

**ORGANISATION FOR ECONOMIC CO-OPERATION
AND DEVELOPMENT**

**CALL FOR TENDER
10000800**

**PISA 2018
Core A (Design, Development & Implementation) &
Core B (Framework Development)**

The deadline date for the receipt of Tenders is 11 April 2014, 3:00 p.m. (Paris time)

INTRODUCTION

The OECD brings together the governments of 34 countries committed to democracy and the market economy from around the world to:

- Support sustainable economic growth
- Boost employment
- Raise living standards
- Maintain financial stability
- Assist other countries' economic development
- Contribute to growth in world trade

The OECD also shares expertise and exchanges views with more than **100 other countries and economies**, from [Brazil](#), [China](#), and [Russia](#) to the least developed countries in Africa.

Established: 1961

Location: Paris, France

Membership: 34 countries

Budget: EUR 347 million

Secretariat staff: 2 500

Secretary-General: [Angel Gurría](#)

Publications: 250 new titles/year

Official languages: English/French

Monitoring, analysing and forecasting

The OECD mission is to promote policies that will improve the economic and social well-being of people around the world. We are focusing on helping governments in our member countries and elsewhere in four main areas:

- First and foremost, governments need to restore confidence in markets and the institutions and companies that make them function. That will require improved regulation and more effective governance at all levels of political and business life.
- Secondly, governments must re-establish healthy public finances as a basis for future sustainable economic growth.
- In parallel, we are looking for ways to foster and support new sources of growth through innovation, environmentally friendly 'green growth' strategies and the development of emerging economies.
- Finally, to underpin innovation and growth, we need to ensure that people of all ages can develop the skills to work productively and satisfyingly in the jobs of tomorrow.

Enlargement and enhanced engagement

In May 2007, OECD countries agreed to invite Chile, Estonia, Israel, Russia and Slovenia to open discussions for membership of the Organisation and offered enhanced engagement to Brazil, China, India, Indonesia and South Africa. While enhanced engagement is distinct from accession to the OECD, it has the potential in the future to lead to membership.

In 2010, Chile, Slovenia, Israel and Estonia became OECD member countries.

In 2013, OECD countries agreed to invite Colombia and Latvia to open discussions for membership of the Organisation. Accession talks with Russia are ongoing.

Publishing

The OECD is one of the world's largest publishers in the fields of economics and public policy. OECD publications are a prime vehicle for disseminating the Organisation's intellectual output, both on paper and online. Publications are available through the Online Information System (OLIS) for government officials, through OECD iLibrary for researchers and students in institutions, corporate, subscribed to our online library and through the Online Bookshop for individuals who wish to browse titles free-of-charge and to buy publications.

INSTRUCTIONS TO TENDERERS

ARTICLE 1 - PURPOSE AND OBJECT OF THE CALL FOR TENDERS

The OECD is issuing this Call for Tender with a view to identifying credible partners to work with the OECD on Core A (Design, Development & Implementation) & Core B (Framework Development) of the PISA 2018 project.

ARTICLE 2 - TERMS AND CONDITIONS OF THE CALL FOR TENDERS

2.1 Composition of the Call for Tenders

The documentation relating to the Call for Tenders includes the following parts:

- a) Instructions to Tenderers and their Annex;
- b) Terms of Reference;
- c) Minimum General Conditions for OECD Contracts.

2.2 Tenders

All Tenders will be treated as contractually binding for the Tenderer and the Tenderer shall consequently date and sign the documents mentioned above, as well as any document in support (including its proposal of prices), and initial each page of each document.

2.3 Duration of Tender validity

Tenders shall remain valid for one hundred twenty (120) calendar days, as from the deadline for receipt of Tenders.

2.4 Additional information

Should any problems of interpretation arise in the course of drawing up the Tender documents, Tenderers may submit their questions to sabrina.traskos@oecd.org , no later than five (5) calendar days before the deadline for the receipt of Tenders. All Tenderers will be advised of the answers given to such questions.

2.5 Acceptance and rejection of Tenders

There is no commitment on the part of the Organisation to accept any Tender or part thereof that is received in response to the Call for Tenders.

The OECD reserves the right:

- To accept Tenders with non-substantial defects
- To reject Tenders received after the deadline for receipt of Tenders, without indemnity or justification.

2.6 Modification or cancellation of Call for Tenders

The Organisation reserves the right to modify or cancel all or part of the Call for Tenders, should the need arise, without having to justify its actions and without such action conferring any right to compensation on Tenderers.

2.7 Partnerships.

Partnerships must jointly meet the administrative requirements set out in the Call for Tenders. Each partner must also meet full requirements individually.

2.8 Extension of the deadline for receipt of Tenders

The OECD reserves the right to extend the deadline for receipt of the Tenders. In that case, all the Tenderer's and Organisation's rights and duties and in particular Article 2.3 above will be subject to this new deadline.

2.9 Expenses

Tenders are not paid. No reimbursement of expenses related to the preparation of any Tender will be made by the OECD.

2.10 Confidentiality

Any information communicated to the Tenderer or which come to his knowledge in the course of the Call for Tenders and/or the performance of the work, are confidential and are strictly dedicated to the purpose of the Call for Tenders. The OECD reserves the right to request that all material be returned at the end of the Call for Tenders process.

ARTICLE 3 - PRESENTATION, SUBMISSION AND CONTENTS OF TENDERS

3.1 Tender presentation and conditions for submission

Tenders shall be entirely drafted **in English** and shall be **received** by the Organisation:

Before the deadline date of **11 APRIL 2014 (Paris time)**.

- In two paper copies and one electronic version (e.g. USB Key):
- In an envelope bearing the words:

*« NE PAS OUVRIR par le service courrier
Appel d'Offres n°100000800 »*

To the following address:

**OECD
EXD/PBF/CPG
To the attention of Sabrina Traskos/ Central Purchasing Group
2 rue André Pascal
75775 Paris Cedex 16
FRANCE**

3.2 Contents of the Tender

- The Tender in **two copies and one electronic version** (e.g. USB Key);
- A Letter of Application, signed by the Tenderer, confirming the following:
 - That all the elements of the offer are contractually binding;
 - That the person signing the offer has the authority to commit the Tenderer to a legally binding offer;
 - That the Tenderer accepts all of the Minimum General Terms and Conditions without any modification. If there is an exception, please state the exception and the rationale for that exception.
 - That the Tenderer, and each of the partners in the case of a partnership, have fulfilled all its legal obligations with regards to tax declarations and payments in its home country and must supply all the requisite certificates to that effect;
- Moreover, the Tenderer shall provide, to the extent possible in accordance with the national regulations of the Tenderer, certificate(s) identifying the Tenderer, including its name, legal form, address, registration number or equivalent, date founded, areas of activity and number of employees ;
- The signed Declaration detailed in Annex to these Instructions to Tenderers.

Please note that the Tenderer, *should it be shortlisted*, will be asked to provide the following:

- Any relevant existing agreements with intermediaries or third parties;
- Financial information for the last three (3) years;
- Proof of completed legal obligations with regards to tax declarations and payments in its home country and all the requisite certificates to that effect.

3.2.2 Financial Conditions

Prices quoted must include everything necessary for the complete execution of an eventual contract (insurance, transport, guarantees). Charges for items essential to the execution of the contract and not identified in the Tender will be borne by the Tenderer.

ARTICLE 4 - INTERVIEWS

The Organisation reserves the right to organise interviews and request the Tenderers to explain in more details the content of their Tenders.

ARTICLE 5 – SELECTION CRITERIA

Main criteria for Tenderer evaluation are as follows:

- Company information (relevant expertise and experience)
- Technical quality of the bid
- Financial proposal
- Background with international organisations

ARTICLE 6 - INFORMATION TO TENDERERS

All Tenderers will be informed, whenever possible, of the decision taken on their Tenders.

Annex

Declaration for Call for Tenders n° 100000800

As part of the offer in response to the OECD call for Tenders n 100000800, the Tenderer (company or individual) declares on oath the following:

- That it is not bankrupt or being wound up, is not having its affairs administered by the courts, has not entered into an arrangement with creditors, has not suspended business activities, is not the subject of proceedings concerning those matters, and is not in any analogous situation arising from a similar procedure provided for under national legislation or regulations;
- That it has not been convicted of an offence concerning its professional conduct by a judgment which has the force of *res judicata*;
- That it has not been the subject of a judgment which has the force of *res judicata* for fraud, corruption, involvement in a criminal organisation or any other illegal activity which may be detrimental to the financial interests of the OECD, its members or its donors;
- That it is not guilty of misrepresentation in supplying the information required as a condition of participation in this Call for Tenders or has failed to supply any relevant information;
- That it is not subject to a conflict of interest;
- That its employees and any person involved in the execution of the work to be performed under the present Call for Tenders are regularly employed according to national laws to which it is subject and that it fully complies with laws and regulations in force in terms of social security and labor law;
- That it has not offered and will not offer, has not granted and will not grant, has not sought and will not seek to obtain, and has not accepted and will not accept any advantage, financial or in kind, to or from any party whatsoever, constituting an illegal practice or involving corruption, either directly or indirectly, as an incentive or reward relating to the award or the performance of the contract that would result from the OECD call for Tenders n 100000800.

I, the undersigned, on behalf of the company, understand and acknowledge that the Organisation may decide not to award the contract to a Tenderer who is one of the situations indicated above. I further recognise that the Organisation may terminate for default any contract awarded to a Tenderer who has been found guilty of misrepresentation in supplying, or has failed to supply, the information required as a condition of participation in this Call for Tenders. Finally I understand and acknowledge that the Organisation may inform any third party, including its members and donors in case a Tenderer is in one of the above mentioned situations or when should it be found guilty of making false declarations, committing fraud, or to be in serious breach of its contractual obligations.

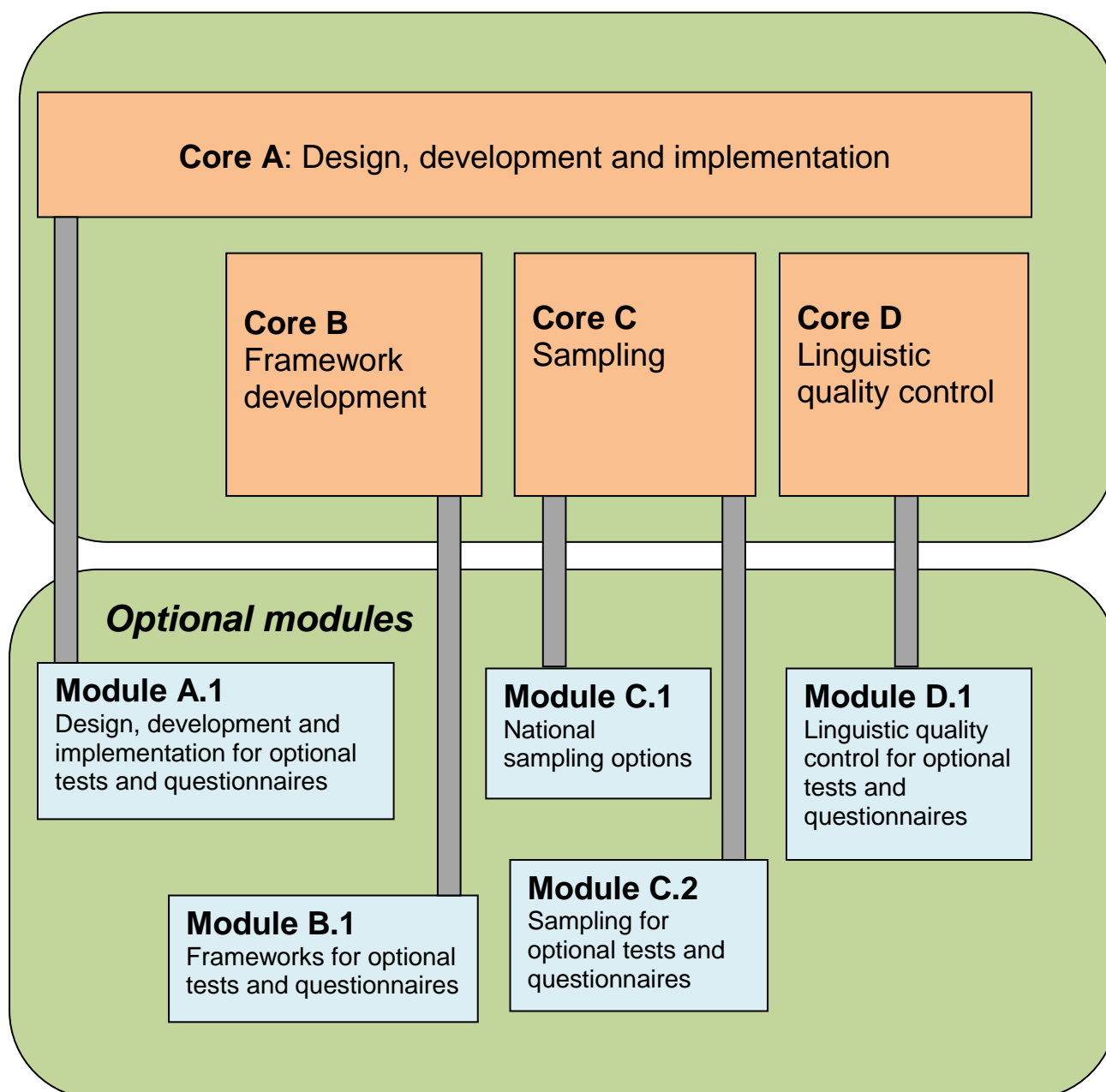
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Signature

SECTION 1 - ORGANISATION OF THE PISA 2018 CALL FOR TENDERS

1. These terms of reference are the first of two that will be issued in 2014 for the components of the PISA 2018 work programme. Figure 1 illustrates the separate components of the PISA 2018 work programme. Each component is included in one of the separate Terms of Reference. The work programme comprises core components (the upper part of the diagram) and optional modules (the lower part of the diagram). The optional modules are part of the Terms of Reference for the core component they belong to.

Figure 1: Structure of the PISA 2018 call for tenders



2. The issuing of the PISA 2018 terms of reference will be done in two stages, of which this is the first. The two stages are as follows:

- **Stage 1 - Issued in February 2014:** Call for tenders for:
 - Design, development and implementation (Core A)
 - Framework development (Core B)
- **Stage 2 – Expected to be issued in April 2014:** Call for tenders for:
 - Sampling (Core C)
 - Linguistic quality control (Core D)

3. Optional modules are those which countries can choose to participate in, and in general they are subject to additional payments from participating countries. The details of contractor costs for these optional components will be decided at a later date when the PISA Governing Board makes a decision about the options to be included in PISA 2018. The optional modules will include the following.

- *Module A.1: Design, development and implementation for additional tests and questionnaires:* Develop and implement optional cognitive assessments and/or questionnaires which may be included in the survey cycle such as an assessment of financial literacy, a parent or a teacher questionnaire. The tasks for this module will be similar to the Core A tasks for the core elements of the survey cycle.
- *Module B.1 Frameworks for additional tests and questionnaires:* Develop frameworks for optional cognitive assessment areas and/or questionnaires which may be included in the survey cycle such as an assessment of financial literacy, a parent or a teacher questionnaire.
- *Module C.1 National sampling options:* Design and implement variations to the standard PISA sampling procedure, such as grade-based sampling, class-based sampling, over-sampling to assess sub-national entities as a national option, and potential links between PISA and other international surveys such as TALIS.
- *Module C.2 Sampling for optional tests and questionnaires:* Sampling for optional tests or questionnaires which may be included in the survey cycle such as an assessment of financial literacy, a parent or a teacher questionnaire.
- *Module D.1 Linguistic quality control for optional tests and questionnaires:* Ensure the quality of the translations of national versions for additional tests or questionnaires which may be included in the survey cycle such as an assessment of financial literacy, a parent or a teacher questionnaire. Undertake the translation of source versions of such instruments into English or French.



