Participants	Sep-20	Mar-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Meetings and Trainings	*CTEG Virtual Meeting 2: Expert Group reviews the results of the Field Trial Analysis and provides recommendations for the selection of items for Main Study	OECD and Core B3	Oct-20	Oct-20
4. Second Review Phase (Chapter 7 of the NPM Manual)	Meetings and Trainings	**TAG Virtual Meeting 1: Review limited 2020 FT analyses and proposed changes to the Technical Standards	OECD and Contractors, as needed	Oct-20	Oct-20
1. First Review Phase (Chapter 4 of NPM Manual)	Meetings and Trainings	MEG Virtual Meeting 3: Update on limited 2020 FT analyses	Cores A and B1	Oct-20	Oct-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Assemble 2021 FT paper booklets (PBA Participants), on a rolling basis based on agreed-upon schedule dependent on FT dates	Core A Cognitive and Participants	Nov-20	Mar-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Assemble and test national 2021 FT SDS (CBA Participants), on a rolling basis, based on agreed-upon schedule dependent on FT dates	Core A Platform and Participants	Nov-20	Apr-21
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	**Complete and submit updated Sampling Task 4 (ST4) - List of sampled schools	Participants	Nov-20	Nov-20
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	**Review and finalise ST4, as necessary	Core C Sampling and Participants	Nov-20	Mar-21

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	**Webinar: 2021 FT Preparing for TA/SA Trainings	Core A Survey Operations and Participants	Dec-20	Dec-20
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	**Adaptation of updated 2021 FT School-level Materials	Core A Survey Operations and Participants	Dec-20	Jul-21
2. Field Trial Preparation Phase (Chapter 5 of the NPM Manual)	Sampling and Weighting	**Review and approve updated FT Sampling Task 5 (ST5)	Core C Sampling and Participants	Dec-20	Mar-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Meetings and Trainings	**2021 FT International Coder and Data Management Training: Virtual training on coding procedures, item-by-item coder training for new cognitive items, and data management	Core A, Core B3 and Participants	Jan-21	Jan-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Prepare international servers for 2021 FT online questionnaires	Core A Platform	Jan-21	Jan-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Sampling and Weighting	**Student sampling helpdesk (2021 FT)	Core C Sampling and Participants	Jan-21	Aug-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Prepare draft FT Analysis Plan for the core cognitive domains (prepared by Core A)	Core A (Core Domains)	Feb-21	Mar-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Prepare updated draft FT Analysis Plan for creative thinking (prepared by Core B3)	Core B3 / OECD (Creative Thinking)	Feb-21	Mar-21

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Release 2021 FT online questionnaire passwords to participants and monitor progress (two weeks before the data collection) <i>(Note: These are released on a rolling basis, based on participant FT dates)</i>	Core A Questionnaires	Feb-21	Nov-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Prepare draft updated FT Analysis Plan for the core cognitive domains (prepared by Core A)	Core A (Core Domains)	Mar-21	Mar-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	**2021 Field Trial Data Collection Period (6 weeks per participant)	Participants	Mar-21	Aug-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Sampling and Weighting	*Send out 1-month MS sampling form submission reminder for upcoming samples	Core C Sampling	Mar-21	Mar-22
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	**National 2021 FT data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 1 Participants, Field Trial)	Participants	Apr-21	Jul-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Sampling and Weighting	**Receive, review, and finalise 2021 FT Sampling Task 6 (ST6) sampling data	Core C Sampling and Participants	Apr-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Sampling and Weighting	*Complete and submit MS sampling forms 2 months before negotiated sample delivery date	Participants	Apr-21	Mar-22