NB Optional student questionnaire modules in ICT and Educational Careers have been offered in previous cycles with no additional costs for countries which choose to use them. In PISA 2018 they will therefore form part of the main core contracts rather than the additional optional modules.

4. Suppliers can bid for either Core A or Core B or both of the elements in this first stage of the call for tender. However, in order to encourage and facilitate the involvement of multiple suppliers in PISA 2018, a limit is being set on the number of cores that individual suppliers can be selected for within the overall PISA 2018 project (barring exceptional circumstances that provide value for money). A supplier may bid for any number of components but no supplier shall be awarded more than two cores. So for example, if a supplier wins the contract for Core A, then it can only be a winning bidder in a maximum of one other core.

5. The OECD and the PISA Governing Board will require the contractors for all parts and modules of the work programme for PISA 2018 to include technical and methodological development while ensuring that PISA will continue to provide reliable trend data. Background information on longer-term priorities for further development of the survey programme is given in the document *Beyond PISA 2015: A Longer-term Strategy of PISA*, which is available from the PISA 2018 call for tender section of the OECD PISA website.¹

Summary of responsibilities of the contractors for PISA 2018

6. This section summarises the responsibilities of the contractors for each of the four core components.

Contractor for Design, development and implementation (Core A) – A focus of this call for tenders

7. The contractor(s) for *Design, development and implementation* will have responsibility for the development and implementation of large parts of PISA 2018 and will manage and co-ordinate the work across all four core contractors, in close co-operation with the OECD Secretariat.

8. The Statement of Work for Core A comprises five tasks, which are described in more detail in Section 3 of this document:

Task 1: Management and co-ordination: The approach to be taken to project management will be agreed between the contractor for Core A and the OECD Secretariat. The contractor will be responsible for facilitating the implementation of the agreed project management approach by all core contractors; for working with the other contractors to co-ordinate their work; and for ensuring that the OECD Secretariat is kept fully informed on the progress of the project. This will involve, among other things, developing and maintaining an integrated project plan and timeline, establishing tools and mechanisms for effective communication between the contractors, and collecting and collating regular progress updates from all core contractors; alerting the Secretariat

¹ <http://www.oecd.org/pisa/pisaproducts/PISA-2018-documents-for-bidders.htm>



of any deviations from plans and schedules and advising the Secretariat on the implications of any such deviations.

Task 2: *Survey design, test and questionnaire development:* The contractor will be responsible for developing an assessment design and constructing computer-based tests and questionnaires that follow the specifications and content presented in the framework developed by the Core B contractor(s). As part of this work, the contractor will work closely with the Core B contractor on activities which can inform framework development, such as collaboration on the development and trialling of “proof of concept” assessment items.

Task 3: *Survey operations, quality control, liaison with national centres:* The contractor will develop and implement survey operations and procedures, and liaise with and support National Project Managers with the implementation of the survey, including organising and hosting meetings of National Project Managers. The contractor will also lead the review and updating of PISA’s Technical Standards in co-operation with the other contractors and the OECD Secretariat and will establish and implement plans for monitoring adherence to the standards.

Task 4: *Development and maintenance of computer platform and communication portal:* The contractor will be responsible for developing, improving and maintaining the computer platform developed for PISA 2015 for delivery of tests and questionnaires in schools and collection of data. This includes further development of the integration of national centre activities such as translation and adaptation of instruments and the construction of national versions of tests and questionnaires within the platform. It also includes maintenance and further development of the portal used for communication between contractors and national centres and support for all users.

Task 5: *Data handling, analysis and scaling:* The contractor will develop an analysis and reporting plan, which will guide the OECD Secretariat in preparing and designing the reporting for PISA 2018, clean all collected data, conduct analyses on the Field Trial and Main Study data, and provide a fully documented database with a set of basic indicators or their components, which will allow the OECD Secretariat, the PISA Governing Board and others to conduct their own further analyses. The contractor will support the preparation of the international report for PISA 2018 and will be responsible for leading the development of PISA 2018 Technical Report.

9. The contractor(s) for Core A will participate in the work of the expert groups (as described in this document) during the framework development phase, and will take over the responsibility for the groups from Core B once the project moves into the instrument development phase. At this stage, the contractor(s) for Core A may wish to continue with the same group membership, or may wish to propose changes in membership to the PISA Governing Board, although a high degree of continuity of membership would be desirable.

10. Bidders for Core A are encouraged to bid for all tasks, and to consider partnership or sub-contracting arrangements as required. Bidders may, if they wish, submit a proposal to carry out only one or some of the tasks, if they consider that they are able to add value by carrying them out separately. See further details in the Statement of Work (Section 3).

Contractor(s) for Framework development (Core B) – Focus of this call for tenders

11. The contractor(s) for Core B are required to develop the PISA 2018 frameworks, which are the conceptual underpinning to the survey and the foundation on which all subsequent work on the cycle will be based. The framework development will inform the nature of the information to be collected, the outcomes to be measured and the approach to development of tests and questionnaires in PISA 2018.

12. The Statement of Work for Core B comprises three tasks, which are described in more detail in Section 3 of this document:

Task 1: Revise and redevelop the assessment framework in *reading*, the major domain in PISA 2018, and review the assessment frameworks for *science* and *mathematics* to ensure that they are up to date with major developments in the fields. The framework for reading shall make full use of the opportunities afforded by the computer-based mode of assessment and build on current state of research in the field of reading, while taking account of the need for measurement of trends over time. The frameworks for the minor domains – science and mathematics – shall require only review and possible minor revisions to the frameworks used in PISA 2015.

Task 2: Develop a framework for the collection of contextual information and the measurement of other educational outcomes which may have connections with performance such as attitudes, motivations or ambitions, through questionnaires for students and schools and the collection of system-level information. As with the development of PISA in general, the development of this framework will rest on participation of a wide community of stakeholders, policy makers, analysts and researchers for providing ideas and themes for PISA. As reading is the major domain of the PISA 2018 assessment, domain-specific areas that may be covered in the student questionnaire include students' experiences with reading in and out of school. The framework will also identify opportunities to include data from other sources (*i.e.*, data not collected solely through questionnaires, or data collected on the level of education systems) as well as possible linkages with other data sources, such as the OECD system-level data collection (NESLI).

Task 3: Develop a framework for the measurement of Global Competencies, which is an innovative assessment domain to be developed for PISA 2018. The domain is expected to include both cognitive aspects of global competency skills and other educational outcomes of relevance to global competency. The framework should provide a sound basis for computer-based assessment of the domain.

13. The contractor(s) for Core B will create the appropriate Expert Groups, in consultation with the PISA Governing Board and the OECD Secretariat, and manage those meetings of the groups dealing with framework development. There will be a Reading Expert Group (as part of Task 1), a Questionnaire Expert Group (as part of Task 2) and a Global Competencies Expert Group (as part of Task 3). The contractor(s) for Framework Development will ensure good communication between the expert groups and other contractors, particularly the contractor for Core A. It will be important that Core A in particular participates in the work of the expert groups and that Cores A and B work together closely from the beginning of the framework development activities. Core A will take over responsibility for the expert groups once the project moves into the instrument development phase. The bidder should suggest how a good working relationship can be established and maintained from the beginning.

14. Bidders for Core B are encouraged to bid for all tasks, and to consider partnership or sub-contracting arrangements as required. However bidders may, if they wish, submit bids for only one or



some of the tasks if they consider that they are able to add value by carrying them out separately. See further details in the Statement of Work (Section 3).

Contractor for Sampling (Core C) – Call for Tenders expected to be issued in April 2014

15. The contractor for *Sampling* will be required to:

Task 1: Prepare draft and final versions of the sampling plans for the field trial and main study. Sampling plans should specify methods and standards for decisions regarding inclusion/exclusion; incorporate improvements to existing practices where appropriate, including to the mechanisms for assessing the adequacy of participating countries' sample frames and for assuring the adequate demographic and geographic representation of students and schools; include procedures that each country would use in drawing a robust sample from the sampling frame, including sampling standards.

Task 2: In coordination with the contractor for Core A, advise on sampling standards and develop quality control procedures for assessing and ensuring that the PISA sampling standards are met; and, in cooperation with the sampling referee, establish procedures for dealing with samples that do not meet the predetermined sampling standards.

Task 3: Prepare sampling weights for the field trial and the main study. This activity will be carried out as part of the broader data analysis process, which will be managed by the contractor for Core A.

Task 4: Work with countries to define the target population and draw the samples, advise countries on their sample design, prepare training manuals and carry out training activities for national centre staff.

Contractor for Linguistic quality control (Core D) – Statement of Work expected to be issued in April 2014

16. The contractor for *Linguistic quality control* will be required to:

Task 1: Undertake the translation of the international source versions of data collection instruments. All international versions of data collection instruments (computer-based and paper-based assessment instruments and questionnaires) will be provided to countries in two source versions: an English and a French version. The contractor for Core A will develop the instruments in either of the two languages and the contractor for Core D shall translate them into the other of the two languages.

Task 2: Undertake the translation into English or French of test item submissions from participating countries. As part of the development of the data collection instruments, participating countries and international experts will submit item proposals to Core A, the contractor responsible for instrument development. The contractor for core D shall translate such items into either English or French, as preferred by the Core A contractor, in order for the items to be considered in the development process and eventually to become part of the source version of the assessment instruments.

Task 3: Work with the Core A test and questionnaire development teams to advise on translatability issues and to prepare translation guidelines for national centres.

Task 4: Ensure the quality of the translation into the national languages(s) used in each participating country of all test and questionnaire items and any other data collection instruments that are part of the core work programme. Countries are responsible for translating the instruments into their own national



languages from the English and/or French source versions. The contractor for Core D must work with national centres to ensure that the translations reflect the language as used in each participating economy/country and are of a quality which will ensure the cross-national comparability of the assessments. This task also covers parts of the manuals used for the preparation and administration of the assessments. The contractor will also review and propose updates to the technical standards regarding the translation of assessment instruments, questionnaires and manuals, to be considered and adopted by the PISA Governing Board.

SECTION 2 - OVERVIEW OF PISA PROGRAMME AND PROJECT DESIGN OF PISA 2018

Introduction

17. This section sets out the main principles of the PISA programme as well as the main features of the design of the project. This section is standard for each of the terms of reference issued for the PISA 2018 work.

18. The broad design parameters (guiding principles, assessment cycle, target population, sampling design, survey operations and management structure) that have guided all assessments from PISA 2000 onward will be maintained in PISA 2018. These are discussed in detail later in this section.

19. As will be emphasised throughout this section, the cornerstone of PISA remains international collaboration, and the role of the multiple contractors in ensuring the active engagement of all international and national stakeholders is central to the success of PISA.

20. The main delivery mode in schools is by computer, and all new assessment items are developed in computer-based mode. In PISA 2015, there is also a paper-based option, which contains trend items from previous cycles. This is being used by 16 countries which are not yet ready to implement computer-based assessment in their schools. It is likely that this paper-based alternative will still be required in PISA 2018.

Project background

21. Through a competitive tendering process in 1997, an international contractor was selected to implement the first cycle of PISA, known as PISA 2000, which was implemented from January 1998 to December 2001. Thirty-two countries participated in PISA 2000: 28 of these were OECD countries, and four were partner countries or economies. The first results were published in December 2001. Following the interest of additional countries to participate in PISA, a second round of PISA 2000, known as PISA Plus, was implemented, with results released in July 2003. Eleven countries participated in PISA Plus.

22. Through a competitive tendering process in 2000, an international contractor was selected to implement the second cycle of PISA, known as PISA 2003. The initial results were published in December 2004. All OECD countries at that time participated in this second cycle and were joined by 11 partner countries.



23. Through a competitive tendering process in 2003, an international contractor was selected to implement the third cycle of PISA, known as PISA 2006. All OECD countries at that time and 27 partner countries participated. The initial international results were released in December 2007.

24. Through a competitive tendering process in 2006, two international contractors were selected to implement the fourth cycle of PISA, known as PISA 2009. All 34 OECD countries at that time and 31 partner countries participated, and the initial results were published in December 2010. Following the interest of additional countries to participate in PISA, a second round of PISA 2009, known as PISA 2009+, was implemented with nine participating countries.

25. Through a competitive tendering process in 2009, a sole international contractor was selected to implement the core and modules of the fifth cycle of PISA, known as PISA 2012. In order to ensure a rigorous and transparent revision and validation of the mathematics framework, an additional contractor was appointed to jointly work with the main contractor on the development and validation of the mathematics framework. All 34 OECD countries and 31 partner countries and economies participated in PISA 2012. The initial results of PISA 2012 were published in December 2013.

26. Through a competitive tendering process in 2011 and 2012, four international contractors were selected to implement the sixth cycle of PISA, known as PISA 2015. The work is split into seven cores with some contractors being responsible for more than one core: (1) cognitive framework development, (2) development of electronic platform, (3) instrument development, scaling and analysis, (4) survey operations, (5) sampling, (6) questionnaire framework and development, and (7) management and oversight. All 34 OECD countries and 38 partner countries and economies are currently participating in PISA 2015. The results are expected to be published in December 2016.

Key Survey Objectives

27. Policy makers are interested in information about how their students' performance compares to that of students in other countries. Furthermore, they wish to understand why students achieve certain levels of performance so that they can determine what they can do to improve their educational systems and, ultimately, ensure that their students obtain the skills needed to succeed in the global workplace and be productive members of society.

28. Moreover, countries wish to collect information on other educational outcomes (such as student attitudes, interests, motivations, and beliefs) and contextual information that may relate to performance outcomes in important ways. This contextual information includes, among others, background characteristics of the students and their families (*e.g.* the student's gender and history of schooling, the family's socio-economic background) and characteristics on the levels of schools, classrooms and education systems (*e.g.* on admittance, selection and grouping policies, public or private management and financing of schools, accountability arrangements, approaches to school management, the involvement of stakeholders in decision making, and school resources).

29. Indicators of student achievement provide policy makers with an instrument that evaluates how well countries are serving their students. The central objectives of PISA are: to make educational systems more accountable; to provide input into legislation and policies; to focus and motivate educational reform and school improvement, especially where schools or educational systems with similar inputs achieve

varying results; to allow achievement to be monitored centrally under conditions of devolved administration; and to ensure that citizens are prepared for life and society.

30. More specifically, PISA is designed with the following deliverables in mind:

- Basic indicators that provide policy makers with a baseline profile of the knowledge, skills and competencies of students in their country.
- Contextual indicators that provide insight into how such skills relate to important demographic, social, economic and educational variables.
- Trend indicators which become available because of the ongoing, cyclical nature of the data-collections.
- Further focused policy analysis.

31. Reading in the language of instruction, mathematics, and science are the core priorities for assessment in the content areas, which are broadly defined and framed within a concept of literacy, which is further described below. PISA also includes assessments and surveys of cross-curricular competencies, recognising the importance of such skills for students' success later in life. This has included the assessment of problem-solving and collaborative problem solving in previous cycles, and PISA 2018 will extend this to the measurement of global competencies. Finally, context questionnaires among students and school principals permit PISA to seek explanations about achievement in student and school characteristics and contexts. Optional questionnaires are also offered for countries that wish to investigate additional contextual variables, for example via questionnaires for teachers or parents.

Long-term strategy and guiding principles

32. In 2013, the PISA Governing Board established a longer-term strategy for PISA which confirms the principles that have been the driving force behind PISA and which should also be adhered to when implementing PISA 2018. The principles are:

- a) PISA is a *system-level assessment*. It represents a commitment by governments to monitor the outcomes of education systems. The assessment's main outputs provide internationally comparable evidence on the quality, equity and efficiency of school systems at the system level.
- b) PISA is *policy-oriented*. It focuses on providing data and analysis that can help guide decisions on education policy. By linking data on students' learning outcomes with data on key factors that shape learning in and out of school, PISA highlights differences in performance patterns and identifies features common to high-performing students, schools and education systems.
- c) PISA is carried out *regularly* to enable countries to monitor their progress in meeting key learning objectives. The basic survey design has remained constant to allow for comparability from one PISA assessment to the next and thus to allow countries to relate policy changes to improvements in education outcomes.
- d) PISA assesses both *subject matter content knowledge*, on the one hand, and *the capacity of individuals to apply that knowledge creatively*, including in unfamiliar contexts, on the other.

Until now PISA has assessed students in three main domains in each round: reading, mathematics and science. These domains cover some of the fundamental skills needed to continue on with higher education or succeed in the labour market. In addition, one innovative assessment domain is typically included in each cycle.

- e) PISA *focuses on knowledge and skills towards the end of compulsory schooling*. It implements and analyses internationally standardised assessments of student learning outcomes up to the end of compulsory education. In most countries the end of compulsory education is around the age of 15 where students are supposed to have mastered the basic skills and knowledge to continue on to higher education or in the workforce.
- f) PISA is designed to provide comparable data *across a wide range of countries*. Considerable efforts are devoted to achieving cultural and linguistic breadth and balance in assessment materials. Stringent quality-assurance mechanisms are applied in the test design, translation, sampling and data collection. An age-based rather than a grade-based target population is used to ensure valid international comparisons of educational performance.
- g) PISA is *a collaborative effort*. Decisions about the scope and nature of the PISA assessments and the background information collected are undertaken by leading experts in participating countries. Governments oversee these decisions based on shared, policy-driven interests. New initiatives are considered in terms of their consistency with the longer term strategy that applies at a given time.

33. The longer-term strategy established in 2013 also sets out six objectives for the longer-term development of PISA, which contractors for the seventh cycle should be aware of in the development and implementation of PISA 2018. Bidders should consider these objectives in preparing their bids. The objectives are listed below, but bidders are advised to refer to the full description of each objective in the document *Beyond PISA 2015: A longer-term strategy of PISA*, which is available from the PISA 2018 call for tender section of the OECD PISA website.²

- To continue exploiting the advantages of computer-based testing, including increasing the use of adaptive testing, allowing the distinction between major and minor domains to be progressively diminished, and facilitating the better measurement of non-cognitive outcomes;
- To aim for greater synergies between PISA and OECD and other international surveys and data collections on education in order to provide more coherent information about learning outcomes as students move through the education system;
- To continue to seek methodological and analytical means to strengthen the policy relevance and analytical power of PISA, including establishing best practice for linking PISA with national assessments;
- To broaden the global coverage of PISA;

² <http://www.oecd.org/pisa/pisaproducts/PISA-2018-documents-for-bidders.htm>

- To maintain PISA as a system-level assessment, while recognising countries' desire to provide feedback to schools and facilitating countries to provide such feedback;
- To seek ways to widen access to PISA for students with disabilities and other special education needs.

34. Apart from the above-mentioned principles and objectives for the future development of PISA, contractors will also be expected to adhere to a number of principles that have guided the instrument development and data collection across all previous cycles:

- *Quality*, i.e. reliability, validity, and comparability. The assessment frameworks, instruments, analyses and publications must be valid, reliable, and comparable across countries, languages and over time. Effective methods should be employed to seek and utilise input from participating countries and to ensure a balanced representation of the cultural and linguistic contexts in participating countries.
- *Critical mass of indicators*. A small but critical mass of data on student achievement, contextual information and non-cognitive outcomes should be collected from which to prepare relevant and informative indicators.
- *Innovation in measurement and process*. While considering the constraints with regards to the comparability of results over time, contractors are nevertheless expected to further develop and improve on the methodology and procedures in previous PISA surveys, so as to maximise the quality, efficiency and effectiveness of the project. Such improvements and innovations may be in the assessment frameworks and instruments, the test development process, survey procedures, meeting structure and organisation, as well as the establishment of quality standards, quality assurance processes and the data analyses. This includes support for research and development activities related to methodologies and assessment domains, which are pursued across successive survey cycles.
- *Efficiency*. Activities should always be implemented in a timely and resource-conscious fashion. This relates to all activities, including the test development process, survey procedures, to all aspects of meetings including schedules and locations, establishment of quality standards and quality assurance processes.
- *Cost effectiveness*. Given the limited resources of many countries, national and international costs should be minimised while respecting the other principles listed here.
- *Partnership*. A collaborative working relationship among all actors must be developed from the beginning. Effective and adaptable project structures and mechanisms for communication must be developed and respected.
- *Balance*. A balance must be struck between meeting countries' needs and meeting the needs of the international comparative analysis. Contractors should ensure opportunities for country input into development processes. Furthermore, there should be clearly defined and transparent processes for building consensus and moderating disagreements.

- *Transparency.* Transparency of all international and national actors must be ensured. One method for doing so would include detailed documentation of meetings and activities as well as a detailed description of procedures that can be shared among actors.
- *Data ownership.* All data collected should be available to the participating countries for use in their own analyses.

35. In addition to the principles above, test security, data protection and confidentiality are essential, and bidders should describe how this will be assured. Contractors will be required to comply as a minimum with data privacy principles which are practised by OECD³, but must also comply with the national requirements of participating countries.

Technical Survey Design

36. This section provides a brief description of the general technical design of PISA, including information on the content domains, the context questionnaires, the target population and sample design.

37. A detailed description of the specific assessment design used in PISA 2015 is available in the document *PISA 2015 Integrated Design*, which is available from the PISA 2018 call for tender section of the OECD PISA website.⁴

Content domains

38. Reading in the language of instruction, mathematics, and science are to be covered as first priorities in PISA because these domains: (i) represent the curriculum of most interest to policy makers in making OECD-wide international comparisons; (ii) are universal across the participating countries; and (iii) can, with currently available methodologies, be measured in an internationally valid, reliable and cost-effective way.

39. PISA seeks to assess content, processes, attitudes, behaviours and habits, embedded in the context of content domains, rather than narrowly defined subject matter knowledge or curriculum-based materials. Content areas for reading, mathematics, and science are thus broadly defined in PISA. Furthermore, the countries participating in previous cycles have endorsed the concept of “literacy” as the framework for examining knowledge, skills, and competencies in the content areas. PISA goes beyond assessing the reproduction of subject-matter knowledge and also seeks to assess the capacity of students to extrapolate from what they know and apply their knowledge in unfamiliar situations. The term “literacy” encapsulates this broad conception of knowledge and skills. A number of publications, available from the OECD web site, describe how the concept of literacy is embedded in PISA and provide the PISA

³ See <http://www.oecd.org/privacy/>

⁴ <http://www.oecd.org/pisa/pisaproducts/PISA-2018-documents-for-bidders.htm>

definitions of reading literacy, mathematical literacy, and science literacy used in PISA's first six cycles.⁵ With literacy as the broad framework, PISA assesses the mastery of processes, understanding of concepts, and the ability to function in various situations. Although the specific definitions may require the contractors' attention in order to be aligned with one another, the contractors shall work within the concept of literacy in developing the assessments for the seventh cycle.

40. PISA seeks an examination of each of the three core domains – reading, mathematics and science - every three years, with examination of in-depth knowledge about each of the domains every nine years. Consequently, PISA has a survey cycle of nine years, with one data-collection scheduled every three years assessing a different content domain as the major one and two other content domains as minor ones. The amount of time allotted for the measurement of each domain has been determined by this distinction in previous cycles of PISA.

41. Reading is the major domain of assessment in PISA 2018, with mathematics and science as minor domains. However, the longer-term objective of the PISA Governing Board is to progressively diminish the distinction between the major and minor domains. Bidders for Core A in particular should consider how PISA 2018 could move further towards achieving this objective, particularly through increased use of adaptive testing.

42. The PISA Governing Board is keen to pursue further areas of assessment, and has decided to explore the measurement of global competencies as part of the core programme of work in PISA 2018.

Context questionnaires

43. An important objective of PISA is to gain insight into individual, institutional, systemic and pedagogical factors that influence learning processes and outcomes. To this end, PISA collects context information both at the student and school levels that enhances the explanation of student outcomes and performance in each content domain. PISA has also offered countries the opportunity to collect contextual information from parents in previous cycles, and in PISA 2015 has for the first time introduced an option to collect information from teachers.

44. Considering that a central objective of PISA is to contribute to an assessment of the preparedness of students for adult life, the student context questionnaire is not limited to aspects of students' work and life in school but includes other relevant perspectives such as students' home background and socio-economic status. In previous cycles, questionnaires were also used to collect information on efficacy and students' engagement; motivation and confidence with reading, mathematics and science; and students' aspirations and attitudes.⁶

Optional modules

5. See for example: PISA 2012 Assessment and Analytical Framework: Mathematics, Reading, Science, Problem-Solving and Financial Literacy (OECD, 2013). PISA 2015 draft frameworks are also available from the OECD web site. (<http://www.oecd.org/pisa/pisaproducts>)

⁶ Copies of questionnaires from previous PISA rounds can be obtained through <http://www.oecd.org/pisa/pisaproducts>.

45. Through optional modules, PISA offers countries the opportunity to assess selected topics of interest in addition to the main assessment. These are components (assessments or questionnaires) that countries may choose to administer. They generally relate to topics that are important to a substantial number of countries. In PISA 2015, a *teacher questionnaire*, a *parent questionnaire* and questionnaire modules on students' *educational career paths* and *ICT familiarity* are offered to countries. An optional assessment of *financial literacy* is also offered. The PISA Governing Board will identify the options that they may wish to include in PISA 2018.

Computer delivery

46. Computer-based assessment in PISA has grown progressively since its beginning in PISA 2006 when three countries implemented a computer-based assessment of science. Seventeen countries took part in the computer-based reading assessment in PISA 2009, and PISA 2012 included a computer-based assessment of problem solving as a core element, while an optional computer-based assessment of reading and mathematics was taken up by 32 participants. PISA 2015 marks a significant step in this development with the majority of participants administering a fully computer-based version of the assessment. All new test items in PISA 2015 are developed for computer delivery only and all questionnaires, except the optional parent questionnaire, are delivered on computer. An alternative paper-based version, which only contains trend items, is available for countries that are not able to administer the computer-based assessment. Of the 72 current participants in PISA 2015, 16 are using the paper-based assessment.

47. The contractors for PISA 2018 are expected to continue to exploit the advantages of computer-based assessment and other technological and methodological innovations. These developments could include further development of computer-based adaptive testing, which may to a limited extent be introduced in PISA 2015, and new and innovative item formats, in particular in the assessment of reading literacy and in context questionnaires. Further information on the objectives for computer-based assessment in PISA is available in the document *Beyond PISA 2015: A longer-term strategy of PISA*, which is available from the PISA 2018 call for tender section of the OECD PISA website.⁷

Target populations and sample design

48. PISA seeks to assess the cumulative yield of educational systems at an age that is standardised across countries and over time. PISA 2018 shall adopt the same operational definition of the target age used in the previous six cycles, namely 15-year-old students enrolled in educational institutions.

49. Student inclusion is an area of growing importance among participants. PISA's intent is to cover all students at the selected age capable of taking the test under reasonably uniform test administration procedures. To be included in OECD-sponsored international reports, a country must begin with a sampling plan that covers all students who are at the selected age. Within predetermined bounds and following the guidelines from previous cycles, students may be excluded who are speakers of a language other than the language of testing and who have been enrolled in a school in the national or regional

⁷ <http://www.oecd.org/pisa/pisaproducts/PISA-2018-documents-for-bidders.htm>

language of testing for less than one year. In addition, special education students who are not able, without substantial student or administrative burden and without adaptations of the assessment instruments, to take the test may be excluded from participation. Explanations for all exclusions must be provided. Despite these opportunities for exclusion, the OECD's goal is to achieve the greatest level of inclusion (especially with regard to students who have limited language proficiency and those with disabilities) that is possible and reasonable, in terms of fairness and sensitivity to students and validity of comparison.

50. Samples must be designed to maximise sampling efficiency for student-level estimates. However, they should also permit the linkage of student achievement data with school-level variables that are collected through the school questionnaire.

51. The sampling plan and assessment instrument design should allow for the continued use of separate scales for each of the three assessment domains (as well as sub-scales), for sound trend analysis in all content areas where applicable, as well as scales concerning the assessment of international options.

52. The sample size required for each country will depend on multiple factors, such as the estimated relative between- and within-school variance of student achievement, the number of sampling stages, the sample selection methods and the test design. Furthermore, in order to ensure that measures of student performance can be reliably related to structural variables from the school context questionnaires, sampling frames must consider the institutional context as well as the relative achievement variance within- and between-schools in each participating country.

PISA technical standards

53. The technical standards for the implementation of PISA specify the quality requirements in terms of sampling, translation and translation verification, test administration, quality monitoring, coding, data entry and data submission, and release and exclusion of data. The technical standards are reviewed periodically by the PISA Governing Board and improvements can be made with countries' approval. In PISA 2018, Core A will be responsible for leading the review and updating of the technical standards. The current technical standards are available from the PISA 2018 call for tender section of the OECD PISA website.⁸

Management structure

54. The PISA management structure utilises the strengths of countries with full membership status in PISA and existing infrastructures at the national and international levels and encourages co-operation and development with national educational and statistical agencies. The structure combines access to political structures at the level of the OECD, ownership by fully participating countries during project design, implementation and reporting and the necessary power of decision making on a day-to-day basis.

55. Countries with full membership status in PISA (currently the 34 OECD countries plus Brazil) are responsible for PISA at the policy level. Through the PISA Governing Board, they determine PISA's policy priorities and oversee adherence to these priorities during its implementation. This includes the

⁸ <http://www.oecd.org/pisa/pisaproducts/PISA-2018-documents-for-bidders.htm>



setting of priorities for indicator development and reporting, the development of data-collection instruments, and the determination of the scope of work that shall afterwards be translated into a tender for the international contractors.

56. The OECD Secretariat is responsible for PISA's overall management. It serves as the Secretariat of the PISA Governing Board and as the interface between the PISA Governing Board and the contractors.

57. The design and implementation of the surveys, within the framework established by the PISA Governing Board, is the responsibility of contractors selected through an approved and transparent tendering process, working closely with the OECD Secretariat.

58. Experts from participating countries serve on Subject Matter Expert Groups that provide input to the development of the assessment instruments to ensure that the participants' diverse cultural and curricular contexts are reflected in the assessments.

Participating countries

59. Participating countries shape the project in three principal ways:

- As members of the PISA Governing Board, they determine the policy objectives and design parameters for PISA. OECD countries and Partner countries that are full participants in the programme (Associate Partners) are represented in the Governing Board. Brazil is currently an Associate Partner with full membership of the PISA Governing Board.
- Through National Project Managers (NPMs), they implement the project at the national level subject to agreed-upon administrative procedures.
- Through experts represented in the Subject Matter Expert Groups (SMEG), they contribute to the development of the assessment frameworks and assessment instruments under the governance and auspices of the contractors.