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
4. Second Review Phase (Chapter 7 of the NPM Manual)	Sampling and Weighting	*Review and finalise participant MS sampling forms	Core C Sampling and Participants	Apr-21	Mar-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Survey Operations	*Release draft MS School Materials for NPM review	Core A Survey Operations	May-21	Aug-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	**Complete Field Trial Review Questionnaire	Participants	May-21	Sep-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Instrumentation (FT)	**Coder query service for cognitive data (2021 Field Trial)	Core A Cognitive, Core B3, and Participants	May-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Sampling and Weighting	*Preparation of MS student sampling software and Within-School Sampling Manual (WSSM)	Core C Sampling	Jul-21	Dec-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Sampling and Weighting	*Deliver MS school samples	Core C Sampling	Jul-21	Apr-22
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	**National 2021 FT data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 2 Participants, Field Trial)	Participants	Aug-21	Sep-21

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	**2021 FT Data cleaning, data analysis and release of certified data (Batch 1 Participants, Field Trial)	Core A Data Management, Cognitive and Questionnaire Content	Aug-21	Sep-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Prepare first draft of proposed MS Questionnaires based on FT analysis <i>(Note: This task and all decisions regarding the MS questionnaires rely only on data from participants in Batch 1 - those that had their submitted data approved by 31 July 2020.)</i>	Core A Questionnaires	Aug-21	Sep-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Analyse FT data and propose MS Instruments (Mathematics)	Core A Cognitive	Aug-21	Sep-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Prepare national MS Questionnaire Adaptation Sheet (QAS)	Core A Questionnaires, Core D	Aug-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Analyse FT data and propose MS Instruments (Creative Thinking)	Core B3	Aug-21	Sep-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Survey Operations	**Prepare and release Field Trial Review Report	Contractors	Aug-21	Oct-21
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Prepare and release final MS School-level Materials	Core A Survey Operations	Sep-21	Nov-21

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Prepare and release Main Survey Review Questionnaire	Contractors	Sep-21	Mar-22
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	**National 2021 FT data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 3 Participants, Field Trial)	Participants	Sep-21	Nov-21
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	**2021 FT Data cleaning, data analysis and release of certified data (Batch 2 Participants, Field Trial)	Core A Data Management, Cognitive and Questionnaire Content	Sep-21	Dec-21
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Survey Operations	*Release draft PQM Materials for NPM review	Core A Survey Operations	Sep-21	Oct-21
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Webinar: MS Gaining Cooperation	Core A Survey Operations and Participants	Sep-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Propose MS Questionnaires	Core A	Oct-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*National review of proposed Creative Thinking MS instruments	Participants	Oct-21	Oct-21

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*National review of proposed Mathematics MS instruments	Participants	Oct-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*National review of proposed MS Questionnaires	Participants	Oct-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Create national MS Questionnaire adaptation workflows and release to Participants	Core A Questionnaires, Core A Platform	Oct-21	Nov-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Meetings and Trainings	** MEG Virtual Meeting 3: Update on limited 2020 FT analyses	Core A	Oct-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Meetings and Trainings	* MEG Meeting 3: Finalise MS instruments to be shared with NPMs and PGB	Core A	Oct-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Create MS Questionnaire testing scenarios	Core A Questionnaires	Oct-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Meetings and Trainings	* QEG Meeting 3 (Face-to-face): Review FT results and finalise MS instruments to be shared with NPMs and PGB	Core A Questionnaire	Oct-21	Oct-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Review and final approval of MS Instruments (cognitive instruments and questionnaires)	OECD and PGB	Oct-21	Nov-21

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Correct errors or implement central revisions from FT to MS for Mathematics	Core A Cognitive and Translation referee, Core D Translation Verification, and Participants	Oct-21	Dec-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Correct errors or implement central revisions from FT to MS for Creative Thinking	Core B3, Core D Translation Verification, Core A Translation referee, and Participants	Oct-21	Dec-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Meetings and Trainings	*TAG Meeting 2: Review FT analyses, and results and proposed MS instruments	OECD and Contractors, as needed	Oct-21	Dec-21
4. Second Review Phase (Chapter 7 of the NPM Manual)	Meetings and Trainings	*CTEG Virtual Meeting 3: Expert Group reviews the results of the Field Trial Analysis and provides recommendations for the selection of items for Main Study	OECD and Core B3	Oct-21	Oct-21
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Instrumentation (MS)	*Final MS Questionnaires authored in QAT (Master Version and Automatic changes)	Core A Questionnaires	Nov-21	Nov-21
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Instrumentation (MS)	*Assemble and test international master MS SDS (CBA Participants)	Core A Platform	Nov-21	Nov-21

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Instrumentation (MS)	*Negotiate MS Questionnaire adaptations and translation updates	Core A Questionnaires, Core D, Participants	Nov-21	Apr-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Meetings and Trainings	*NPM Meeting 3: Review FT results, review MS proposed instruments, MS school sampling procedures and process for finalising instruments for the MS, survey operations and student/teacher sampling software training <i>(Note: This meeting includes individual consultations with Core A questionnaire content, Core A questionnaire technical, Core A data management and Core C)</i>	Contractors and Participants	Nov-21	Nov-21
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Webinar: MS Adapting School-level Materials	Core A Survey Operations and Participants	Nov-21	Nov-21
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Release PQM Nomination Packet to NPMs	Core A Survey Operations	Nov-21	Nov-21
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Webinar: MS Preparing for TA/SA Trainings	Core A Survey Operations and Participants	Nov-21	Dec-21
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Adaptation of MS school-level materials	Core A Survey Operations and Participants	Nov-21	Sep-22
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Assemble MS paper booklets (PBA Participants), based on agreed-upon schedule dependent on MS dates	Core A Cognitive and Participants	Nov-21	Mar-22

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
3. Field Trial Phase (Chapter 6 of the NPM Manual)	Data Preparation, Management, and Analysis	*2021 FT Data cleaning, data analysis and release of certified data (Batch 3 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Nov-21	Jan-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Framework	*Final frameworks for Creative Thinking	OECD	Dec-21	Dec-21
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Framework	*Final frameworks for Mathematics	Core B1	Dec-21	Dec-21
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Release final PQM Materials to NPM review	Core A Survey Operations	Dec-21	Dec-21
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Instrumentation (MS)	*Assemble and test national MS SDS (CBA Participants), based on agreed-upon schedule dependent on MS dates	Core A Platform and Participants	Dec-21	Apr-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Development of FT instruments	*Update of French Source of MS coding guides for Creative Thinking	Core D and Translation Referee	Jan-22	Feb-22
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*PQM training: Disseminate PQM Manuals/Self-Training Materials to PQMs, monitor completion of PQM self-trainings, and conduct follow-up webinars	Core A Survey Operations	Jan-22	Oct-22

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Meetings and Trainings	*MS International Coder and Data Management Training: Coding procedures, item-by-item coding training for cognitive items, and data management training. (Note: Individual consultations on other aspects of the project can be arranged upon request, pending contractors' availability.)	Contractors and Participants	Jan-22	Jan-22
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Sampling and Weighting	*Student sampling helpdesk (MS)	Core C Sampling and Participants	Jan-22	Dec-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Development of FT instruments	*Finalise MS coding guides for Mathematics following MS coder training	Core A Cognitive	Jan-22	Feb-22
4. Second Review Phase (Chapter 7 of the NPM Manual)	Instrumentation (MS)	*Prepare international servers for MS online questionnaires	Core A Platform	Jan-22	Feb-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Development of FT instruments	*Finalise MS coding guides for Creative Thinking following MS coder training	Core B3	Jan-22	Feb-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Development of FT instruments	*Update of French Source of MS coding guides for Mathematics	Core D and Translation Referee	Feb-22	Feb-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Instrumentation (MS)	*Prepare draft MS Analysis Plan for the questionnaires	Core A Questionnaires	Feb-22	Feb-22