60. Countries participating in PISA are expected to establish a national committee, drawn from the national educational and scientific community and experts involved in student assessment. These committees could, for example, provide advice to the national representatives to the PISA Governing Board and to the National Project Manager on the appropriateness of the international data-collection instruments in the national context, on matters of quality control, and on the dissemination of the results at the national level.

The PISA Governing Board (PGB)

61. The PISA Governing Board is composed of representatives of OECD countries and partner countries with full membership in PISA (Associate partners).

62. In consultation with the OECD Secretariat, the PISA Governing Board: (i) determines PISA's policy objectives and the content domains to be tested; (ii) establishes priorities for indicators, analysis and

data-collection instrument development; (iii) specifies the scope of work that shall be translated into a tender; and (iv) guides the preparation, review, and completion of all programme-related reports.

63. The PISA Governing Board also works with the OECD Secretariat to ensure compliance with the policy objectives and design parameters at milestones during PISA's implementation. In addition to enabling participating countries to share substantively with one another the programme's decision-making and policy direction, the PISA Governing Board enables participating countries to be fully informed of all aspects of PISA's implementation.

64. The PISA Governing Board currently considers two forms of co-operation with OECD partner countries as part of its global relations strategy: (i) Participant status, which gives access to participation in the PISA survey and observer status at the PISA Governing Board, and (ii) Associate status, which covers full participation in the PISA survey and in the PISA Governing Board. Associates in PISA take on the same obligations and rights as OECD countries, including the right to vote in the Governing Board. Brazil is currently an Associate.

National Project Managers

65. Participating countries and economies will nominate National Project Managers to implement the surveys in the national context. National Project Managers are the primary means of day-to-day contact between participating countries and the contractors for the implementation of PISA and shall communicate with the contractors on all issues related to the implementation of the assessments in their country. National Project Managers play a vital role in ensuring that PISA is a high-quality project with results that can be verified and evaluated. They can also play an important role in the development and review of PISA's reports and publications, in consultation with their respective PISA Governing Board member.

66. The National Project Manager decides how best to facilitate the communication and co-ordination needed at the national level for implementing data collection responsibilities as well as for interacting with international contractors.

67. A major risk in the implementation of PISA is the possibility of deviations introduced at the national level during the course of the implementation. Seemingly unimportant decisions, taken alone or in combination, can undermine the integrity of the entire survey in a particular country. The international contractors shall seek an open and collegial process with National Project Managers that stresses the role that key design parameters shall play in assuring final quality. The strict adherence to PISA standards ensures that the assessment is carried out with a high degree of uniformity in all participating countries and economies.

Subject Matter Expert Groups and Questionnaire Expert Groups

68. A strong cognitive core and a coherent theoretical underpinning are of key importance in the validity of PISA and other international comparative assessments. Furthermore, such assessments require a wide range of internationally available technical expertise in the different assessment domains. Substantive input from countries is also imperative in ensuring that the assessments will be internationally valid and reflect the cultural and curricular context of participating countries. Subject matter expert groups in PISA are usually established for each content domain to be tested as well as for context questionnaires. The



expert groups are key players in the development of the assessment frameworks and instruments. In addition, these groups assist the international contractors in linking PISA's policy objectives with substantive and technical expertise. The contractors are required to establish processes by which the expert groups, the contractors and the Secretariat can best communicate with each other and the participating countries.

Technical Advisory Group

69. The Technical Advisory Group constitutes a forum through which the main actors implementing the project interact both among themselves and with those whose additional technical expertise is sought. Unlike the Subject Matter Expert Groups, the Technical Advisory Group has a permanent role across survey cycles and will include, among other experts, those individuals who have a leading operational role in PISA 2018. The members of the group were, at the outset of the first PISA cycle, appointed by the OECD Secretariat in consultation with the PISA Governing Board, based on nominations by the contractors for the first cycle. Some of the membership of the group has remained constant since the first cycle, and new members have been appointed as required.

70. From the PISA 2015 cycle onwards, the Technical Advisory Group is managed by the OECD Secretariat.

71. The Technical Advisory Group explores technical issues that have policy implications. During programme implementation, the OECD Secretariat brings proposals for modifications of PISA's programme of work or its implementation procedures that have cost implications at either international or national levels to the PISA Governing Board for review and decision (*e.g.*, modifications to data-collection instrument development procedures, the sample and test design, the translation procedures, or marking and verification procedures). When appropriate, the PISA Governing Board shall seek the advice of the Technical Advisory Group on these or other matters, either directly or through the OECD Secretariat. The detail of the agenda for TAG meetings is drawn up by the OECD Secretariat, working closely with the International Survey Director (Core A).

Sampling referee

72. To ensure the integrity of national samples, the PISA Governing Board appoints a sampling referee for each cycle of PISA. Based on evidence about the quality of the samples for PISA 2018 and in consultation with the Technical Advisory Group or other experts and with the contractor for Core C, the sampling referee will assess the implications for the use of country results in the international and thematic reports and will make recommendations to the PISA Governing Board regarding the use of individual countries' data in the reporting process. In addition, the sampling referee will inform participating countries and the PISA Governing Board as early as possible of problems with sampling or response rates that may or will jeopardise countries' compliance with sampling guidelines for PISA 2018, providing an explanation for the problems or concerns and, when possible, suggesting remedies for them.

The OECD Secretariat

73. The OECD Secretariat is responsible for PISA's overall management. This entails preparing the terms of reference for each survey cycle under the guidance of the PISA Governing Board, engaging contractors to implement specified activities, and monitoring the contractors for quality assurance purposes and the project on a day-to-day basis. The OECD Secretariat is also responsible for building consensus at the policy level among countries with full membership in the PISA Governing Board, both during the preparation of the terms of references and at milestone points of the surveys.

74. The OECD Secretariat serves as the Secretariat of the PISA Governing Board and as the interface between the PISA Governing Board and the contractors during all stages of PISA 2018. It is a further responsibility of the OECD Secretariat to provide the PISA Governing Board with a progress report on no less than a biannual basis as well as with a report on financial and contractual management on an annual basis.

75. The OECD Secretariat produces indicators and analyses based on statistical components provided by the contractors, and is fully responsible for preparing the international PISA report in collaboration with the countries with full membership status in PISA, through the PISA Governing Board, and the contractors. It is also responsible for overseeing thematic reports or other reports or research papers related to the PISA cycle, which are published under the responsibility of the OECD.

76. Countries with full membership status in PISA shall agree on a set of general rules for the inclusion/exclusion of country results in international reports. The OECD Secretariat shall arbitrate disagreements between participating countries and the sampling referee under guidelines established by the PISA Governing Board.

77. Additionally, it is the OECD Secretariat's role to participate actively during the development of all documents and reports and to oversee the documentation process of the project including approval of all documents before they are provided to participating countries. This applies, in particular, to meeting documents, manuals and test materials.

SECTION 3: STATEMENT OF WORK

Core A: Design, development and implementation

78. The contractor for Design, development and implementation will play a key role in PISA 2018 with responsibility for the development and implementation of large parts of the survey and as the contractor which, in close co-operation with the OECD Secretariat, will manage and co-ordinate the work across all core contractors.

79. The contractor(s) for Design, development and implementation will be required to do the following:

- **Task 1:** Management and co-ordination
- **Task 2:** Survey design, test and questionnaire development
- **Task 3:** Survey operations, quality control, liaison with national centres, development and maintenance of communication portal
- **Task 4:** Development and maintenance of computer platform and communication portal
- **Task 5:** Data handling, analysis and scaling

80. Bidders are encouraged to bid for all tasks, and to consider partnership or sub-contracting arrangements as required. Bidders may, if they wish, submit a proposal to carry out only one or some of the tasks, if they consider that they are able to add value by carrying these out separately. However, in such a case the bidder should show an awareness of how tasks interconnect and should describe how they would work with contractor(s) for other aspects of Core A to ensure that there were no resulting inefficiencies, communication problems or increases in national costs. In particular, it will be important that national centres have one main point of contact and one system of communication for the activities described in this Statement of Work, including a single system and main point of contact for carrying out tasks such as negotiating adaptations, checking and adapting tests and questionnaires or discussing national requirements.

81. Bidders should present their proposals separately for each of the five tasks in this Statement of Work for Core A and also submit a separate cost proposal for each of the five tasks in Core A. Bidders should also indicate any cost savings if they were awarded the contract for all five tasks. These may be, for example, savings in project management and attendance at meetings.



82. In collaboration with the OECD Secretariat, the contractor for *Design, development and implementation* will deliver high quality products on time and within budget, under the auspices of the PISA Governing Board.

83. The contractor for *Design, development and implementation* shall nominate an International Survey Director, whose role and responsibilities are further described under Task 1 below. The International Survey Director shall liaise with the OECD Secretariat. In turn, the OECD Secretariat shall act as the communication channel between the contractor for *Design, development and implementation* and the PISA Governing Board.

84. The OECD Secretariat shall provide the contractor(s) for *Design, development and implementation* with all relevant documentation from previous cycles of PISA.

85. Core A personnel will be expected to attend PISA Governing Board meetings to present updates on project activities. These meetings take place twice each year and are generally hosted by participating countries. The contractor will be responsible for covering travel, accommodation and subsistence expenses for either their own personnel or members of expert groups who attend these meetings, and should describe the extent of such attendance they have assumed in their budget.

Expert groups

86. The contractor for *Design, development and implementation* will participate in the work of the expert groups during the framework development phase, and will take over the responsibility for the groups once the project moves into the instrument development phase. At this stage, the contractor may wish to continue with the same group membership, or may wish to propose some changes in membership while also ensuring continuity with the existing group. There will be a Reading Expert Group, a Questionnaire Expert Group and a Global Competencies Expert Group.

87. During the phase of instrument development and subsequent phases, it will be the responsibility of the contractor for *Design, development and implementation* to specify and implement procedures that promote excellent communication among the members of each expert group, and between expert groups where necessary.

88. In PISA 2015 two physical meetings of each expert group were held during the instrument development and review phases, with each meeting being of 2-3 days' duration. There were also shorter remote meetings via webinars or conference calls. Two more physical meetings of each group are likely to be held, one following the Field Trial in 2014 to discuss item selection, and the other after the Main Survey in 2015 to finalise scale descriptions and to complete framework exemplification based on Main Survey responses. The bidder is free either to follow this pattern or to propose an alternative method of working with the groups.

89. Bidders should describe the number of expert group meetings they have included in their proposed budget, and should also describe how they would call on the expertise of group members outside the formal meetings. Bidders should consider the most efficient and cost-effective use of remote meetings as an alternative to physical meetings.



90. Bidders should include in their cost proposal all expenses associated with holding expert group meetings for which they are responsible, such as hire of venues, travel, accommodation, subsistence and honorariums to expert group members. A member of the OECD Secretariat team will generally attend meetings and the Secretariat will cover their own associated costs. The contractor for Core A will also not be required to cover any costs for representatives from other PISA 2018 contractors who attend Expert Group meetings.

Task 1: Management and co-ordination

91. The OECD Secretariat will have a significant role in the oversight and management function for PISA 2018, working together with the contractor for *Design, development and implementation*.

92. The contractor will be required to appoint a senior person to act as the International Survey Director. This person will be the Project Director for Core A and will work closely with the OECD Secretariat to ensure the success of PISA 2018. He or she will act as overall leader of the work of all contractors as well as providing leadership for National Project Managers, and to this end should have strong management and team-building skills. The person in this role should also have the academic credibility and experience to provide the intellectual leadership of PISA among contractors and experts, and to work with the Secretariat on identifying technical issues to be discussed by the Technical Advisory Group. Bidders should name the person who will be carrying out this role, who should be expected to spend the majority of his or her time working on PISA. Bidders should specify the percentage of time to be spent on the project by the International Survey Director.

93. In close collaboration with the contractor for Core A, the Secretariat will be responsible for the following aspects of management and co-ordination of the project:

- Ensuring that the PGB is regularly updated on the progress of the project.
- Providing advice to the PGB on the feasibility and impact of changes to the scope of PISA 2018 or its implementation, taking into account the issues involved for all contractors.
- Ensuring that the decisions of the PGB are implemented; liaising with and advising contractors accordingly; ensuring that Core A is kept fully informed of any decisions which impact on project structure or timelines.
- Ensuring that a project management approach is agreed with the Core A contractor and is applied to managing the work of all contractors.
- Oversight of risks, issues and deviation from timelines; ensuring that risks and issues are regularly monitored and appropriately mitigated and managed.
- Providing a central point for resolving any debates between contractors over responsibilities, workflow and timelines which have not been resolved through the channels of communication set up by Core A; negotiating with the contractors to resolve these.

- Monitoring the budgets and milestones of core contractors and resolving budgetary or contractual issues.
- Establishing and maintaining an archive of all project resources, documents, materials and databases.
- Providing additional support to National Centres by attending NPM meetings; obtaining regular feedback from NPMs; dealing with any queries or problems which cannot be resolved by liaison between contractors.

94. The contractor for *Design, development and implementation* will be responsible for facilitating the implementation of the agreed project management approach by all Core contractors; for working with the other contractors to co-ordinate their work; and for ensuring that the Secretariat is kept fully informed on the progress of the project. This will involve the following:

- Establishing tools and mechanisms for effective communication between all contractors; establishing communication protocols between the Core contractors and facilitating their implementation.
- Developing and maintaining an integrated project plan and timeline that joins the work of the multiple contractors in a coherent and cost-efficient way.
- Negotiating and resolving timeline amendments, for example those which might arise from PGB requirements, unavoidable operational delays or other unforeseen project changes; keeping the Secretariat fully updated on amendments; informing the Secretariat promptly of any timeline issues which cannot be resolved between the contractors or which may have implications for achievement of project milestones.
- Informing the Secretariat promptly of any urgent issues or disputes which may arise between the contractors.
- Organising regular progress meetings between representatives of all core contractors, either face-to-face or online, at agreed intervals; circulating any papers required for meetings; keeping and circulating minutes of all meetings, including agreed action points.
- Collecting and collating progress updates from all cores; submitting a monthly progress update to the Secretariat, covering the work of all contractors.
- Putting in place procedures for monitoring risks; maintenance of a regularly updated risk register and issues log; providing regular updates on risks, issues and deviations from timelines to the Secretariat.
- Collecting and collating information from core contractors on the feasibility and impact of changes to the scope of PISA 2018 or its implementation (*e.g.* countries joining the cycle late), to assist the Secretariat in giving advice to the PGB.

- Establishing a mechanism for submission of all PISA resources, documents, materials and databases to the OECD archive, and liaising with all core contractors to ensure that this is kept up-to-date.
- Discussing additional requests from participating countries; negotiating and co-ordinating additional national requirements or requests with the OECD Secretariat and with national centres or PGB members as appropriate; liaising with the other core contractors as required. This may in some cases require the identification of additional costs across all contractors and the establishment of corresponding additional contractual arrangements with countries and with other core contractors.

95. For Task 1, the contractor will be expected to provide regular reports to the Secretariat and the PGB, covering the work of all core contractors. The nature and frequency of such reports will be agreed between the contractor and the Secretariat.