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Instrumentation (MS)	*Release MS online questionnaire passwords to Participants and monitor progress <i>(Note: This task is completed on a rolling basis, based on Participant MS dates)</i>	Core A Questionnaires	Feb-22	Jan-23
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Main Survey Data Collection Period (6 weeks per participant)	Participants	Mar-22	Dec-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Translation and Linguistic Quality Control	*Translation Period: Mathematics and Creative Thinking MS coding guides following updates	Participants	Mar-22	Apr-22
5. Main Survey Preparation Phase (Chapter 8 of the NPM Manual)	Translation and Linguistic Quality Control	*Linguistic Quality Control (Verification) of MS coding guides for Mathematics and Creative Thinking following updates	Core A Translation Referee, Core D Translation Verification, and Participants	Mar-22	May-22
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Sampling and Weighting	*Receive, review, and finalise MS sampling data	Core C Sampling and Participants	Apr-22	Dec-22
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Complete Main Survey Review Questionnaire	Participants	May-22	Sep-22
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*National MS data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 1 Participants, Main Survey)	Participants	May-22	Jul-22

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*Coder query service for cognitive data (Main Survey)	Core A Cognitive, Core B3, and Participants	May-22	Feb-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Complete weighting steps 1-2 for all participants and step 3 for those with finalised sampling data	Core C Sampling	May-22	Aug-22
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Complete revisions for weighting steps 4-12	Core C Sampling	Jul-22	Sep-22
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Contact NPMs to explain data discrepancies	Core C Sampling and Participants	Jul-22	Mar-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Continue with weighting	Core C Sampling	Jul-22	Mar-23
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*MS Data cleaning, data analysis and release of certified data (Batch 1 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Aug-22	Oct-22
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*National MS data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 2 Participants, Main Survey)	Participants	Aug-22	Oct-22

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Survey Operations	*Prepare and release Main Survey Review Report	Contractors	Aug-22	Oct-22
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Survey Operations	*Prepare and release PQM Report	Core A Survey Operations	Sep-22	Jan-23
4. Second Review Phase (Chapter 7 of the NPM Manual)	General Tasks	*Prepare and submit PISA 2021 integrated assessment design for the Main Survey	Core A Cognitive	Sep-22	Oct-22
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Participants are required to contact the OECD regarding the withdrawal of national data for participant-specific reasons. Participants should contact the OECD with these requests and indicate any information that would assist with the understanding of this withdrawal of data.	OECD and Participants	Oct-22	Apr-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Contact NPMs for non-response bias analysis when needed	Core C Sampling and Participants	Oct-22	Mar-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Continue with weighting	Core C Sampling	Oct-22	Mar-23
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*MS Data Review (Batch 1 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Oct-22	Nov-22

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*MS Data cleaning, data analysis and release of certified data (Batch 2 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Nov-22	Jan-23
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*National MS data file preparation (scoring, data entry, validity and reliability checks) and data submission (8 weeks per participant) (Batch 3 Participants, Main Survey)	Participants	Nov-22	Feb-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Prepare and submit a first set Chapters for the Technical Report	Contractors	Nov-22	Mar-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Review results of NPM non-response bias analyses	Core C Sampling	Jan-23	Apr-23
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*MS Data Review (Batch 2 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Jan-23	Feb-23
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*MS Data cleaning, data analysis and release of certified data (Batch 3 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Feb-23	Apr-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Preparation, Management, and Analysis	*Data adjudication process	Contractors and OECD	Apr-23	Jul-23