Task 2: Survey design, test and questionnaire development

96. The contractor for *Design, development and implementation* will be required to:

- Develop an assessment design, which will meet the requirements for valid measurement in the major domain, provide a reliable estimation of trends over time, and lead to interesting insights in policy-relevant areas.
- Prepare and, after receipt of comments from the PISA Governing Board and the OECD Secretariat, revise and complete assessment instruments in reading literacy, the primary substantive domain in PISA 2018; amend or revise if necessary the assessment instruments used for science and mathematics in previous cycles for use in PISA 2018.
- Prepare and, after receipt of comments from the PISA Governing Board and the OECD Secretariat, revise and complete the assessment instruments for the assessment of Global Competencies as part of the core assessment for PISA 2018.
- Prepare and, after receipt of comments from the PISA Governing Board and OECD Secretariat, revise and complete questionnaires for students and for school principals.
- For those countries which opt to include them, update and implement the extensions to student questionnaires for ICT and Educational Careers. In PISA 2015, 46 countries are using the ICT questions while 22 are implementing the Educational Careers questionnaire. The 2012 questions for these two elements are available via the links on the following page on the OECD website: <http://www.oecd.org/pisa/pisaproducts/>.
- Construct the assessment instruments and questionnaires according to the specifications and content presented in the frameworks developed by the Core B contractor(s). The assessment instrument design should allow for the development of separate scales for science, reading, mathematics and global competency, subscales in the major domain of reading, and sound analysis of trends in science, reading and mathematics. It has to be possible to link the scales

from one cycle to another. Frameworks from previous cycles of PISA are available via the links on the following page on the OECD website: <http://www.oecd.org/pisa/pisaproducts/>

- Balance the value of trend maintenance with state-of-the-subject understanding of reading and the modern demands of reading literacy.
- Improve the cross-cultural validity of existing questionnaire measures through the exploration and application of novel techniques, e.g. variations in the numbers of response options, variations in the wording of response options, scale anchoring or conditioned Rasch models. Proposed innovations should be balanced against their potential effect on the measurement of trends.
- Work closely with the contractor for Core B to investigate the feasibility and operationalization of assessment approaches, particularly in the design of novel or innovative test items. This may involve collaboration in development of “proof of concept” items, to assist in the development of assessment approaches by the expert group, or small-scale trialling of items with students as part of this process. Bidders should describe their approach to this and should specify the extent of prototype item development and item trialling (e.g. cognitive laboratory activities) they have included in their bid.

97. The contractor for *Design, development and implementation* will be expected to develop an assessment design which will meet the requirements for valid measurement in the major domain, provide a reliable estimation of trends over time, and lead to interesting insights in policy-relevant areas. At the same time, the design needs to be feasible and practical without overburdening national budgets. To this end, the Core A contractor will need to work closely with the contractor for sampling (Core C) in particular to develop an overall design for the survey which can be presented to the PGB. The current PISA 2015 draft survey design can be found on the Call for Tender section of the OECD PISA website⁹ and bidders are invited to comment on how they feel they might wish to modify or improve on this design.

98. In PISA 2015, the primary mode of administration of PISA is by computer, and this is expected to continue and to develop further in PISA 2018. There is a paper-based alternative for countries which do not have the necessary facilities for computer-based administration in their schools, and this alternative may need to be offered again for PISA 2018. Of the 72 participants in PISA 2015, 16 are using the paper-based instruments, which contain only trend items.

99. Bidders should describe how they would propose to develop and extend the assessment by further exploiting the possibilities of the computer-based mode. This may include, for example, increased use of adaptive testing to enable fuller assessment across all three PISA domains, moving beyond the traditional questionnaire formats into more innovative ways of gathering information from students and schools, or exploiting opportunities to widen access for students with special needs.

100. The PISA 2015 survey design includes a mode effects study to test for the possible effects of changing from paper-based delivery in previous cycles to computer-based delivery in PISA 2015. The mode effect study comprises trend items in all three core domains. Bidders should describe how they would ensure that the possible mode effects are taken into account for participants that are making the change from paper-based delivery to computer-based delivery in PISA 2018 and that were therefore not

⁹ <http://www.oecd.org/pisa/pisaproducts/PISA-2018-documents-for-bidders.htm>



included in the mode effects study in PISA 2015. This could include a mode effects study for such countries in the Field Trial in 2017.

Context questionnaires

101. The contractor for Core A will develop the questionnaires for students and schools, based on the framework developed by Core B. This will involve close co-operation and involvement in the development of the framework, and a highly interactive process of questionnaire development between a wide scientific community, stakeholders, the PISA Governing Board, the OECD Secretariat and the contractor. The contractor for Core A will identify the data that must be collected and the questions to be used to address the themes which are described in the framework.

102. Bidders for Core A are encouraged to consider innovative approaches to collecting contextual information about students and schools from several sources. Although the school questionnaires provide useful explanatory information, reliance on a single source of information in characterising an entire educational setting can be problematic, especially if the respondents may have an interest in portraying their schools in a favourable way. Accordingly, bidders are asked to suggest how data might be collected that complement or substitute the standard questionnaires in ways that are culturally sensitive and suitable for use in participating countries.

103. For the student questionnaire, a rotated design was used in PISA 2012, whereby blocks of questions were spread over a number of versions of the questionnaires, thus increasing the material that is covered in total. In PISA 2015, there is a single version of the student questionnaire. Bidders are asked to consider how the possibilities afforded by computer-based delivery could be exploited to widen coverage of the themes, without either increasing the overall response time or causing undue complications in analysis and reporting, such as missing-by-design questionnaire responses.

104. The contractor should demonstrate that they have the capacity to attract high quality scientific and policy evaluation and design expertise. It is important that the contractor demonstrates that those developing the questionnaires have a sufficient understanding about schools and the social, cultural, and educational environments in which students learn, including the educational systems and the cultural contexts of participating countries. Drawing on this experience, bidders are requested to look into ways of cross-nationally validating the data collected in the participating countries and economies. Bidders should describe how they would improve the cross-national comparability and validity of the questionnaire measures. The bid should also describe how response bias will be addressed and controlled for.

105. Participating countries may modify the wording or format of items, or add national components to the questionnaires used to collect background or explanatory information from students or schools. Many contextual items need to be specified and agreed in their nationally specific format, such as study programmes, descriptions of levels of education, home languages and so on. The contractor for Core A shall provide guidance for such issues to national centres and shall set up procedures for working with national centres to approve the content of these national adaptations before countries begin to translate their questionnaires.

106. During the process of translation verification, the Core A team which has worked on the negotiation of national adaptations to questionnaires will need to be available to work with Core D

(*Linguistic verification*) where necessary, if verifiers need to check whether translation changes have an impact on the meaning or purpose of questionnaire items.

107. Bidders are encouraged to consider ways to ensure that the questionnaire items developed represent the best means of providing measures of the concepts set out in the framework. Bidders should describe how this will be achieved including the possible use of external consultation and the role of national review in this process.

108. Bidders should describe how they would investigate the suitability, cultural appropriateness and validity of questionnaire items during the course of their development, for example through use of cognitive laboratory investigations or focus groups.

Assessment instruments

109. The contractor for Core A will develop the tests for students and schools, based on the frameworks developed by Core B. This will involve close co-operation and involvement in the development of the frameworks, and a highly interactive process between a wide scientific community, stakeholders, the PISA Governing Board, the OECD Secretariat and the contractor.

110. The development of the assessment instruments should take account of the wishes of the PISA Governing Board to establish and maintain trends over time. To accommodate the PISA Governing Board's interest in the analysis of trends, the contractor must ensure that a sufficient number of (unpublished) items from previous cycles are included in the assessment instruments for PISA 2018 in order to allow for trend analysis in all substantive domains. Unpublished items from previous assessments which were originally developed for paper-based administration have been converted to computer-based versions as part of the PISA 2015 development, so can be used for trend measurement in the computer-based tests. All new PISA 2015 science items are available in computer-based mode only, so could be used for trend measurement in PISA 2018 only in countries carrying out the computer-based assessment in PISA 2015. The contractor must ensure that a sufficient number of unpublished items from PISA 2018 will be available for use in future cycles of PISA.

111. In developing the item pool for reading and for global competencies, the contractor will draw on National Project Managers as well as international subject matter experts. The contractor shall provide international and national experts with Item Submission Guidelines for the submission of assessment materials such as stimuli and items. The guidelines should include information such as the type of material that is expected, scope, content, framework specification, scoring guidelines, copyrights and all other relevant information to assist and guide countries during this phase. The active involvement of countries in the developmental process is important for the data-collection instruments to be considered internationally valid and representative. Item Submission Guidelines used in PISA 2015 are available from the Call for Tender section of the OECD PISA website.¹⁰

112. Bidders should describe their proposed processes for test development and investigation of validity, as well as for investigation of the suitability, cultural appropriateness and validity of test items

¹⁰ <http://www.oecd.org/pisa/pisaproducts/PISA-2018-documents-for-bidders.htm>

during the course of their development, for example through use of cognitive laboratory investigations or focus groups.

113. An important aspect of test reliability in the context of an international survey such as PISA is the development of rigorous procedures to ensure the international comparability of scoring. Core A will be responsible for development of scoring guides, of training materials for scoring and of all other associated materials. The contractor will also be responsible for conducting training and standardisation of the scoring of open-ended items, for providing facilities for national centres to score computer-based questions, for responding to queries from countries during the marking process, and for checking the reliability of scoring at both national and international levels. Bidders should describe in detail their approach to this.

114. The scoring capabilities should include the facility for national centres to score open-ended items online, or for scoring to be done offline in national centres which may have connection problems. There should also be the capability for supervisors to check on the work of markers and for markers to send queries to supervisors, as well as for statistical reliability checking. Bidders should describe their experience of working with this type of scoring system and give details of their capabilities to provide online scoring.

115. All questionnaires and tests (including scoring guides) will be provided to participating countries in both English and French source versions. Translation from one source language to the other source language will be the responsibility of Core D.

116. During the process of translation verification, the Core A team which has worked on the test development will need to be available to work with Core D (*Linguistic verification*) where necessary, if verifiers need to check whether translation changes have an impact on the meaning or purpose of test items.

117. Bidders should be explicit in their proposal about how they will work with the Subject Matter Expert Groups and National Project Managers to develop, review and select items from the item pool. The item pool should be cross-culturally and cross-nationally valid. It is important that contractors address the issue of cross-cultural, cross-linguistic, and cross-national validity conceptually and not solely rely on administrative solutions consisting of the collection and review of material by participating countries.

Task 3: Survey operations, quality control, liaison with national centres

118. The contractor will be required to undertake the following tasks related to survey operations, quality control, liaison with national centres and the development and maintenance of communication protocols:

Develop and implement survey operations and procedures and related aspects of quality control.

119. The contractor shall develop and implement survey operations and procedures, for both paper-based and computer-based tests, and related aspects of quality control, including the development of test administration procedures, and the training of all necessary and relevant country representatives in these procedures (e.g. National Project Managers, school coordinators, test administrators, etc.). The contractor shall develop all related training materials and procedures in consultation with other relevant core



contractors, the Technical Advisory Group and the OECD Secretariat. All training materials shall be developed in English, with the exception of the scoring guides, which will have both English and French source versions. Translation of the scoring rubrics from one source language to the other source language will be the responsibility of Core D.

Support the work of National Project Managers (NPMs)

120. The contractor shall develop a description of the role and profile of NPMs and specify the contractor's intended working relationships with NPMs.

121. The contractor shall support National Project Managers (NPMs) with the implementation of the survey. While each core contractor will be expected to support NPMs on tasks related to that contractor, Core A shall have a co-ordinating role across all core contractors, will be the first point of contact for all national activities, and will be expected to provide support and advice to new National Project Managers in particular.

122. As part of this co-ordinating role, the contractor shall provide and maintain tools for NPMs and other core contractors to track progress with the implementation of the tasks involved with the survey in each country and to keep track of any potential problems with countries' abilities to meet project timelines or technical standards. This should be located within the PISA portal described in Task 4 below.

123. The contractor shall be the main point of contact and communications with NPMs. The contractor shall specify and implement procedures that promote excellent communication with NPMs. The contractor will be expected to maintain a communication portal, as part of the PISA portal described in Task 4 below, where NPMs and core contractors can communicate about tasks and where NPMs can find manuals, guidance and regularly updated information on progress with the survey.

124. The contractor shall call, organise, and host meetings of National Project Managers. Provisions for meeting venues and facilities as well as for travel and compensation of experts, as required, should be included in bidders' proposals. No compensation of travel costs for NPMs or representatives from the OECD Secretariat should be included in the cost proposal. Participating countries will bear the costs of their NPMs' participation in these meetings. Bidders shall propose the frequency of such meetings, noting that for PISA 2015, six in-person meetings are planned during the survey cycle, including two training sessions before the field trial and the main study. The duration of these meetings varies in PISA 2015 from 3-6 days, and meetings have, so far, taken place in Paris, Bangkok, Brasilia and Malta.

125. Bidders are encouraged to propose innovation and identify efficiency gains and cost savings in meeting arrangements, *e.g.* through different meeting structures and an enhanced use of web-based communication tools. Currently, meetings of National Project Managers are typically attended by more than 150 participants with a wide variation in experience level, and bidders are requested to take these dimensions into account in their proposal. In particular, the bidder should describe how additional support would be given to newly-participating countries or new national teams.



Develop PISA's Technical Standards and establish plans for monitoring adherence to the standards

126. In any international survey, agreed standards are essential to ensure validity, reliability, and comparability across countries and over time. This requires the agreement of all participants on an international refereeing process and on procedures for quality control.

127. The contractor for Core A, in conjunction with the OECD Secretariat, shall review and prepare a proposal for the PISA 2018 Technical Standards, with input on relevant areas from the contractors for Cores C (sampling) and D (linguistic quality control). The proposal will be presented to the PISA Governing Board in order to seek consensus among participants on the standards. The PISA 2015 technical standards are available on the Call for Tender section of the OECD PISA website.¹¹

128. The contractor for Core A will be responsible for monitoring that all national centres are following the PISA Technical Standards. Bidders should describe in detail how they would do this. In particular, they should describe how such monitoring would be done and how any necessary support would be given in the case of newly participating countries or new national centres.

129. The contractor shall establish plans for monitoring adherence to the Technical Standards during field operations in all countries. This will include national centre procedures, survey operations in the schools that participate in the assessment and the work of Test Administrators. These plans shall include a requirement that the contractors shall appoint and pay Quality Monitors to visit a number of schools in each of the participating countries to assess their compliance with the project's guidelines for sampling, data collection, etc. Bidders' discussion of quality assurance should specify how this requirement will be achieved, including how coordination with the other relevant core contractors will be managed, the criteria for selecting schools to be visited, and how the findings will be used to ensure the projects' overall integrity. The number of schools to be monitored, methods of identifying and training quality monitors and the proposed costs for such monitoring should be distinctly identified in the bidder's cost proposal. In PISA 2015, an average of 15 schools in each participating country will be visited on administration days by the Quality Monitors employed by the contractor.

130. The Core A contractor will put in place procedures for monitoring the translation verification process and for adjudicating in the case of any disagreements between national centres and the Core D verification team. In previous cycles, this has been done by a Translation Referee who has the necessary background and expertise both to carry out such adjudication tasks and to advise countries on language-related issues such as choice of assessment language in bilingual schools. The bidder should describe their approach to this aspect of quality control, whether by use of a Translation Referee or by other means.

131. The contractor shall manage the data adjudication process, through which countries' data will be judged against the Technical Standards. The contractor shall coordinate with the other relevant core contractors, in particular Core C, to compile the relevant information to support data adjudication and the production of a data adjudication report. This report will be considered by the Technical Advisory Group who will make recommendations to the PGB. Bidders are asked to outline their proposals for fulfilling this task.

¹¹ <http://www.oecd.org/pisa/pisaproducts/PISA-2018-documents-for-bidders.htm>

Task 4: Development and maintenance of computer platform and communication portal

132. The contractor for *Design, development and implementation* will be required to:

- Further develop, improve and maintain the PISA electronic platform developed for PISA 2015 (a draft description of which is provided on the Call for Tender section of the OECD PISA website). The platform should continue to be adaptable to allow for evolution over the PISA cycles e.g. to assess new domains or to cope with new test designs.
- Produce protocols and standards that will guide instrument development and communicate with the contractor for framework development to ensure that the assessment content implied by the framework is deliverable by the platform.
- Maintain and develop further the portal which provides a central point for communications and for national centre tasks. In particular, further improve the capability of the portal to assist national centres in monitoring the progress of their work and further develop the usability of the portal interface.

133. The PISA platform is capable of all functions from test item development through to delivery of the assessment, i.e. item development, item review, test compilation, test delivery and administration. It also has the capability for onscreen coding of open-ended responses and for automatic capture of data. These processes have been well developed as far as the tests are concerned, although further development of online marking capabilities will probably be required in PISA 2018. The questionnaires have been developed using a different and more limited system in PISA 2015. The contractor for Core A in PISA 2018 would be required to further develop the platform so that the same capabilities could be provided for the development of both tests and questionnaires, thus enabling more streamlined and consistent development, review and adaptation, making the workflow easier for national centres, widening the range of available item types in the questionnaires, and giving a more consistent “look and feel” across tests and questionnaires.

134. The PISA platform for PISA 2015 is based on the TAO platform, an open-source assessment solution that enables the creation and delivery of computer-based tests online. The TAO platform consists of all source code and binaries versions as released from time to time under the non-upgradable GPL v.2 license on the official TAO website¹² or such other website used as the official website for the distribution of the TAO platform.

135. It is expected that the best approach for PISA 2018 will be to build on and further develop the platform which has been developed for PISA 2015. However, bidders are free to suggest use of another solution, as long as it can be shown that this will provide additional capabilities or added value, without either adding costs or causing an undue amount of additional work for national centres. If a different platform is proposed, bidders should pay particular attention to the information below about intellectual property rights.

136. Bidders should identify in their responses any limitations on the following positions in respect of intellectual property rights (IP): all test items, associated data and results will be owned by the OECD; all

¹² <http://www.tao.lu>



aspects of the 2018 delivery systems will be owned by the OECD or be non-proprietary. The strong preference is either for all IP in the delivery system to be owned by the OECD or for the proposed solution to be a non-proprietary solution similar to the open source solution for PISA 2018. Bidders are asked to make clear their position regarding the IP implications of their proposed solutions and must make clear where 3rd party rights are being used and therefore cannot be assigned to the OECD. In addition, bidders are asked to set out proposals, in relation to IP, regarding the use of the 2018 computer delivery system in future PISA cycles. This would include making the 2018 system available to companies wishing to bid for a test delivery role in the following PISA cycle.

137. The PISA 2015 assessment is currently available only for computers using the Windows operating system, although it is hoped that it will also be available for Apple computers in the Main Survey in 2015 using Microsoft Windows emulation. The contractor for Core A will be required to increase the range of operating systems in PISA 2018; as a minimum, to enable use on computers using the Linux operating system and to further develop functionality on Apple computers. The contractor will also be required to investigate the possibility of using tablet computers. Bidders should describe the extent to which they would provide a more extensive range and flexibility of delivery options to participating countries.

138. The contractor should provide online delivery of tests for those countries where schools can support this. Bidders should describe in detail how tests would be delivered to schools and how data would be captured in schools which are not able to do this online.

139. In PISA 2015, separate software which was first developed for use in earlier cycles of PISA (*Keyquest*) is being used for school and student sampling and tracking of schools and student participation. This is not yet fully integrated with other functions within the PISA portal or with the software which is used to collect data within the PISA assessment platform. The Core A contractor will be required to work with the contractor for Core C so that the sampling approach used in PISA 2018 can be more fully integrated with other elements within the portal and the assessment platform, thus avoiding the need for national centres to use separate systems.

140. Another necessary improvement of the test delivery platform is in adaptations for students with a variety of special needs, to widen accessibility and inclusivity, which is becoming an increasing imperative in many PISA-participating countries. Bidders should describe the type of adaptations they would introduce in the computer-based instruments, for example to make them more accessible for students with visual impairments or those who need to use hands-free technology. Bidders should make it clear which adaptations would be developed within their proposed core budget.

141. The contractor will be required to provide comprehensive training materials on the use of the platform for NPMs and bidders should also describe how they would provide a support service to national centres.

142. The contractor will be responsible for designing and implementing a School Readiness Tool which can be used by national centres to assess the capabilities of sampled schools to implement the computer-based assessment. Bidders should clarify whether the Readiness Tool would be designed to capture data to be used by the contractor or whether it would provide a toolkit for national centres to use in their schools, to ensure all technical requirements are met. Bidders should also describe how they would ensure that the Readiness Tool can be made accessible to school staff in all languages.

143. An important function of the PISA communications portal is as a delivery mechanism for uploading and downloading materials between national centres and contractors and for managing various national tasks. Bidders should describe how they would aim to improve the functionality of this part of the portal, for example by providing an automatic messaging function to alert national centres when changes are required, or a reminder system linked to national schedules.

144. In addition to these suggested developments and refinements of the PISA platform, bidders should describe other innovations or added value which they would be able to offer within their proposed core budget. These may include, for example, proposals for provision of log file data from the computer-based tests in a format which can be readily used by researchers, or provision of interactive online public access to released computer-based test items.

Task 5: Data handling, analysis and scaling

Data cleaning, verification and analysis

145. The contractor shall clean all data, including data from the cognitive tests and the questionnaires, for the preparation of an international database. This task is necessary for both the Field Trial and the Main Study. Bidders are asked to indicate the types of checks that will be carried out on the data, and the mechanisms which will be put in place to ensure that checks are carried out by national centres as required.

146. With the data collected during the Field Trial, the contractor shall conduct analyses to identify problems in the implementation of the administration procedures; investigate methodologies of data analyses (particularly the methodology of scaling the cognitive data, which should be compatible with the need to maintain the measurement of trends from previous PISA cycles); investigate the properties of measurement instruments; and carry out other necessary analyses which may be required to inform and improve the preparation of the final PISA 2018 database.

147. The contractor shall work with the expert groups to develop proposals for the PGB for development of the Main Survey instruments, based on Field Trial data.

Data products

148. The contractor shall provide a fully documented database (including a compendia providing the distribution of students according to the variables collected in the questionnaires) that shall be delivered to the OECD Secretariat in interim form by end April 2019 and in a second more complete form in June 2019. The final database, incorporating all amendments or corrections, should be complete no later than the end of September 2019. This database shall provide a set of basic indicators, or their components, and allow the OECD Secretariat, the PISA Governing Board and others to conduct their own further analyses. In addition, an earlier initial dataset should be compiled in October 2018 containing such data that have been processed by that time, in order to allow the Secretariat to carry out initial data exploration.

149. These datasets shall cover all data sources, from both tests and questionnaires. The overall quality control of the international database rests with the contractor for Core A. Bidders should describe the workflow that will be necessary in order to allow these datasets to be produced according to this timeline.

150. The contractor shall develop and implement a plan to ensure that PISA-related data are readily accessible to and user friendly for a wide range of potential users, including researchers, National Project Managers, policy makers, and other who would benefit from access to the data from PISA 2018. The PISA Governing Board does not wish to sacrifice data quality or the ability to conduct sophisticated analyses, yet the PISA Governing Board remains committed to facilitating widespread use of the data. Bidders should, therefore, propose the means to achieve this goal through software products, documentation, and capacity building through training sessions, etc. Bidders should also budget for the provision of a publicly-available interactive data selection facility, which may build on those developed for previous cycles. Data from previous PISA cycles should be incorporated in such data selection facilities in order for the users to easily retrieve trend information.

Analysis plan

151. The contractor shall submit a draft analysis and reporting plan to the PISA Governing Board for its review and approval. The plan shall discuss the kinds of analyses that will be possible with the data collected in PISA 2018, including data collected through the cognitive assessments, questionnaires, and any international options. The plan should include details of the composition of the scales and indices that are planned to be derived from the questionnaire items.

152. The analysis and reporting plan will guide the OECD Secretariat in preparing and designing the reporting plans for PISA 2018, particularly the international report. Most importantly, the plan should summarise and explain the types of analyses that can and should be conducted to address PISA's policy-driven focus and discuss how the data can best be presented and reported. The plan should include discussion of analytical and statistical techniques that make best use of the data while ensuring that they remain accessible to policy makers and researchers. Once approved by the PISA Governing Board, the plan will serve as the basis of the international and thematic reports that the OECD Secretariat will coordinate. At the contractor's discretion and with the approval of the OECD Secretariat or the PISA Governing Board, the contractor can amend the analysis and report plan in the interests of improving quality, format or analysis.

153. Participating countries wish to obtain a thorough understanding of the variation in performance between students, schools and school systems, along with the factors associated with that variation. Bearing this desire in mind, bidders are asked to give some preliminary ideas for the types of analysis that they see the potential to conduct and the new policy insights that could potentially be provided from such analysis. Bidders are also asked to describe the techniques they see as most promising for developing these policy insights using PISA and other data.

154. The contractor shall also carry out the analysis to test and compile the derived variables, scales and indices as agreed in the analysis plans, for inclusion in the international database.

155. The analysis and dissemination activities of PISA are guided by advice from the PISA Analysis and Dissemination Group (ADG), comprising representatives from the PISA Governing Board and led by



the OECD Secretariat. The contractor is expected to engage with the work of the ADG under these terms of reference.

Support for the preparation of the international report

156. The OECD Secretariat is responsible for the preparation of the report that will summarise the results of PISA 2018. The purpose of the report will be to:

- Provide evidence on the performance of students and countries in reading, mathematics and science as well as global competencies and any international options
- Provide insights into the factors associated with the development of these competencies
- Examine how these factors interact
- Compare performance across PISA cycles
- Identify the implications for policy and practice

157. To support the preparation of the report, the contractor shall:

- Develop an analysis and reporting plan, as mentioned above
- Provide statistical and technical support for the OECD Secretariat during the development of the report
- Design and provide basic descriptive tables following a standardised format that the Secretariat specifies
- Review the report and drafts of the report for technical consistency and coherence

158. Responsibility for the production of tables and analyses from the international database will be shared between the contractor and the OECD Secretariat. The bidder should specify the approximate number of tables assumed within the core budget. This estimation should take as a basis the analysis in the PISA 2012 reports which are available on the OECD PISA website¹³. As a guide, approximately 350-400 tables of varying length and complexity were produced by the contractor for PISA 2012.

159. Given the level of co-ordination that will be necessary between the OECD Secretariat, contractors and participating countries and economies, bidders are asked to discuss how such co-ordination will be facilitated and managed successfully. One issue that should be addressed in this discussion is the consistency of results in national reports with those in the international reports. The contractor cannot guarantee such consistency as the national reports are prepared by each country, but should be available to

¹³ <http://www.oecd.org/pisa/keyfindings/pisa-2012-results.htm>



assist those preparing national reports should questions arise about procedures for data analysis, scaling procedures, weighting, software, etc.

Technical Report

160. The contractor for Core A shall have the responsibility of compiling a Technical Report for PISA 2018 that will cover all aspects of PISA, and which will draw on the contributions of all contractors for the respective parts of the survey. The contractor for Core A shall deliver the final draft of the report no later than 31 March 2019, in line with an outline agreed with the OECD Secretariat. Upon feedback from participants and the OECD Secretariat, the contractor shall provide the necessary revisions that will allow the Secretariat to finalise the production of the report by 31 July 2019.

161. The Technical Report will serve the needs and address the likely questions of unexperienced as well as sophisticated users of data from PISA 2018. Bidders should suggest how they would ensure that the report would serve the needs of all users.

162. Bidders should also consider how the approach taken to the PISA Technical Report in previous cycles could be improved and developed to ensure greater transparency, better understanding of PISA methodology and more complete information for all stakeholders, including the general public and the media.

163. Bidders should consider the extent to which technical information could be made more fully and flexibly available, for example by supplementing the published report with web-based material.

Optional Module A.1: Design, development and implementation for additional tests or questionnaires

164. The contractor(s) may be called on to develop and implement additional tests and/or questionnaires which the PISA Governing Board may decide to include in the survey cycle. The PISA Governing Board will decide on these in the course of 2014 and 2015. These may involve international options which have been offered in previous surveys, such as Financial Literacy which was offered in PISA 2012 and PISA 2015, the Parent Questionnaire, which was introduced in PISA 2006, or the Teacher Questionnaire which has been introduced in PISA 2015. Or, these may be new areas or may involve co-operation with other surveys, such as synergies with the TALIS survey. The tasks for this module will be similar to the tasks for Core A for the core elements of the survey cycle, as described above. These optional elements are not included as part of the current Call for Tender, and would be subject to an additional contract.

165. Optional student questionnaire modules in ICT and Educational Careers have been offered in previous cycles with no additional costs for countries which choose to use them. They therefore form part of the main Core A contract rather than the optional Module A.1.

Core B: Framework development

166. The PISA frameworks are the conceptual underpinning to PISA, and development of the PISA 2018 frameworks is the foundation on which all subsequent work on the cycle will be based. It is therefore essential that the frameworks be based on sound theoretical principles and an understanding of the state of the art in the relevant areas. The framework development must also take account of the policy imperatives of OECD countries and the methodological demands of large international surveys.

167. The framework development will require a contractor or contractors to do the following:

- **Task 1:** Revise and redevelop the assessment framework in reading, the major domain in PISA 2018, and review the assessment frameworks for science and mathematics to ensure that they are up to date with major developments in the fields.
- **Task 2:** Develop a framework for the collection of contextual information and the measurement of non-cognitive outcomes, through questionnaires for students and schools, the collection of system-level information and the analysis of process data obtained from tests or questionnaires (eg measures of perseverance might be based on test-taking behaviour in the computer-based tests).
- **Task 3:** Develop a framework for the measurement of cognitive and non-cognitive aspects of Global Competencies, including the relevant contextual factors.

168. Bidders are encouraged to bid for all three tasks, and to consider partnership or sub-contracting arrangements as required. However bidders may, if they wish, submit bids for only one or two of the tasks, if they consider that they are able to add value by carrying these out separately. However, in such a case the bidder should show an awareness of how tasks interconnect and should describe how they would work with the contractor for the other aspects of Core B to ensure that there were no resulting inefficiencies, communication problems or increases in costs.

169. Bidders should present their proposals separately for each of the three tasks in this Statement of Work, and also submit a separate cost proposal for each task. Bidders should also indicate any cost savings if they were awarded the contract for more than one of the tasks. These may be, for example, savings in project management and attendance at meetings.

170. In collaboration with the OECD Secretariat, the contractor(s) for *Framework Development* will deliver high quality products on time and within budget, under the auspices of the PISA Governing Board.