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Deliver Interim database (with weights)	Core A	Apr-23	Apr-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Prepare and submit a second set Chapters for the Technical Report	Contractors	Apr-23	Oct-23
6. Main Survey Phase (Chapter 9 of the NPM Manual)	Data Preparation, Management, and Analysis	*MS Data Review (Batch 3 Participants, Main Survey)	Core A Data Management, Cognitive and Questionnaire Content	Apr-23	Apr-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*OECD informs ETS of any data withdrawal requests	OECD	Apr-23	Apr-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Preparation, Management, and Analysis	*Preparation of first draft database (merging weights in preparation of scaling)	Core A Data Management	Apr-23	May-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Finalise NRBA and submit NRBA Analysis	Affected participants/adjudicated regions	Apr-23	Apr-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Submit weights for international database	Core C Sampling	Apr-23	Apr-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Preparation, Management, and Analysis	*Scaling (both cognitive and questionnaires)	Core A Psychometrics	May-23	Jun-23

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Sampling and Weighting	*Deliver weighting summaries to each participant	Core C Sampling	May-23	May-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Meetings and Trainings	*CTEG Virtual Meeting 3: Expert Group reviews results of the Main Study and develops descriptors for levels of proficiency in the assessment as defined in the Framework and the analysis and reporting plan.	OECD and Core B3	Jun-23	Jun-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Meetings and Trainings	*TAG Meeting 3: Review MS analyses, and results and discuss adjudication results	OECD and Contractors, as needed	Jun-23	Jun-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Meetings and Trainings	*MEG Meeting 4: Review MS results and finalise described proficiency scales	Cores A	Jun-23	Jun-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*International Database 1 (participant ID masked) and participant national data files with preliminary plausible values and weights	Core A Data Management and Analysis	Jul-23	Jul-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Preparation and release of Masked Data Explorer 1 (with data from the International Database 1)	Core A Data Management and Analysis	Jul-23	Jul-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Final feedback on International Database 1	Participants, OECD and Contractors	Jul-23	Jul-23

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Period for participants to request masking of variables from the public use files (PUFs). <i>(Note: Participants that request masking to maintain anonymity of respondents including the masking of region/stratum identifiers (replaced by a common missing value) must submit an official request to the Core 3 during this masking-request period. Please note, region/stratum identifiers can be masked, but cannot be suppressed entirely from the database.)</i>	Core A Data Management and Analysis	Jul-23	Sep-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*International Database 2 (participant ID masked) and national data files with updated plausible values and weight. Released by the OECD, participants will receive information, which will enable them to convert the masked ID codes to actual Participant names for all Participants.	Core A Data Management and Analysis	Sep-23	Sep-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Preparation and release of Masked Data Explorer 2 (with data from the International Database 2)	Core A Data Management and Analysis	Sep-23	Sep-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Final feedback on International Database 2	Participants, OECD and Contractors	Sep-23	Sep-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Approval of participant suppression request	Participants, OECD and Core A	Sep-23	Sep-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Draft Data File 3 (OECD and Core A Questionnaire review only)	Core A	Sep-23	Oct-23

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Preliminary (national) PUF (includes any final changes to data after International database review; applies all suppression requests)	Core A Data Management	Sep-23	Oct-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Final files delivered to the OECD OECD will prepare data for any separate releases, if needed (e.g., Financial Literacy or Creative Thinking or special variables)	Core A Data Management	Oct-23	Nov-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Preliminary Compendia	Core A Data Management	Nov-23	Nov-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Final feedback on Preliminary (national) PUF	Participants, OECD and Contractors	Nov-23	Nov-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Final feedback on Preliminary Compendia	OECD	Nov-23	Nov-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Final Compendia	Core A Data Management	Nov-23	Nov-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*PISA 2021 Official Release Data	OECD	Dec-23	Dec-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Publication of Initial Report	OECD	Dec-23	Dec-23

Survey Phase	Area	PISA 2022 Tasks	Responsibility	Start Date	End Date
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	Data Products	*Release of all data products	Core A Data Management	Dec-23	Dec-23
7. Review and I. Reporting Phase (Chapter 10 of the NPM Manual)	General Tasks	*Submission of all PISA resources, documents, materials and database to the OECD Archive	Core A	Mar-24	Mar-24