171. The implementation of the design of the seventh cycle of PISA based on the PISA Governing Board's specifications will be the responsibility of the contractor appointed to deliver Core A, including the development of measurement instruments, survey design and measurement models to ensure adequate coverage of the framework. This aspect of the work of Core A will build on the frameworks developed by Core B.

172. The contractor(s) for *Framework Development* shall nominate a project director(s) who shall liaise with the International Survey Director (Core A) and the OECD Secretariat.

173. The contractor will be expected to present draft frameworks or outlines to the PISA Governing Board. During the equivalent phase for PISA 2015, aspects of framework development were on the agenda of three successive meetings. The contractor will be responsible for covering travel, accommodation and subsistence expenses for either their own personnel or members of expert groups who attend these meetings, and should describe the extent of such attendance they have assumed in their budget.

174. The accountability and responsibility for the international management of PISA 2018 lies with the OECD Secretariat. In keeping with that, the OECD Secretariat will have a significant role in the oversight and management function for PISA 2018. However, part of the oversight and management role will be contracted to Core A. Contractors for Core B need to be aware of this and to be ready to follow the leadership of the International Survey Director. The OECD Secretariat will remain responsible for all contractual issues and will also arbitrate in the event of any disagreements between contractors.

175. The contractor(s) shall facilitate a wide discourse on the frameworks within scientific communities and expert groups. It is expected that the proposed frameworks will be reviewed at the meetings of the National Project Managers and the Technical Advisory Group.

176. The framework development will inform the design of tests and questionnaires. The test design should allow for the development of separate scales for science, reading, mathematics and global competency, subscales for the major domain of reading, and sound analysis of trends in science, reading and mathematics. It has to be possible to link the scales from one cycle to another. The contractor(s) for *Framework Development* will be expected to work together with the contractor responsible for scaling and analysis (Core A) to ensure that the framework facilitates such links.

177. Frameworks from previous cycles of PISA are available via the links on the following page on the OECD website: <http://www.oecd.org/pisa/pisaproducts/>.

178. Bidders for *Framework Development* must discuss their experience that demonstrates (i) relevant and successful projects in this area, involving multiple countries; and (ii) how their efforts during the period of contract implementation will promote and achieve the co-ordination required to ensure the success of PISA 2018.

179. Proposals for *Framework Development* shall also describe techniques that will ensure that the assessments are in accord with the PISA philosophy of assessing a student's capacity to deal with future challenges. They should describe the types of items that would be relevant to this approach, bearing in mind also the computer-delivered mode of the assessment.

Expert groups

180. The contractor(s) for *Framework Development* will create the appropriate Expert Groups, in consultation with the PISA Governing Board and the OECD Secretariat, and manage those meetings of the groups dealing with framework development. There will be a Reading Expert Group (as part of Task 1), a Questionnaire Expert Group (as part of Task 2) and a Global Competencies Expert Group (as part of Task 3). Bidders should include in their bids suggestions for membership of expert groups as well as proposals

for how these groups will operate. Participating countries will also be asked to nominate experts for these groups.

181. During the phase of framework development, it will be the responsibility of the contractor(s) for *Framework Development* to specify and implement procedures that promote excellent communication among the members of each expert group, and between expert groups where necessary. The contractor(s) will also ensure good communication between the expert groups and other contractors. It will be important that Core A in particular participates in the work of the expert groups. Core A will also take over responsibility for the expert groups once the project moves into the instrument development phase. The bidder should suggest how a good working relationship can be established and maintained from the beginning.

182. Core B will be responsible for ensuring the validity and the feasibility of proposed assessment methods or of novel or innovative types of questionnaire item which may be proposed by the expert groups. This will require close working with Core A. This may involve, for example, collaboration on development and testing of “proof of concept” test items or innovative types of questionnaire item. Bidders should describe clearly how they propose to approach this and the extent of activities such as development of proof-of-concept items or cognitive laboratory activities which they have included in their bids.

183. Core B will be responsible for developing sample items which can be used to illustrate the drafts of the frameworks which will be made available online before the Field Trial. These should also be developed in close co-operation with the expert groups and with Core A, and may arise from the development activities described in the previous paragraph.

184. In PISA 2015 two physical meetings of each expert group were held during the framework development phase, with each meeting being of 2-3 days’ duration. There were also shorter remote meetings via webinars or conference calls. The bidder is free either to follow this pattern or to propose an alternative method of working with the groups. Bidders should describe the number of expert group meetings they have included in their proposed budget, and should also describe how they would call on the expertise of group members outside the formal meetings. Bidders are encouraged to submit proposals for making the most efficient and cost-effective use of remote meetings as an alternative to physical meetings.

185. Bidders should include in their cost proposal all expenses associated with holding expert group meetings for which they are responsible, such as travel, accommodation, subsistence and honorariums to expert group members. A member of the OECD Secretariat team will generally attend meetings and the Secretariat will cover their own associated costs. The contractor for Core B will also not be required to cover any costs for representatives from other PISA 2018 Cores who attend Expert Group meetings.

Task 1: Frameworks for reading, mathematics and science

186. The contractor for *Framework Development* shall develop the framework for the computer-based assessment of reading using the existing framework as a base.

187. In creating or redeveloping a framework for reading for PISA 2018, the contractor shall:

- Focus on the application of reading in a real-life context;

- Ensure the external validity of the framework in light of the current state of research in the field of reading;
- Ensure links between the content to be assessed in 2018 and the content assessed in previous cycles of PISA; and
- Ensure that the framework takes account of the need for measurement of trends over time.

188. Bidders should discuss how they would make full use of the opportunities afforded by the computer-based mode of assessment, and how this may impact on the PISA 2018 reading framework. For example, bidders may wish to evaluate the definition of digital reading in the PISA 2015 reading framework, consider how this may need revision in PISA 2018 and discuss the opportunities for new approaches to the assessment of reading in PISA 2018.

189. The PISA Governing Board expects the contractor for *Framework Development* to build the framework development on state-of-the-art thinking, theory and research findings in the field of reading education, open the development processes to broad external input, and discuss the PISA frameworks in relation to national and international standards.

190. As with the development of PISA in general, the development of the framework should rest on participation of a wide community of stakeholders, policy makers, analysts and researchers. Bidders should describe how this will be achieved and in particular ideas they have for possible wider consultation on the development of the framework in order to achieve that goal.

191. The contractor for *Framework Development* will be required to assess the external validity of the PISA reading framework, by e.g. addressing how PISA situates itself against diverse national standards and curricula and/or consultation with a wide range of stakeholders such as higher education providers or employers' organisations. Bidders should describe in detail their proposals for this investigation of the validity of the framework.

192. The frameworks for the minor domains, namely science and mathematics, will require only review and possible minor revisions to the frameworks for PISA 2015. The bidder is not required to establish expert groups for science and mathematics, but should outline how the review and any necessary revisions will be carried out.

193. For Task 1, the contractor will be expected to provide:

- An initial draft outline of proposals for the reading framework to the OECD PISA Secretariat by the end of September 2014, for review by the PISA Governing Board in November 2014. This outline should identify in particular any issues or questions on which direction is needed.
- A first draft reading framework by end February 2015, for review by the PISA Governing Board in April 2015.
- A second draft reading framework by end September 2015, for review by the PGB in November 2015.

- A final draft reading framework by December 2015, which should include sample test items. This will be made publicly available on the OECD PISA website.
- Final text for the published framework by December 2017, incorporating any changes needed following the Field Trial.

Task 2: Framework for non-cognitive outcomes and contextual information

194. The contractor for *Framework Development* shall develop the framework for the collection of contextual information and the measurement of non-cognitive outcomes, using the existing frameworks as a base.

195. Bidders need to demonstrate an understanding of cultural differences, institutional differences, and differences on the level of governments and educational systems. Bidders should discuss how these would be taken into account in the development of the questionnaire framework, and suggest procedures for working with the PISA Governing Board to identify national policy priorities.

196. As with the development of PISA in general, the development of the framework should rest on participation of a wide community of stakeholders, policy makers, analysts and researchers for providing ideas and themes for PISA. Bidders should describe how this will be achieved and in particular ideas they have for possible wider consultation on the development of the framework in order to achieve that goal.

197. Within the student questionnaire, some of the key constructs that have been measured in previous PISA cycles include socio-economic and family background, linguistic background of students, prior educational experience (particularly pre-primary participation), attitudes towards school, sense of belonging, student-teacher relations, disciplinary climate and learning time. Some of these constructs need to be maintained as they are key variables in the analysis of PISA outcomes, while others may be important to enable measurement of change over time. Bidders should describe how they would plan to improve the measurement of some important constructs such as socio-economic background.

198. Some other constructs measured in PISA 2015 do not necessarily need to be retained in PISA 2018. Bidders are invited to make suggestions for new areas of learning contexts or of behavioural, affective or motivational outcomes which may help explain differences in performance between and within countries.

199. As reading is the major domain of the PISA 2018 assessment, domain-specific areas that may be covered include students' experiences with reading in and out of school (*e.g.*, experience of different approaches to teaching reading, reading habits, preferred ways of learning). Some of these variables may be repeated from the PISA 2009 cycle, when reading was the major domain, while others may be new or may be updated. Bidders are invited to discuss the approach they would take to suggesting domain-specific variables which may help explain outcomes.

200. Within the school questionnaire, some of the key constructs that have been measured in previous PISA cycles include school climate, school funding and management, competition between schools, quality of educational resources, organisation of instruction (including grouping of students), instructional practices, composition of the teaching staff, assessment practices, accountability practices, parental and

community involvement and curricular opportunities. Again, bidders are invited to suggest possible ways in which measurement of these constructs could be strengthened or possible new areas which would be of relevance for policy-makers.

201. The framework will also identify opportunities to include data from other sources (*i.e.*, data not collected solely through questionnaires, or data collected on the level of education systems) as well as possible linkages with other data sources, such as the OECD system-level data collection. Bidders are invited to describe what other sources of data may be useful for this purpose.

202. The contractor will be expected to provide:

- An initial proposal for suggested constructs to be included in the framework, to be delivered to the OECD Secretariat by the end of September 2014, for review and prioritisation by the PISA Governing Board in November 2014. This outline should identify in particular any issues or questions on which direction is needed.
- A first draft questionnaire framework by end February 2015, for review by the PISA Governing Board in April 2015. This draft will be used as a basis for work to begin on development of the student and school questionnaires.
- A second draft questionnaire framework by end September 2015, for review by the PGB in November 2015.
- A final draft questionnaire framework by December 2015. This will describe the constructs included in the Field Trial questionnaires in 2017 and will be made publicly available on the OECD PISA website.
- Final text for the published framework by December 2017, incorporating any changes needed as a result of the final selection of constructs following the Field Trial.

Task 3: Framework for Global Competencies

203. The contractor for *Framework Development* shall develop the framework for Global Competencies so that it provides a sound basis for computer-based assessment. An initial scoping paper for global competencies which was presented to the PISA Governing Board in October 2013 is available from the Call for Tender section of the OECD PISA web site (see www.pisa.oecd.org).

204. As well as the assessment of cognitive aspects of global competency skills, it is likely that there will be non-cognitive outcomes which are of interest – or, indeed, the division between cognitive and non-cognitive outcomes may be less clearly demarcated than in other more traditional assessment domains. The bidder is invited to consider whether the measurement of non-cognitive global competencies should be operationalized through the more traditional approach of the student questionnaire or whether a different approach may be considered which more closely integrates the measurement of cognitive and non-cognitive competencies. Opportunities for further integration which may be possible in a computer-based test should also be discussed.



205. As with the development of PISA in general, the development of the framework should rest on participation of a wide community of stakeholders, policy makers, analysts and researchers. Bidders should describe how this will be achieved and in particular ideas they have for possible wider consultation on the development of the framework in order to achieve that goal.

206. For Task 3, the contractor will be expected to provide:

- An initial outline of proposals for the framework on global competencies to the OECD PISA Secretariat by the end of September 2014, for review by the PISA Governing Board in November 2014. This outline should identify in particular any issues or questions on which direction is needed.
- A first draft global competency framework by end February 2015, for review by the PISA Governing Board in April 2015.
- A second draft global competency framework by end September 2015, for review by the PGB in November 2015.
- A final draft global competency framework by December 2015, which should include sample test items. This will be made publicly available on the OECD PISA website.
- Final text for the published framework by December 2017, incorporating any changes needed following the Field Trial.

Optional Module B.1: Frameworks for optional assessment areas

207. The contractor(s) may be called on to develop frameworks for other assessment domains or questionnaires that are decided upon by the PISA Governing Board. The PISA Governing Board will decide on these in the course of 2014 and 2015. These may involve international options which have been offered in previous surveys, such as Financial Literacy which was offered in PISA 2012 and PISA 2015, the Parent Questionnaire, which was introduced in PISA 2006, or the Teacher Questionnaire which has been introduced in PISA 2015. Or, these may be new areas or may involve co-operation with other surveys, such as synergies with the TALIS survey. These optional elements are not included as part of the current Call for Tender, and would be subject to an additional contract.

SECTION 4: SCHEDULE, DELIVERABLES AND BUDGET GUIDELINES

Indicative timeline for PISA 2018

208. The following indicative timeline provides the major milestones for PISA 2018. Note that the scheduling presented here is tentative and subject to the proposals made by the successful bidders in response to these terms of reference. Although the seventh cycle is bound by certain predetermined milestones (*e.g.*, field trial in 2017, main study around April-June 2018 in the Northern Hemisphere and later in the year for Southern Hemisphere), the bidders' expert judgement is sought on the planning, organisation and management of the work they are bidding for.

209. Bidders are asked to provide detailed project plans for the scope of work related to the part of the project they are bidding for. The project plans should include tasks, milestones and deliverables as well as an allocation of personnel to tasks. The following indicative timeline contains only selected major milestones, whereas the project plans submitted by bidders should cover the totality of the activities that relate to the parts of the terms of reference that they are bidding for.

210. Note that the major milestones for all four core parts of PISA 2018 are included in the indicative timeline. The bidders are asked to submit project plans for the core part(s) they are bidding for under the assumption that the major milestones for other core parts will remain as indicated in the timeline below. The final details of the schedule and work plan for the PISA 2018 cycle will be determined following discussions between all core contractors (co-ordinated by Core A) and the OECD Secretariat.

211. The key milestones and deliverables will be completed by the winning contractors within an agreed timeline. The contractors shall report on these to the PISA Governing Board and provide the Board with the necessary documents and information. All final documents related to the project and delivered to the countries are to be given to the OECD Secretariat in electronic form for archiving and documentation purposes.

PISA 2018 Indicative Timeline

	CORE A	CORE B	CORE C	CORE D
Oct 2014	Submit initial proposals for assessment design and computer platform design	Submit initial proposals for frameworks for reading, global competency and questionnaires		
Nov 2014				
Dec 2014				
Jan 2015				
Feb 2015	Submit statement of NPM roles and responsibilities for participating countries (with contributions from cores C and D)	Submit 1 st draft frameworks for reading, global competencies and questionnaires		
Mar 2015				
Apr 2015				
May 2015	Submit PISA 2018 assessment design and computer platform design for review			
Jun 2015	Submit consolidated timeline for PISA 2018 (with contributions from all cores)			

	CORE A	CORE B	CORE C	CORE D
Jul 2015	Submit Field Trial NPM manual (with contributions from cores C and D)			
Aug 2015	Submit draft PISA 2018 Technical Standards (with contributions from cores C and D)			
Sep 2015	Submit final PISA 2018 assessment design and computer platform design	Submit 2 nd draft frameworks for reading, global competencies, and questionnaires	Provide initial sampling forms and guidance for national centres	
Oct 2015	Issue call for test item submission and provide training for participating countries			Translatability assessment of new test and questionnaire items
Nov 2015	Submit batches of test and questionnaire items for country review			Translatability assessment of new test and questionnaire items
Dec 2015	Submit batches of test and questionnaire items for country review	Submit final draft frameworks for reading and global competencies and final Field Trial questionnaire framework		Translatability assessment of new test and questionnaire items
Jan 2016	Submit batches of test and questionnaire			Translation of source

	CORE A	CORE B	CORE C	CORE D
	items for country review			versions of test and questionnaire items into French
Feb 2016				Translation of source versions of test and questionnaire items into French
Mar 2016	Submit final proposals for Field Trial tests and questionnaires			Submit translation guidelines and translator manuals for national centres
Apr 2016	Release of test and questionnaire items for translation			Release of translation verification forms and protocols
May 2016	Release of test and questionnaire items for translation			
Jun 2016			Release Field Trial sampling forms and guidelines	
Jul 2016				
Aug 2016				



	CORE A	CORE B	CORE C	CORE D
Sep 2016				
Oct 2016				
Nov 2016	Release manuals for Test Administrators and School Coordinators			
Dec 2016	Dispatch national versions of instruments (Field Trial)			Completion of translation verification for Field Trial
Jan 2017	Field Trial Coder Training			
Feb 2017				
Mar 2017	Field Trial data collection		Release Main Study sampling forms and guidelines	
Apr 2017				
May 2017				
Jun 2017				
July 2017				
Aug 2017				

	CORE A	CORE B	CORE C	CORE D
Sep 2017				
Oct 2017	Propose Main Study item selection for tests and questionnaires		Finalize Field Trial Sampling data	
Nov 2017				Final verification checks
Dec 2017	Begin dispatch of national instruments for main study	Submit final test and questionnaire frameworks for publication		Final verification checks
Jan 2018	Main Study Coder Training			Final verification checks
Feb 2018				Final verification checks
Mar 2018	Main Study data collection Deliver initial dataset for data exploration (October)			Final verification checks
Apr 2018				Final verification checks
May 2018				
Jun 2018				
Jul 2018				
Aug 2018				
Sep 2018				

	CORE A	CORE B	CORE C	CORE D
Oct 2018				
Nov 2018				
Dec 2018			Finalize Main Survey sampling data	
Jan 2019				
Feb 2019				
Mar 2019	Submit data adjudication report (with contributions from Core C)			
Apr 2019	Deliver interim database		Finalise sampling weights	
May 2019			Submit final weighting summaries to national centres	
Jun 2019	Deliver first draft complete database			
Jul 2019				
Aug 2019				



	CORE A	CORE B	CORE C	CORE D
Sep 2019	Deliver final complete database			
Oct 2019				
Nov 2019				
Dec 2019	Release of all data products			
Jan 2020				
Feb 2020				
Mar 2020	Submission of PISA 2018 Technical Report (with contributions from Cores C and D)			

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Management deliverables

212. All core contractors will submit a monthly report to Core A that describes the progress made during the month, work to be undertaken during the next month, and any problems or difficulties encountered, particularly any which may impact on the schedule, have implications for the work of other contractors, or cause delays or other difficulties for national centres. The reports shall be collected and collated by Core A who will submit regular reports to the OECD Secretariat and periodic reports for the PISA Governing Board which cover progress, work to be undertaken and any issues across all contractors. The progress reports will be submitted during the entire contract period. The format and frequency of reports to the Secretariat and to the PGB will be discussed and agreed between Core A and the Secretariat.

Budget guidelines and assumptions

213. Budgets should be presented in EUR and detailed according to the table below. For each type of expenditure a total should be given as well as a breakdown of individual staff costs and roles. Costs should be given separately for each of the tasks in the relevant Statement of Work for which the bidder is tendering, ie Tasks 1-5 for Core A, and Tasks 1-3 for Core B. Any savings which would result from the award of all tasks to the same bidder should be clearly identified.

Type of expenditure*	Year						
	2014	2015	2016	2017	2018	2019	2020
Management							
Meetings							
Consultants, contractors and intellectual input							
Miscellaneous – materials, admin support, communication							

*include total plus breakdown of individual staff costs and roles in each category.

214. The budget should be for one project cycle of PISA 2018. PISA operates under a zero-volume growth budget and will continue to do so in the future. Bidders should be aware that the costs of the core PISA 2018 activities cannot exceed those in the previous cycle. This includes the marginal costs of additional participants. Bidders should take account of the fact that the PISA 2018 cycle will build on the work done in the previous cycle. Notwithstanding the amounts mentioned below, it is important that bids demonstrate good value for money, and that bidders clearly show how they will be able to build on and add value to the work done in the past.

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215. The core budget will be for 35 countries (34 OECD member countries plus Brazil). The estimates below take account of this number of countries. In addition, the Secretariat expects up to 50 non-member countries and economies to participate in PISA 2018. Bidders should provide a cost estimate for the participation of each additional country/economy in PISA 2018.

216. The work for *design, development and implementation* (Core A) will span the period from July 2014 to December 2019. In the previous cycle of PISA, the budget for the equivalent components, excluding optional components and marginal costs for participating partner countries or economies, amounted to approximately EUR 5 936 000 (in 2012 prices). The marginal cost for each participating partner country or economy was approximately EUR 57 000 (in 2012 prices).

217. The work for *framework development* (Core B) will span the period from July 2014 to December 2017. In the previous cycle of PISA, the budget for the equivalent components, excluding optional components, amounted to around EUR 713 000 (in 2012 prices). There were no additional marginal costs for partner countries or economies.

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SECTION 5: EVALUATION CRITERIA

218. The evaluation criteria will be the same three criteria as will be used to assess the other components of the PISA 2018 call for tender, though the weights given to the three criteria may vary. For the contracts for *Design, development and implementation (Core A)* and *Framework development (Core B)*, the criteria and their weights will be as follows.

Core A:

Technical quality (40 points)

- Extent to which the proposal demonstrates an understanding of the project design and assessment domains.
- Clear, convincing and feasible proposals for each of the tasks in the Statement of Work.
- Proposals for a test design of PISA 2018 that are innovative and yet in keeping with PISA's aims and philosophy and with the longer term aims of PISA.
- Should proposals of equal technical quality be submitted, the proposal offering more innovation and efficiency gains shall be rewarded.

Organisational and management capabilities (30 points)

- Proven capacity to develop a collaborative working relationship with the other actors, including other contractors, and to promote consensus-building activities through effective communication and management. Proven ability to put effective management and financing structures in place.
- Clarity of how Core A interconnects with other parts of the PISA 2018 work and concrete proposals for how to capitalise on these interconnections through effective collaboration with the other PISA 2018 contractors, including a commitment to working flexibly and in partnership with others.
- Clear and convincing proposals for how the contractor will work with the National Project Managers and the Expert Groups, including the work to develop and select items for the item pool.

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Sound proposals are sought for managing the transition of the work of the Expert Groups from framework development (Core B) to instrument development.

- A commitment to work within a fixed price envelope and to work flexibly and in partnership with the other core contractors, the OECD Secretariat and the PISA Governing Board.

Staff qualifications and previous experience (30 points)

- Past experience and track record in the tasks specific to the Core A work, preferably in an international context and in a timely manner.
- Capacity to enlist the best expertise in providing the deliverables required under the terms of reference.
- The qualifications and experience of the proposed International Survey Director.
- Experience that demonstrates relevant and successful project management and coordination of large-scale assessments and/or projects involving multiple countries; a strong partnership ethos and a commitment to work within a fixed price envelope, whilst seeking innovation and improvement in PISAs methods and operations.

Core B:

Technical quality (45 points)

- Extent to which the proposal demonstrates an understanding of the project design and assessment domains.
- Extent to which the proposal can improve the explanatory power of the background questionnaires, either through improvements to the existing measures - including their validity and international comparability - or by developing new ones.
- Should proposals of equal technical quality be submitted, the proposal offering more innovation and efficiency gains shall be rewarded.

Organisational and management capabilities (25 points)

- Ability of the bidder to develop a collaborative working relationship with the other actors, including other contractors, and to promote consensus-building activities through effective communication and management.
- Ability to put effective management and financing structures in place.

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Staff qualifications and previous experience (30 points)

- Past experience in producing assessment frameworks, preferably in an international context, in a timely manner.
- Capacity to enlist the best expertise in the appropriate disciplines.

MINIMUM GENERAL CONDITIONS

ARTICLE 1 – GOODS OR SERVICES

The services supplied under the Contract (hereinafter “The Work”) shall conform to the standards mentioned in the Terms of Reference. It is expressly agreed that the Contractor shall perform the Work in accordance with all Standards or, where no such standards have yet been formulated, the authoritative standards of the profession will be the applicable norms.

ARTICLE 2 - PRICES

Prices charged by the Contractor under the Contract shall not vary from the prices quoted by the Contractor in its Tender, with the exception of any price adjustment authorised in the Contract or in the Organisation’s request for Tender validity extension, if need be.

ARTICLE 3 - PAYMENTS AND TAXES

Payment will be made in Euros.

The Organisation is exempt from taxation, including from sales tax and value added tax (V.A.T.). Therefore, the Contractor shall not charge any such tax to the Organisation. Upon request, the Organisation will provide the Contractor with a certificate of this exemption. All other taxes of any nature whatsoever are the responsibility of the Contractor.

ARTICLE 4 - DELAY IN EXECUTION

The Contractor shall perform the Work in accordance with the time schedule and the terms specified in the Contract, this being an essential element of the Contract.

ARTICLE 5 - ACCESS TO THE PREMISES

If the Work requires at any time the presence of the Contractor and/or of the Contractor’s employees, agents or representatives on the premises of the Organisation, they shall observe all applicable rules of the Organisation, in particular security rules, which the Organisation may enforce by taking any measures that it considers necessary.

ARTICLE 6 - FORCE MAJEURE

Neither Party shall be liable or be deemed to be in breach of the Contract as a result of any delay in performing, or any failure to perform its obligations, if such delay or failure is caused by force majeure. Force majeure may only be invoked when an event is, at the same time, unforeseeable, unavoidable and beyond the control of the party invoking it. Such events may include, but are not restricted to, civil unrest, wars, revolutions, fires and floods, but under no circumstances shall include public transport strikes or strikes by Contractor’s personnel. The party invoking it shall notify the other Party of its existence as soon as possible, use reasonable endeavours to mitigate its effects and recommence performing the Contract as soon as the force majeure ends.

MINIMUM GENERAL CONDITIONS

ARTICLE 7 - AUTHORITY

The Contractor hereby declares having all rights and full authority to enter into this Contract and to be in possession of all licences, permits and property rights, in particular intellectual property rights, necessary for the performance of this Contract.

ARTICLE 8 - LIABILITY

The Contractor shall be solely liable for and shall indemnify, defend and hold the Organisation and its personnel harmless from and against any and all claims, losses, damages, costs or liabilities of any nature whatsoever, including those of third parties and Contractor's personnel, arising directly or indirectly out of or in connection with Contractor's performance or breach of this Contract.

It is the responsibility of the Contractor to possess adequate insurances to cover such risks, including any risks related to the execution of the Contract.

ARTICLE 9 - REPRESENTATIVES

Neither the Contractor nor any of its experts, employees, agents or representatives:

- Shall in any capacity be considered as members of the staff, employees or representatives of the Organisation;
- Shall have any power to commit the Organisation in respect of any obligation or expenditure whatsoever;
- Shall have any claim to any advantage, payment, reimbursement, exemption or service not stipulated in this Contract. In particular and without limitation, it is understood that neither the Contractor, nor any of Contractor's employees, agents or representatives may in any manner claim the benefit of the privileges and immunities enjoyed by the Organisation or by its personnel;
- Shall disclose or use, in whole or in part, for any purpose whatsoever, other than that specified in the present Contract, information or documents communicated to them, or which come to their knowledge in the course of the performance of this Contract, including, but not limited to, the results of the Work under the Contract. The Contractor shall ensure that the Contractor's employees, agents and representatives are expressly bound by and respect the provisions of the present clause.

ARTICLE 10 - DESIGNATION OF A CO-ORDINATOR

The Contractor shall appoint a co-ordinator within its personnel, to be approved by the OECD. The co-ordinator shall actively cooperate with the Organisation's representatives. Throughout the duration of the Contract, the co-ordinator will consult the Organisation as often as necessary and will attend meetings, if need be. The OECD reserves its right to ask for the replacement of this co-ordinator if deemed necessary.

MINIMUM GENERAL CONDITIONS

ARTICLE 11 - INTELLECTUAL PROPERTY

The copyright and any other intellectual property rights arising from the Work carried out in performance of this Contract, including the intermediate and final results thereof, shall vest in the Organisation as the Work is created, or be assigned to the Organisation, as the case may be under any applicable legal theory.

The Contractor undertakes not to use the Work for any purpose whatsoever that is not directly necessary to the performance of the Contract, except with the prior written consent of the Organisation. The Contractor shall ensure that the Contractor's employees, agents and representatives are expressly bound by and respect the provisions of the present clause 15.

ARTICLE 12 - TRANSFER OF RIGHTS OR OBLIGATIONS

The Contractor shall not transfer to any third party any rights or obligations under this Contract, in whole or in part, or sub-contract any part of the Work, except with the prior written consent of the Organisation.

ARTICLE 13 - TERMINATION FOR BREACH

Without prejudice to any other remedy for breach of Contract the Organisation may claim, the Organisation reserves the right to terminate the Contract without any prior notice or indemnity:

- i) In the event of failure by the Contractor to comply with any of its obligations under the Contract; and/or
- ii) If the Contractor, in the judgment of the Organisation, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

ARTICLE 14 - TERMINATION FOR CONVENIENCE

The Organisation may, by written notice sent through registered mail with recorded delivery to the Contractor, terminate the Contract, in whole or in part, at any time for its convenience. The notice shall specify that termination is for the Organisation's convenience, the extent to which Work of the Contractor under the Contract has been completed, and the date upon which such termination becomes effective. The Work that is complete on receipt of notice by the Contractor shall be accepted by the Organisation, at the Contract terms and prices. For the remaining, the Organisation may elect:

- i) To have any portion completed at the Contract terms and prices; and/or;
- ii) To cancel the remainder and pay to the Contractor the amount corresponding to the completed work.

ARTICLE 15 - ARBITRATION CLAUSE



MINIMUM GENERAL CONDITIONS

Any dispute arising out of the interpretation or implementation of this Contract, which cannot be settled by mutual agreement, shall be referred for decision to an arbitrator chosen by agreement between the Organisation and the Contractor or, failing such agreement on the choice of the arbitrator within three months of the request for arbitration, to an arbitrator appointed by the First President of the Court of Appeal of Paris at the request of either Party. The decision of the arbitrator shall be final and not subject to appeal. The arbitration shall take place in Paris, France.

ARTICLE 16 - CONFIDENTIALITY

Any information, on any medium whatsoever, sent to the Contractor to which the Contractor obtains access on account of the Contract, shall be held confidential. In consequence, the Contractor shall not disclose such information without the written prior consent of the Organisation.

ARTICLE 17 - DURATION OF THE CONTRACT

The duration of the contract shall be determined at a later stage

I declare having read the terms of the present Minimum General Conditions for OECD Contracts and agree to comply with said terms should (please insert here the name of your entity).....be selected to carry out the Contract.

Done at:

Date:

Signature: