



**PISA FOR DEVELOPMENT  
CAPACITY BUILDING PLAN:  
ZAMBIA**



**PISA**  
FOR DEVELOPMENT





**PISA FOR DEVELOPMENT  
CAPACITY BUILDING PLAN:  
ZAMBIA**

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

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

**Photo credits:** © epicurean / iStockphoto

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgement of the source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to [rights@oecd.org](mailto:rights@oecd.org). Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at [info@copyright.com](mailto:info@copyright.com) or the Centre français d'exploitation du droit de copie (CFC) at [contact@cfcopies.com](mailto:contact@cfcopies.com).

## ACKNOWLEDGEMENTS

This plan has been produced with the support of the World Bank, through its READ Trust Fund programme, as part of its contribution to the PISA for Development project.

This plan has been prepared by Fernando Cartwright on behalf of the OECD and the Ministry of Education, Science, Vocational Training and Early Education of Zambia as part of the PISA for Development project. PISA for Development is an initiative of the OECD and its partners that aims to identify how the Programme for International Student Assessment (PISA) can best support evidence-based policy making in emerging and developing economies – and contribute to the UN-led definition of global learning goals for the post-2015 agenda. In addition the project will help to build country capacity in assessment, analysis and use of results for monitoring and improvement of education among participating countries.



## TABLE OF CONTENTS

CAPACITY BUILDING PLAN: ZAMBIA.....	7
1. Introduction and overview of plan.....	7
2. Background.....	8
3. Zambia country context.....	9
4. Summary of the Capacity Needs Analysis.....	11
4.1. Capacity for enhancing and implementing contextual questionnaires.....	11
4.2. Capacity for enhancing and implementing cognitive instruments.....	11
4.3. Assessment of capacity for incorporating out-of-school 15-year-olds in the assessment.....	11
4.4. Country capacity in assessment, analysis and use of results for monitoring and improvement.....	12
5. Results based on analysis using the Capacity Building Framework.....	12
5.1. Capacity building for PISA-D implementation.....	12
5.2. Increased capacity for PISA-D and for national assessments.....	26
6. Overall cost summaries.....	34
7. Monitoring and evaluation.....	35
8. Next steps.....	37
REFERENCES.....	38
ANNEX A.....	39

### Tables

Table 1. Capacity Building Plan Zambia.....	35
Table 2. Indicators for monitoring and evaluation based on the ultimate goals for each area of development.....	36
Table A.1. Schedule of PISA-D international/NPM meetings.....	39





## **PISA FOR DEVELOPMENT**

### **CAPACITY BUILDING PLAN: ZAMBIA**

#### **1. Introduction and overview of plan**

Since its launch in 2000 the Programme for International Student Assessment (PISA), which measures the competencies of 15-year-olds in the domains of reading, mathematics and science, has served as a reliable source of evidence for policy decisions and educational reform in developed countries. In order to make this valuable tool more accessible and relevant to developing countries, the OECD initiated PISA for Development (PISA-D) in consultation with its partners, which would use appropriately modified instruments but would provide results on the same scales affording international comparisons. In order to ensure successful participation, the OECD has helped to prepare the six participating countries (Cambodia, Ecuador, Guatemala, Paraguay, Senegal and Zambia) in three phases. First, a capacity needs analysis for each country was prepared. In the second phase a capacity building plan has been prepared for each of the six countries based on their respective capacity needs. In the third phase of preparation the countries will develop a project implementation plan. The improved assessment capacity, followed by analysis and use of results will improve their evidence-based decisions and their contribution to the UN-led definition of global learning goals for the post-2015 agenda.

The first phase of preparation for Zambia's participation in PISA-D, the capacity needs analysis (CNA), was conducted through consultations with key stakeholders and the Examinations Council of Zambia (ECZ) which is the National Centre designated for implementing PISA-D in the country. The stakeholders included departments in the Ministry of Education, development partners and research institutes. The lead development partner in Zambia supporting PISA-D is the Department for International Development (DFID), United Kingdom.

This document describes the output of the second phase of Zambia's preparation for PISA-D: the capacity building plan (CBP). The CBP was developed with the ECZ with the support of the World Bank through the READ Trust Fund and the OECD. This second phase was implemented in two stages. The first stage, conducted in August 2014, elaborated on the capacity building priorities identified in the CNA to identify key activities required by the OECD's international contractors, the ECZ and other in-country stakeholders in order to build the desired capacities. The output from this first stage was used by the OECD to inform discussion with its international contractors that are responsible for implementing the project with the countries and to refine the requirements for the CBP. The second stage of the development of the CBP, conducted in February 2015, used the finalised structure and international implementation schedule to define the schedule of activities described in this document.

The CNA revealed that Zambia had a mature assessment climate, one that was similar to many countries already implementing PISA, and that the current capacity of the ECZ would likely be able to implement PISA-D successfully. However, there were several aspects of the enabling environment and organisational capacity, in particular, which limited the ability of Zambia to effectively utilise the PISA data and sustainably manage the implementation of the programme. To a lesser extent, the CNA also identified some areas related to individual capacity that could benefit from PISA-D support, such as cognitive item development (particularly using the PISA skills framework) and data analysis and reporting.

The CBP for Zambia addresses each of these priorities using a combination of international training workshops provided by the OECD and its international contractors, international peer-to-peer learning activities, and in-country training and workshops. The CBP was worked out for the four-year PISA-D cycle (2015-2018) with costed learning activities related to the implementation schedule of PISA-D.

The CBP contains the following sections:

- description of the capacity building components of PISA-D
- description of Zambian context with respect to policy goals in the education sector and expectations with respect to PISA-D
- summary of the CNA findings and capacity building priorities
- description of main capacity building activities associated with the capacity building priorities
- schedule of activities, including timing and budget over the four years of PISA-D implementation
- monitoring and evaluation of the CBP
- prescription of next steps in the PISA-D implementation.

## 2. Background

This collaborative effort between the World Bank (Washington, D.C.) and the Organisation for Economic Co-operation and Development (OECD) (Paris) is to develop capacity for developing countries to prepare them for participation in PISA-D.

The OECD PISA-D Participation Agreement was signed by the Permanent Secretary, Ministry of Education, Science, Vocational Training and Early Education (MoE), Government of Zambia, Mr. Chisimba Nkossa, on 6 October 2014.

The CBP will run concurrently with the process of developing PISA-D, culminating in the collection of data in late 2016 (Field Trial) and late 2017 (Main Study) and reporting in 2018. As noted above, there are three phases for the preparation of Zambia for its participation in PISA-D:

- The Capacity Needs Analysis (CNA): the capacity of the country is based on its national and international assessment experience benchmarked against the requirements for PISA-D. The necessary capacity for PISA-D is defined as:

“the ability of the individuals and institutions responsible for the project in each country to perform the necessary functions to carry out the multiple steps of PISA assessment implementation (as generally set out in the roles and responsibilities for the National Centre (NC) and the National Project Manager (NPM), as well as in the Participation Agreement signed between the country and the OECD), solve the likely problems that will arise during implementation, provide timely and adequate information for project implementation, and set and achieve project objectives in a sustainable manner.”

The CNA for Zambia was finalised and published jointly by the OECD and the World Bank, with approval from the Permanent Secretary, MoE, in December 2014. The CNA took into consideration national aspirations for a well-functioning assessment system in the context of a

country's education policies and reform priorities and strategies as well as the specific capacities and competencies required for successful implementation of PISA-D.

- **Capacity Building Plan (CBP):** The CBP focuses on the needs identified in the CNA for the country based on the difference between the current capacity and the target competencies required. The CBP will cover the four years of PISA-D implementation, costed and planned in relation to the PISA-D schedule. The programme would include the human and financial resources both international and national to achieve the target capacity within a projected timeline. Although specific dates and activities may require modification based on co-ordination of activities with the PISA-D international contractor, OECD, and other participating countries, the intent of this CBP is that the activities and outcomes should be achievable within a four-year time period.
- **Project Implementation Plan (PIP):** Though a generic PISA-D PIP has been provided to countries, each country has to prepare a PIP according to its specific needs and operational conditions. The PIP also needs to be integrated with the overall international plan for implementation of PISA-D and the work of the international contractor.

### 3. Zambia country context

National policy in Zambia is embodied in a series of multi-year national development plans, within the overarching framework described in *Educating Our Future, Vision 2030*, which outlines the objective of Zambia becoming a prosperous middle-income country by 2030. The current policy document, the Revised Sixth National Development Plan 2013-2016 (R-SNDP) is a revision of the Sixth National Development Plan 2011-2015. The R-SNDP was developed to incorporate the priorities of the Patriotic Front government after the election of President Sata and the Patriotic Party in 2011, which represented the first change of party rule since the introduction of the multiparty system in 1991. The death of President Sata in 2014 and subsequent elections in February 2015 have produced a change in Cabinet, but the general strategic goals and policies are expected to remain consistent with those of the previous government.

The focus of the R-SNDP is the development of sectors that will have the greatest impact on job creation, rural development and inclusive growth. These sectors primarily deal with social and economic infrastructure, such as water supply, transportation networks and information and communications technology. However, the R-SNDP also recognises the increased burden on available human capital that accompanies the introduction of advancements in technologies and increased productivity. Accordingly, the R-SNDP also sets specific goals for Human Development through the education sector.

The education sector is divided into three levels: Basic Education (grades 1-9), High School (grades 10-12), and Higher Education. Progress through Basic Education is marked by the Primary School Certificate Leaving Examination in grade 7, which students must pass in order to enter grade 8. Entry to High School is also marked by the mandatory Junior Secondary Leaving Examinations, and successful completion of High School requires passing the Combined School Certificate and General Certificate of Education Examination. Students completing High School may pursue Higher Education in one of three separate streams: university, teacher training college, technical and vocational training.

Students at age 15, the target population of PISA-D, are typically in grade 9 or 10 and are thus at the intersection between these three levels of schooling. Many of these students have made or will soon make the transition from Basic Education to High School and are contemplating which path to pursue in Higher Education. At the same time, however, the funnelling effect of the promotion examinations has reduced the proportion of Zambian 15-year-olds who remain students in the education sector. Either because of low

expectations of success or actual failure to pass an examination, more than half of 15-year-olds in Zambia have left formal education by age 15.

Education policy is governed by the MoE. The MoE's strategic focus combines the policy aspirations outlined in the R-SNDP and also embraces social factors impacting the education system including HIV/AIDS, gender, disability, OVC and illiteracy. The specific goals and mid-term policies of the MoE are outlined in the third National Implementation Framework (NIF III), which covers the period 2011-2015. The policies in the NIF III indicate a shift from early frameworks, which tended to focus primarily on access to Basic Education and providing infrastructure. Access to entry-level Basic Education is approaching universal, and attention has shifted to issues of quality, instructional effectiveness, equity, and ensuring the relevance of education to both the needs of individuals and local communities and international standards. Accordingly, the information used to monitor programme success is also shifting from input and supply factors to student outcomes.

Zambia has a long history of monitoring student outcomes. Public examinations in Zambia were first implemented in 1928 and remain a prominent feature in the education sector. These examinations are developed and administered under the authority of the ECZ, which operates as a semi-autonomous arms-length government agency under the Department of Standards within the MoE. Promotion examinations at grades 7, 9 and 12 are critical for individual success, and average performances are typically interpreted by stakeholders as measures of the effectiveness of the education sector.

However, the content and structure of these examinations render them of limited usefulness for satisfying many of the key information needs of policy-makers. For this reason, the ECZ has also developed the National Assessment Survey (NAS), which mimics, at a national level for grade 5 students, the research-oriented content developed by the Southern Africa Consortium for Measuring Education Quality (SACMEQ), which includes both a curriculum-derived assessment as well as a contextual questionnaire. Zambia has participated in every cycle of the SACMEQ large-scale assessment since 1997, and the NAS has been implemented in two-year cycles almost continuously since 1998. Since 2013, the scope of the NAS has also expanded to include grade 9 students.

Although these existing research-oriented large-scale assessments have a lengthy track record in Zambia, their direct impact on educational policy and educational discourse has been limited. For example, the SACMEQ results have prompted additional scrutiny on the education sector, but there are no policies or initiatives that have been produced as a direct result of research findings of either assessment programmes. Neither of the assessments are typically used as the monitoring and evaluation metric for policies or interventions of the MoE or co-operating partners.

Based on interviews with stakeholders, the limited utility of these instruments is most likely a result of two factors. First, the focus on curriculum limits the scope of inference to achievement of students within the specific school year, rather than examining the cumulative effect of different factors over the course of many years. Similar information is typically available with a higher profile from the examinations results. Second, the contextual questionnaires are not designed with specific information needs in mind; the primary reason for specific questions being included on the questionnaires is because they are included on previous questionnaires (or, in the case of the NAS, because the questions are included in SACMEQ). Similar information is typically available with better coverage from the Annual School Census results.

The research team at ECZ responsible for the NAS has been designated as the National Centre for PISA-D, and it is expected that capacity building activities conducted through PISA-D will be immediately applicable to the larger programme of assessment development and research in the NAS. The PISA-D CNA identified several opportunities for PISA-D assessments to improve the quality and relevance of

information provided to stakeholders and as well as the methodology used to collect and report the information.

#### **4. Summary of the Capacity Needs Analysis**

##### ***4.1. Capacity for enhancing and implementing contextual questionnaires***

With the project implementation support that is planned by the OECD, the National Centre, ECZ, has sufficient existing capacity to be able to manage the implementation of Strand B of PISA-D – contextual questionnaires – in accordance with PISA standards. The ECZ has experience with the adaptation of existing survey instruments for cultural and linguistic equivalence according to international guidelines, but has no capacity for the design of instruments for research purposes. The use of questionnaire data has historically been limited to reporting simple descriptive statistics and demographic comparisons. Capacity for development and use of enhanced questionnaires requires additional statistical and psychometric expertise. However, the Steering Committee for the National Assessment Survey (NAS), whose membership includes university researchers, co-operating partners and other key Zambian stakeholder groups, and is chaired by the Permanent Secretary of the MoE, will be able to identify the key research priorities and assist the PISA contractor in the development of appropriate instruments.

##### ***4.2. Capacity for enhancing and implementing cognitive instruments***

With the project implementation support that is planned by the OECD, the National Centre, ECZ, has sufficient existing capacity to be able to manage the implementation of Strand A of PISA-D – cognitive instruments – in accordance with PISA standards. The current expectation for the PISA-D project is that no new items will be developed for the international cognitive assessment.

The main challenges implementing the PISA-D cognitive instruments stem from the differences between the PISA assessment framework and the curriculum-based content typically found in examinations and large-scale assessments in Zambia. Because of these differences, stakeholders will likely have difficulty associating the PISA-D results with their goals and objectives, which are typically associated with curriculum delivery in an academic context. The ECZ currently does not have sufficient familiarity with the PISA assessment framework to bridge the PISA cognitive assessments with the learning objectives prescribed by the Basic Education curriculum.

The ECZ has also identified several aspirational goals which, although not necessary for the implementation of PISA-D, would improve the local capacity to develop and report the results of cognitive assessments. These goals include development of complex item types, scoring protocols, psychometric analysis, and development of described proficiency levels.

##### ***4.3. Assessment of capacity for incorporating out-of-school 15-year-olds in the assessment***

Current capacity of the National Centre, ECZ, is insufficient to manage the implementation of Strand C of PISA-D – out-of-school 15-year-olds – in accordance with proposed PISA-D standards. The ECZ does not have the technical capacity for designing or conducting a sample outside of schools. Any implementation of this strand will likely require co-operation of the Central Statistics Office (CSO). The ECZ is prepared to take a co-ordinating role, developing instrumentation and training data collectors, with the CSO directly managing the population enumeration and data collection. However, the CSO currently does not have capacity to sample 15-year-olds or conduct extended interviews with cognitive assessments. Implementing this strand will require substantial co-ordination with the PISA contractor to identify target population and develop an appropriate data collection strategy.

#### ***4.4. Country capacity in assessment, analysis and use of results for monitoring and improvement***

The ECZ is an internationally-recognised body with expertise in the field of assessment and almost 100 years of experience administering secure standardised assessments in schools, often in multiple languages. The ECZ will not have any difficulty using existing assessment delivery infrastructure for the administration of the in-school components of PISA-D.

### **5. Results based on analysis using the Capacity Building Framework**

The collaborative work with ECZ on capacity building took place between 1<sup>st</sup> and 14<sup>th</sup> September, 2014. First, using the web tool ([www.polymetrika.org/PISAD/Home/DataEntry](http://www.polymetrika.org/PISAD/Home/DataEntry)), the CNA was reviewed. During the review, requirements that were not met and requirement that were met but where existing experience had to be applied to new or different requirements demand by PISA were identified. Using this list of capacity needs, options for capacity building elements were developed and priorities were assigned to them. Next, capacity building activities were selected to responded to the capacity needs related to the capacity building elements under each of the areas of development and then to schedule them over the four-year project cycle. This schedule is aligned to the programme of 8 international/NPM meetings that are planned over the course of the project (see Annex A). The final step was to develop a budget for each capacity building element by year of PISA implementation.

The CBP process resulted in two types of investments: 1) related to PISA-D implementation, and 2) increased capacity for PISA-D and for national assessments. The results of the analysis of the capacity building framework are presented under these two types of investment. The capacity needs identified, each with its rating are presented with their goals, for each capacity building element. This list was used to develop the ultimate goal for each area of development, which will be later used for monitoring and evaluation. Finally, the activities that were planned by project phase are shown under each of the 11 capacity building elements with their related costs.

The resulting CBP includes many aspiration goals that may not be required for minimal PISA-D implementation. It is the expectation of the stakeholders who contributed to the development of the CBP that priority will be given to minimal implementation, and, where budget constrains investment to a limited number of activities, these decisions will be made on an ad hoc basis. By design, the planned activities contribute as much as even more to the general assessment capacity or functionality of the education sector than to the minimal PISA-D implementation requirements.

#### ***5.1. Capacity building for PISA-D implementation***

Note: all costs and funding amounts are in US dollars.

##### ***5.1.1. School, student and out-of-school youth sampling***

Development/population of school, student and out-of-school sample frames using unique identifiers. The approach for out-of-school youth should first focus on including TVET and employed youth and then address the non-employed/non-student population.

Specific programme capacity targets:

- 15-year-old census: Information about out-of-school 15-year-olds is available from data sources updated with 2-5 year frequency ECZ and CSO must work with PISA-D to select/develop an appropriate methodology to define the sample frame for out-of-school 15-year-olds – **established**

- location of 15-year-olds: Information about location is at community or district levels (e.g. number of 15-year-olds in each community): Census-based data need to be augmented with other administrative records (annual school census, employment data, TVET enrolments) to produce more accurate population estimates – **established**
- specialised skill for scientific probability sampling: Survey design staff have experience designing complex samples with appropriate design weights and/or performed non-response adjustments to analysis weights – **advanced**.

**Phase II (2015-2016): Develop sampling plan and methodology for assessing out-of-school 15-year-olds**

Activity	Working with the international contractors, ECZ will develop a sample frame design for out-of-school 15-year-olds. Using the information provided by the key stakeholders, the international contractor provides options for sampling out-of-school 15-year-olds. Each option includes information about technological, data and logistical requirements. The international contractor provides a recommendation based on information provided by the stakeholders and, where information is not provided, explicit assumptions.
Deliverables	The sample frame design includes descriptions of the target population as well as strategies to enumerate the population and draw a scientific sample.
Country responsibilities	The ECZ co-ordinates with key stakeholders engaged with out-of-school 15-year-olds (CSO, TVETA, and Ministry of Agriculture) to define the target population to which the PISA-D out-of-school youth should generalise. The ECZ leads the process and provides the PISA-D international contractor with the population specification as well as any information requested by the international contractor that may be necessary to design the sample or make an informed recommendation.
Relevant documentation	Sampling out-of-school 15-year-olds paper.
In-country costs	USD 0.

Phase II (2015-2016) total cost: USD 0

**Phase III (2016-2017): Complete the sample frame definition for the defined target population**

Activity 1	The PISA-D international contractor leads international workshops on sampling, in the context of the National Project Managers meetings number 2 and 3 in Washington DC (United States) in January 2016 and Asunción (Paraguay) in April 2016. The workshops include concepts such as bias and random error as forms of sampling error and how sample designs consider both sampling error and cost efficiency. They will also cover the design of samples beginning with research goals and the creation of a sample frame, using specific examples from previous PISA countries.
Administrative details	To attend the NPM meetings, this training will include four participants (potentially some from CDC and Planning) for a total of 10 days (5 days for each NPM meeting). The unit travel cost is USD 6 000. Costs for the workshop and activities will be covered by the PISA-D international contractor. The budgeted amounts cover travel, accommodation and per diem for participants. Note that the participants will participate in concurrent training activities related to translation and adaptation of survey materials.
In-country costs	USD 64 000.
Activity 2	Completion of the sample frame. The international contractor provides direction to local contractors and project partners (e.g. ECZ and CSO) for enumerating the target population. The enumeration and final definition of the sample frame are completed by Zambian project partners.
Deliverables	Training for local interviewers/enumerators, plus enumerated sample strata for the population of out-of-school 15-year-olds in Zambia.
Country responsibilities	Populate design with necessary data. Co-opt key staff from CSO into ECZ for planning activities. Hire data enumerators to populate sample frame. Plan data collection methodology.
In-country costs	USD 20 000.
Activity 3	Following each NMP meeting a follow up meeting of the advisory council will be organised to report on the new information, discussions and training provided by the international contractors. The goal of these meetings will be to communicate effectively, sustain momentum for the project, and strengthen ownership for a wide array of stakeholders in government, donors and civil society.
Deliverables	Two meeting of approximately 40 people.
Country responsibilities	ECZ to organise, host and deliver both meetings.
In-country costs	USD 8 000.

Phase III total cost: USD 92 000



**Phase IV (2017-2018): Implementation of methodologies for analysis of complex samples (weighting, non-response adjustment)**

Activity 1	In the context of the National Projects Manager meeting number 6 to be held in Antigua (Guatemala) in July 2017, the PISA-D international contractor holds an international workshop on sampling. The workshop reinforces theoretical concepts developed during the previous sampling workshop, with an additional focus on the specific design of each country's PISA-D sample. The format of the workshop includes learning-by-doing, as participants use information about their target populations and research priorities to develop and appropriate sample design that suits the needs and budget of the PISA-D implementation. The workshop covers the design of samples beginning with research goals and the creation of a sample frame, using specific examples from previous PISA countries.
Administrative details	This training may include four participants, including staff from ECZ, Research, and possibly from CDC and Planning for a total of 5 days. The unit travel cost is USD 6 000 including accommodation. Costs for the workshop and activities will be covered by the PISA-D international contractor. Note that participants will likely participate in other concurrent activities related to instrument development and adaptation at the same site. Note that the participants will participate in concurrent training activities related to survey operations for the main study.
In-country costs	USD 32 000.
Activity 2	Calculation and application of survey weights. The international contractor verifies the correct application of methods for calculating and applying survey design weights in the production of secondary statistics for the reporting of initial results. This activity is carried out by the international contractor in co-ordination with participating countries.
Reporting requirements	The international contractor provides written feedback, either a) recognising the correct application of the survey design to the estimation of statistics and standard errors, or b) describing where errors are made and how to correct them.
In-country costs	USD 0.
Activity 2	Following the NMP meeting a follow up meeting of the advisory council will be organised to report on the new information, discussions and training provided by the international contractors. The goal of the meeting will be to communicate effectively, sustain momentum for the project, and strengthen ownership for a wide array of stakeholders in government, donors and civil society. In particular, this meeting will explain the assessment, what is being measured and how.
Deliverables	One meeting of approximately 40 people.
Country responsibilities	ECZ to organise, host and deliver the meeting.
In-country costs	USD 4 000.

Phase IV total cost: USD 36 000

**Summary: Total capacity-building element cost = USD 128 000**

### 5.1.2. Response-coding methods and protocols

Implementation of best practices for ensuring quality and inter-rater reliability (double-coding, sampling, etc.).

Specific programme capacity targets:

- adherence to protocol: Data processing staff have experience operating with a variety of protocols in different contexts – **advanced**

- response-coding expertise: Response coders are recalibrated periodically based on results of reliability analysis (see Standard 11.3) – **advanced**
- fidelity of response coding: The operations manual is used directly in training for and management of coding activities – **established**.

**Phase II (2015-2016): Development of protocols and training in best practices**

Activity 1	Participating in the 2016 International Advisory Group meeting in Asunción (Paraguay) in March 2016, PISA-D countries will review the implementation of the PISA-D project.
Country responsibilities	The ECZ ensures the National Project Manager and relevant staff participates in the International Advisory Group meeting. The costs included here cover travel for 2 participants for a 3 day meeting.
In-country costs	USD 12 000.
Activity 2	After the National Project Managers meeting number 4 in Livingstone (Zambia) in July 2016, the international contractor produces a protocol document based on PISA technical standards describing the procedures required to maintain data quality during the coding of questionnaire and cognitive items. The protocols are an adaptation of existing work, with sufficient additional details and descriptions to facilitate formulaic (step-by-step) implementation in an operational context.
Deliverables	The response-coding protocols include specifications for working environment, training and supervision requirements, double-coding practices and use of statistics to monitor data quality.
Administrative details	The costs for this activity are covered by the participation agreement signed by ECZ with the OECD.
In-country costs	USD 0.

Phase II (2015-2016) total cost: USD 12 000

**Phase III (2016-2017): Implementation of response-coding protocols**

Activity	Training workshop in response-coding practices using test and questionnaire responses from the pilot test. The workshop uses a learning-by-doing approach that allows the ECZ to implement the response-coding protocols with guidance and supervision from the international contractor. This activity will be carried through phase III and covers two trainings, one for the field trial and another for the main study.
Deliverables	At the completion of the workshop, the ECZ has the operational structures in place to meet the PISA technical standards for both the field trial and the main study.
Reporting requirements	A workshop summary lists the participants and notes which elements of the response-coding protocol document were covered during the workshop. For elements that were not covered, the summary explains why the element was omitted and, where relevant, describes the strategy that will be used to ensure compliance with that element during the processing of the main survey.
Country responsibilities	The ECZ ensures that a sufficient number of test and questionnaires are available from the field test to provide a useful learning experience. Any specialised software required by the response-coding process must be installed on participants' computers. The ECZ is responsible for identifying participants and managing logistical details for the workshop.
In-country costs	USD 23 452.

Phase III (2016-2017) total cost: USD 23 452

**Summary: Total capacity-building element cost = USD 35 452**

### 5.1.3. Research and development for LSA

The ECZ will institute a research programme based on LSA data. Features of the programme will include dedicated time and resources for research activities and capacity building activities.

Specific programme capacity targets:

- data manipulation skill: fluency with statistical software (e.g. SPSS, SAS): Data management is performed using syntax files – **advanced**
- fidelity of instrument translation and adaptation to local contexts: Translators or staff responsible for instrument adaption are knowledgeable about the constructs measured by PISA questionnaires (e.g. SES, school climate, engagement with learning, etc.) – **advanced**.

#### Phase II (2015-2016): Development of long-term research programme

Activity	The ECZ formalises a research programme, which broadly identifies long-term research goals with appropriate data sources (existing and planned). Based on review of the pilot research activities, the research programme identifies best practices. The programme also includes strategies for developing strategic partnerships with other stakeholders or experts in educational research, including academic and private sector, local and international. Where possible, co-operation with external agencies should be formalised, establishing the role of ECZ as a research body as well as a testing institution.
In-country costs	USD 0.

Phase II (2015-2016) total cost: USD 0

**Phase IV (2017-2018): Pilot research activities using existing data holdings**

Activity 1	At the National Project Managers number 7 meeting to be held in Saly (Senegal) in March 2018, an international contractor delivers a workshop on the analysis of large-scale survey data. The intent of the workshop is not solely on statistical methods. Instead, the workshop focuses on strategies for rendering survey data meaningful to audiences. The goal is to identify opportunities and methods for integrating different sources of information (either different analyses, different data sources, or different research methods) to produce a coherent narrative. The workshop provides a learning-by-doing approach, using existing data from a previous NAS. The training provider will use a previous report as the basis for the workshop. Participants will identify a possible narrative in the previous report and develop a strategy for expanding and detailing the narrative. Strategies include operationalising research questions, identifying confounding variables, creating and testing theoretical models, deciding when it is appropriate to defer to previous research, and how to incorporate qualitative data.
Deliverables	All training materials are submitted. The strategies presented in the workshop should be presented as a library or 'recipe book' of options from which analysts may select one or more as appropriate to their situation.
Country responsibilities	The ECZ is responsible for identifying participants. Prior to the workshop, the ECZ will identify and provide the training provider with the public report and data for a previous NAS. The data should include variable and value labels as well as copies of the underlying questionnaires. Participants in the workshop must attend all workshop sessions.
Administrative details	The ECZ is responsible for selecting local experts and staff expert with experience in analysis of large-scale educational surveys to participate in this training. International costs include travel, accommodation, per diem and consulting fees for a 10 day workshop. Training facilities will be provided by international contractors.
In-country costs	USD 32 000.
Activity 2	The ECZ pilots the research programme and prepares for the PISA-D analysis by conducting one research activity per quarter. The analyses use data from previous LSAs and focus on creating narratives supported by data that are accessible to lay audiences. Each activity deals with a single theme, and should explore using multiple reporting formats. The focus on reporting results is production of information rather than production of documents or text. For example, it may be possible that the most useful format for presenting the results for one research project is a PowerPoint presentation or op-ed news column rather than a traditional report.
Activity 2	Following each NMP meeting a follow up meeting of the advisory council will be organised to report on the new information, discussions and training provided by the international contractors. The goal of these meetings will be to communicate effectively, sustain momentum for the project, and strengthen ownership for a wide array of stakeholders in government, donors and civil society.
Deliverables	A meeting for approximately 40 people.
Country responsibilities	ECZ to organise, host and deliver the meeting.
In-country costs	USD 4 000.
Deliverables	Four completed research project. The projects are independent and may use a variety of formats for reporting their findings.

Phase IV (2017-2018) total cost: USD 36 000

**Summary: Total capacity-building element cost = USD 36 000**

#### 5.1.4. Stable funding for co-ordinated large-scale assessment activities.

Establish a line item in Yellow Book (Estimated of Revenue and Expenditure: Activity Based Annual Budget, Government of Zambia) for co-ordinated LSA and ILSA activities.

Specific programme capacity targets:

- stability of NLSA programme: The NLSA is a stable programme that has been operating regularly – **established**
- having regular funding for NLSA: There is regular funding allocated to the NLSA. Currently, the annual budget for NLSA falls under the Department of Planning within the Ministry of Education, which does not accurately represent the scope and breadth of activities associated with the NLSA. A more desirable situation would be for the NLSA activities to be more visible in the national budget so that high-level budgetary decisions do not reduce the budget of the NLSA simply to produce a more equitable-looking budget from the perspectives of the various departments – **established**
- adequacy of NLSA funding: Funding covers all core NLSA activities: design, administration, analysis and reporting – **established**
- having regular funding for ILSA: There is regular funding approved by law, decree or norm. There should exist a budget line item in the Estimated Expenditures for the National Budget (Yellow Book). The line item ensures that funding will be made available from whatever resources are available (as was done with the NAS). The commitment ensures that the project continues to exist. The Steering Committee (SC) is presented with proposal. If the SC recommends the proposal, then the proposal is tabled to the Permanent Secretary and senior managers – **advanced**
- adequacy of ILSA funding: Funding covers all core activities of the ILSA – **established**.

#### Phase II (2015-2016): Establish commitment of project funding from various sources

Activity 1	Completion of project plan for PISA-D.
Deliverables	Government and (where applicable) development partners will release discretionary and sector funds to ECZ for the PISA-D activities. Release of the funds will trigger the complete payment of all international participation fees.
Country responsibilities	ECZ will draft the project plan that includes full project costs through the four-year cycle and submit it for approval to government.
In-country costs	USD 0.
Activity 2	Co-ordinated LSA budget line proposal.
Country responsibilities	ECZ drafts a proposal to introduce a budget line item for LSA activities conducted in Zambia. The budget would include costs associated with the National Assessment Survey, PISA-D and (to the extent possible) SACMEQ. The proposal will be submitted to the Joint Steering Committee.
In-country costs	USD 0.
Activity 3	Approval of budget line proposal by Permanent Secretary and senior directors at MoE.
In-country costs	USD 0.
Activity 4	Approval of budget proposal by government.
In-country costs	USD 0.

Activity 5	Co-ordination of LSA project plans.
Country responsibilities	The ECZ identifies common project elements between LSA projects and streamlines operations to reduce redundancies, strengthen shared resources, and co-ordinate operational schedules to reduce conflicting demands on shared resources.
In-country costs	USD 0.

Phase II (2015-2016) total cost: USD 0

**Summary: Total capacity-building element cost = USD 0**

#### 5.1.5. Measurement of skills in context.

Adaptation of PISA framework to measure skills learned in formal education as they are used in real-world contexts (specifically, the Zambian context).

Specific programme capacity targets:

- contributions to ILSA: The country/system has contributed new knowledge on ILSA. Development of new content (questionnaire and test items) for PISA-D should also benefit similar countries who wish to implement PISA-D in the future – **advanced**
- learning needs for non-academic outcomes: A framework extends the K-12 curricula to adult competencies relevant to local contexts (including economy, citizenship, etc.)The PISA cognitive framework should integrate the skills defined in the curricula/syllabi – **advanced**
- translator knowledge of PISA framework: Translators or staff responsible for adaptation are knowledgeable about the PISA assessment framework – **established**
- NPM’s and NC’s Familiarity with PISA skill ontology / framework: A common framework is used by NC staff for identifying skill determinants and dependencies for different learning objectives – **advanced**.

**Phase II (2015-2016): ECZ item writers are trained in the PISA framework and can develop items with specified cognitive characteristics in real-world contexts. Item writers will adapt existing PISA items to the Zambian context and create new items to populate an item bank equivalent to 3 hours of continuous testing.**

Activity 1	Based on international training activities, team leaders in item development train item writing staff by replicating the international training procedures and examples.
Deliverables	Participants collectively produce a large volume of test items of varying cognitive complexity and content. There should be enough items to represent approximately three to four hours of continual testing. These items are the basis of the Zambia PISA-D item bank. Each item should include metadata that describes its cognitive specifications, authorship and scoring instructions.
Reporting requirements	The workshop summary includes a list of participants and a summary description of the items that are produced, characterising items by their content area and cognitive specifications.
Country responsibilities	The ECZ is responsible for identifying participants and managing the logistics of the training workshops, as well as for the travel costs and professional fees of the contractor providing the training.
Administrative details	This activity will be conducted or co-ordinated entirely by the ECZ based on the work of international contractors, whose costs are covered by the participation agreement signed with the OECD.
Relevant documentation	Training materials provided by the PISA-D international contractor.

In-country costs	USD 0.
Activity 2	During the first National Project Managers meeting to be held at Quito (Ecuador) in September 2015, the PISA-D international contractor will explain the PISA cognitive framework and work with participants to identify relationships between primary/secondary curricula and the PISA framework as well as development of performance tasks using the PISA cognitive framework.
Deliverables	The workshop will provide accessible reference material explaining the PISA cognitive framework and provide examples of how different tasks and documents are used to represent the different cognitive requirements in the framework. The workshop should use examples of curricular learning objectives to create PISA-style performance tasks using real-world documents, applying the concepts to the Zambian primary and secondary curricula. The main product of the workshop should be a set of models and templates that practitioners can use in a step-by-step approach to develop PISA-type performance and learning tasks from the learning objectives in the Zambian curricula.
Reporting requirements	Four participants from the ECZ and the Curriculum Development Centre will be responsible for sharing and explaining the material of the workshop with colleagues.
Country responsibilities	The National Centre is responsible for inviting participants with relevant experience in curriculum development, test development and/or development of instructional materials, arranging for meeting facilities and distributing the documentation from previous workshops. The participants must have sufficient background in content development to understand and apply the psychological principles described in the workshop to the Zambian context. Participants should provide a selection of contextual documents that students might encounter in a non-academic settings (e.g. workplace, consumer economics, public services) as well as curricular documents and examples of learning materials found in Zambia. The participants must also have sufficient background in development of learning resources or cognitive testing to understand and apply the psychological principles described in the workshop to the Zambian context. Participants should provide a selection of contextual documents that students might encounter in a non-academic settings (e.g. workplace, consumer economics, public services) as well as curricular documents and examples of learning materials found in Zambia.
Administrative details	This workshop should consist of four participants for a total of 5 days. The in-country costs include travel, per diem and accommodation for the participants, each with travel costs of USD 6 000. Costs for the workshop and activities will be covered by the PISA-D international contractor.
Relevant documentation	Relevant primary/secondary curricula; primary documents and texts representing non-academic experiences.
In-country costs	USD 32 000.
Activity 3	Following the NPM, ECZ will organise a meeting of the consultative group to discuss the development an international item bank of contextual items appropriate to developing economies. ECZ and CDC staff attending international meetings will discuss the objectives of an international item bank with other national representatives and development partners and develop a strategy for developing the item bank under the PISA-D infrastructure.
Country responsibilities	Participants should have knowledge of item banking principles, relevance of skills to different economies and secondary curriculum.
Administrative details	This activity is scheduled to occur concurrently with other international meetings that have already been budgeted. These meetings are scheduled to take place after each NPM meeting
In-country costs	USD 4 000.

Phase II (2015-2016) total cost: USD 36 000

**Summary: Total capacity-building element cost = USD 36 000**

### 5.1.6. Data collection

Implementation of training protocols and methods to manage and ensure quality of data collection and develop a pool of subcontractors who can be used for all LSA and examinations data collection. In the long term, this will develop into a profession of data collection with standards and legal responsibilities.

Specific programme capacity targets:

- quality of training for data collection: Data collection staff have been monitored during previous or mock data collection and have received feedback on their adherence to protocols during previous data collection – **advanced**
- local capacity building for ILSA: The country/system offers some opportunities to learn about ILSA – **established**
- data collection monitoring: All monitors are trained as data collectors – **advanced**
- commitment of data collectors to training: Training time is compensated and is integrated with regular duties (or staff are hired exclusively for data collection) – **advanced**
- avoidance of conflicting interests: Employment framework requires data collectors to disclose any potential conflict of interest. ECZ is interested in learning about best practices for managing the cadre of data collectors that have been used in other countries – **advanced**.

#### Phase II (2015-2016): Adapt PISA data collection protocols to develop clear procedures that account for local conditions in Zambia

Activity 1	The PISA-D data collection protocols replace the various data collection manuals and guidelines used in other LSAs. All LSA data collection activity is governed by the protocols. Individual performance contracts of ECZ employees and contractors reference the protocols, and the levels of individual competence and responsibility described in protocols are used to award of compensation to individuals involved with data collection.
Country responsibilities	The ECZ phases out the non-standardised data collection procedures used by existing LSAs and replaces them with the PISA-D protocols.
In-country costs	USD 0.
Activity 2	Alongside National Project Managers meetings number 4 to be held in Livingstone (Zambia) in July 2016, ECZ to develop a legal and administrative framework for managing liability and accountability for data quality during the data collection process. An international contractor provides a training workshop describing the rationale and implementation of existing frameworks in other contexts and how they may be adapted for different local conditions. The framework provides a basis for hiring, training and managing data collectors. A long-term goal of the framework is to encourage individuals to view data collection as a part of their career portfolio rather than casual employment. The international contractor performs a review of the legal and administrative structures related to data collection in Zambia and leads the development of the framework according to best practices at the OECD and other countries. The international contractor uses the final version of framework to draft a data collection operations protocol document, which captures the information in the framework in a format that is consistent with international best practice.
Deliverables	A data collection framework document that describes the standards and protocols used to ensure data quality during the data collection process. The framework includes descriptions of required activities related to hiring, training, data collection, and supervision. The legal component of the framework includes draft binding agreement(s) that define the conditions of employment, assumption of liabilities and consequences of noncompliance. The framework is the basis of a draft data collection operations protocol document.



Country responsibilities	The ECZ facilitates development process by co-ordinating meetings and providing information on the current legal and administrative framework within which data collectors work. This information may include but are not limited to hiring practices, data collection protocols, supervisory practices, employee retention, and any binding agreements made by data collectors related to accountability and liability. The ECZ, with legal counsel, reviews and approves the final framework.
Administrative details	The ECZ will select and contract a suitable expert with experience in issues related to security and management of data collection. International costs include travel and consultation fees. In-country costs primarily include legal and material/clerical costs that cannot be performed by core staff of ECZ or affiliated departments.
In-country costs	USD 30 000.
Activity 3	After the NPM meeting, ECZ organises meeting of the Advisory Council and distributes the draft data collector protocols for review to a broader audience of stakeholders, concurrent with implementation of the instrument field testing. Feedback from stakeholders and observations from the field testing are used to modify the framework. The finalised framework is submitted to MoE for approval.
Deliverables	The final data collection operations manual describes the responsibilities and, where necessary, sequential activities, required from all agents involved in data collection activities. It also includes legal and financial information such as rates of pay, professional standards, and supervision/disciplinary policies.
Reporting requirements	A summary report includes names, affiliations and critical input of individuals involved in the review process as well as issues from the field testing related to data collection protocols. For any issues identified from these two sources of information, the report explains how the issues are addressed by revisions to the protocols.
Country responsibilities	The ECZ prints and distributes the draft protocols to stakeholders and manages the training of data collectors and implementation of the field testing. With local consultants, the ECZ incorporates feedback and observations and produces a final data collection operations manual.
Administrative details	In-country costs include publishing and distribution costs and consultant fees for one or more workshops with stakeholder groups. This workshop is organised concurrently to the NPM meetings
In-country costs	USD 4 000

Phase II (2015-2017) total cost: USD 34 000

**Phase III (2016-2017): Field test data collection protocols**

Activity 1	During National Project Managers meeting number 5 to be held in Sally (Senegal) in May 2017, the PISA-D international contractor will deliver a workshop providing instruction on survey data collections operations, including scheduling, training models for data collection staff, security and data quality protocols, and dealing with non-response. The training content should include examples from experiences of other countries in dealing with challenges that arise during the data collection process.
Deliverables	The workshop should include all relevant manuals and protocols that the ECZ can use as operational checklists throughout the collection process.
Country responsibilities	The ECZ is responsible for selecting participants with sufficient knowledge of survey operations to benefit from the training and be able to convey the relevant information to operational staff in Zambia.
Administrative details	This training will include 4 participants including two from ECZ and two from Standards for a total of 5 days. The unit travel cost is USD 6 000. Costs for the workshop and activities will be covered by the PISA-D international contractor. The budgeted amounts cover travel, accommodation and per diem for participants.
Relevant documentation	PISA-D NPM Manual; PISA-D Standards.
In-country costs	USD 32 000.
Activity 2	During the National Projects Managers meeting number 6 in Antigua (Guatemala) in July 2017, the PISA-D international contractor will deliver a workshop providing instruction on the final protocols and procedures required for the main survey data collection. The workshop should include a review of the lessons learned from the analysis of the FT activities and the importance of the collection and security protocols to the integrity and accuracy of the final data.
Administrative details	The costs of participating in this training have already been accounted above.
In-country costs	USD 0.
Activity 3	Following the initial training provided by the PISA-D international contractor on survey operations and survey administrator training, the international training participants will hold in-country workshops to extend the training to the network of professional data collection staff responsible for managing data collection activities in the education sector. The workshop leaders should also collect feedback from participants to be used for future refinement and adaptation of the training materials and protocols.
Administrative details	This activity will include training of data collectors, coders and data entry specialists for the field trial. It does not include the actual work they will produce, just the training activity.
Relevant documentation	Training materials and manuals provided by the PISA-D international contractor with adaptations by the ECZ to suit the Zambian context.
In-country costs	USD 10 960.
Activity 4:	Participating in the 2017 International Advisory Group meeting in Livingstone (Zambia) in March 2017, PISA-D countries will review the implementation of the PISA-D project.
Country responsibilities:	The ECZ ensures the National Project Manager and relevant staff participates in the International Advisory Group meeting. The costs included here cover travel for 2 participants for a 3 day meeting.
In-country costs:	USD 12 000.

Phase III (2016-2017) total cost: USD 54 960

**Phase IV (2017-2018): Adopt data collection protocols into other LSAs**

Activity	Following the final training provided by the PISA-D international contractor on survey operations and survey administrator training in preparation for the main survey data collection, the international training participants will hold in-country workshops to extend the training to the network of professional data collection staff responsible for managing data collection activities in the education sector.
Administrative details	These activities include training of coders, data collectors and data entry personal for the main study. It does not include the actual work they will produce, just the training activity.
Relevant documentation	Final training materials and manuals provided by the PISA-D international contractor with adaptations by the ECZ to suit the Zambian context.
In-country costs	USD 11 600.

Phase IV (2017-2018) total cost: USD 11 600

**Summary: Total capacity-building element cost = USD 100 560**

*5.1.7. Preparation of publications*

The ECZ will develop and use standardised protocols and manuals for data visualisation and production of reports (both print and online formats).

Specific programme capacity targets:

- availability of document formatting and print specifications: All document print and specifications are maintained in manuals accessible to all NC staff. The project will learn from and adapt the document standardisation process used by OECD (e.g. manual of style, print formatting) – **established**
- quality of document proofing: Clear protocols exist for the identification of potential typographic errors and/or the NC has an official dictionary and manual of style – **advanced**.

**Phase IV (2017-2018): Implementation of document production manual for the initial results of PISA-D**

Activity 1	Peer-to-peer learning activities focus on learning about strategies used by other countries for reporting national data. In particular, the participants will examine report templates and data visualisation strategies used in different contexts.
Administrative details	This activity is concurrent with other training activities related to data analysis and to be delivered at the NPM meeting number 8.
In-country costs	USD 0.
Activity 2	In the context of the National Project Managers meeting number 8, to be held in Antigua (Guatemala) in July 2018, the PISA-D international contractor provides a training workshop that follows the procedures and protocols described in the report production manual in the context of reporting the initial results of PISA-D. This workshop is held following the compilation of the analysis data set(s) and any planned data analysis training workshops. The workshop will provide learning-by-doing instruction on: 1) the production of tables and visualisation of data, and 2) the preparation of reports, review and revision cycles, and the use of style guidelines.
Deliverables	The workshop training materials include any presentation material as well as electronic templates and examples that facilitate the use of the report production manual.
Reporting requirements	Workshop summaries provide a list of participants and training activities. For each part of the workshop, the summary includes the learning objectives and the degree to which they are met by participants.

Country responsibilities	ECZ identifies staff for participation in the workshop, manages logistics (training site, refreshments and meals, arranging transportation), and nominates/approves the external consultant responsible for delivering the workshop. The ECZ ensures that the participants for the workshop have the requisite sets of results for meaningful participation in the workshop.
Administrative details	Four participants will attend this training, including three from ECZ Research team, and potentially from the Test Development, Curriculum Development and Planning departments. In-country costs include travel, accommodation and per diem. Training facilities will be provided by the PISA-D international contractor.
Relevant documentation	Final PISA-D microdata files; PISA-D report publication guidelines;
In-country costs	USD 32 000.
Activity 3	Following the completion of main activities required for PISA-D reporting, ECZ staff will adapt the PISA-D publication guidelines and manuals to formalise and disseminate publication protocols within ECZ. These protocols will be used to standardise the look and feel of reports produced by ECZ and regulate the production of documents with review and editing protocols.
Administrative details	Two members of the ECZ Research team will finalise the protocols.
In-country costs	USD 4 000.
Activity 4	In the context of the 2018 International Advisory Group meeting to be held in Saly (Senegal) in March 2018, PISA-D countries will review results, scaling methodology, and preparations for data analysis, including training and peer-to-peer learning activities involving one or two countries already participating in PISA.
Reporting requirements	Participants will conduct an in-country follow-up workshop to share the material of the meeting with colleagues at ECZ, Planning, and Standards departments.
Country responsibilities:	The ECZ ensures the National Project Manager and relevant staff participates in the International Advisory Group meeting. The costs included here cover travel for 2 participants for a 3 day meeting.
Administrative details	In-country costs include travel, accommodation and per diem for two participants to be selected by ECZ. The OECD Secretariat is responsible for organising the meeting.
In-country costs	USD 12 000.

Phase IV (2017-2018) total cost: USD 48 000

**Summary: Total capacity-building element cost = USD 48 000**

## ***5.2. Increased capacity for PISA-D and for national assessments***

### ***5.2.1. Psychometric methods***

Familiarisation with psychometric methods for development and analysis of questionnaire scales and complex item types.

Specific programme capacity targets:

- NC's understanding of item response theory: NC staff has experience with multiple item response models (e.g. polytomous, Rasch, 2PL, 3PL) – **advanced**
- NC's test development skills: NC staff use multivariate statistics to examine test dimensionality, item bias or differential item functioning, and test information and increase the accuracy and relevance of tests – **advanced**.

**Phase II (2015-2016): Produce questionnaire scales and complex cognitive item types**

Activity	Using information presented by the PISA-D international contractors on the development of enhanced questionnaire content, ECZ will produce draft measurement tools for conditions or behaviours that have specific importance or relevance to Zambia.
Administrative details	This activity will be conducted entirely by the ECZ.
In-country costs	USD 0.

Phase II (2015-2016) total cost: USD 0

*5.2.2. Staffing*

To provide dedicated clerical support for correspondence, co-ordination and scheduling (which may require establishing a new position and bureaucratic structure). If establishing a new position is not possible, then the responsibility may be assigned to a senior officer. Providing this support will enable key project staff to commit to and meet their project responsibilities.

Specific programme capacity targets:

- scheduling priority given to ILSA activities: Administrative support for NC intercepts and schedules or co-ordinates ad hoc meeting requests on behalf of NC staff – **advanced**
- relevance of NC expertise: The NLSA office is adequately staffed to carry out the NLSA effectively, with minimal issues. Project team needs clerical support staff, preferably a full-time position responsible for office-support, correspondence, and scheduling – **established**
- effectiveness of human resources for ILSA: The ILSA office is adequately staffed or trained to carry out the ILSA effectively, with minimal issues. Project team needs clerical support staff, preferably a full-time position responsible for office-support, correspondence, and scheduling – **established**
- NPM regularity of communication: NPM can process all incoming email and voicemail each day – **advanced**
- engagement of clerical/administrative support: Clerical support distributes outgoing correspondence from NC – **established**
- National Centre co-ordination: NC staff use shared agendas to enable regular and ad hoc scheduling of meetings – **advanced**
- participation in previous international ILSA training: The ILSA team attended all international workshops or meetings. Team leaders will commit to meeting participation and, at a minimum, there should be formal debriefing procedures to ensure that relevant information from international training is shared with project staff – **established**.

**Phase II (2015-2016): Hire staff for part-time integration into project**

Activity 1	Develop Terms of Reference (ToR) for new clerical/administrative position. The position will assume responsibilities for operational management activities that are beyond the capacity of ECZ that enable ECZ to co-operate with local and international stakeholders during the implementation of international assessment activities. The main purpose of this role will be to ensure that in-country activities are compliant with international schedules and that stakeholders are adequately informed of the project status.
In-country costs	USD 0.
Activity 2	Complete hiring and training of an external consultant who will help co-ordinate and manage PISA-D activities in Zambia.
Country responsibilities	Complete the candidate interview and hiring process. The successful candidate assumes clerical and administrative responsibilities within ECZ and is introduced to key stakeholders.
Administrative details	In-country costs include part-time, part-year consulting fees and logistics support.
In-country costs	USD 14 000.

Phase II (2015-2016) total cost: USD 14 000

**Phase III (2016-2017): New staff will manage communications with stakeholders**

Activity	The long-term consultant providing management support assumes responsibilities specific to PISA-D, including tracking and managing correspondence between stakeholders and project team members.
Administrative details	In-country costs include consulting fees and logistics support for half-time support for a full year.
In-country costs	USD 16 000.

Phase III (2016-2017) total cost: USD 16 000

**Phase IV (2017-2018): New staff will engage stakeholders directly**

Activity	Long-term consultant assumes full responsibility for communicating with stakeholders and co-ordinating logistics of PISA-D. As the responsibilities and activities of this role become clearly defined, the ECZ will move to formalise and institutionalise this position in order to co-ordinate future cycles of PISA-D and other international assessments.
Country responsibilities	The consultant works full-time on PISA-D and is the main point of contact for communications between ECZ and external stakeholders.
Administrative details	In-country costs include consulting fees and logistics support for a full year.
In-country costs	USD 35 000.

Phase IV (2017-2018) total cost: USD 35 000

**Summary: Total capacity-building element cost = USD 65 000**

### 5.2.3. Develop capacity to understand and work with LSA

Create opportunities and resources to develop LSA skills of teachers and junior staff, primarily through online resources and partnerships with universities. These resources may also be made available to educate the media and general public.

Specific programme capacity targets:

- stakeholder use of LSA data: Stakeholders actively analyse data for specific information. Promote accessibility of data and results through internet and educate stakeholders on appropriate interpretations of data (e.g. identifying conditions in which specific interpretations are valid) – **advanced**
- transparent policy for NLSA: The policy document is available to the public. Relevant documentation should be available online, but some material may require secured access – **established**
- NLSA research and development funding: Funding covers research and development activities. Targeted capacity: report writing, data visualisation, statistical analysis, research methods – **advanced**
- experience in planning, organising and conducting large-scale surveys: The country/system offers some opportunities to prepare individuals for work on the NLSA. Internet resources to be developed that provide opportunities to working teachers and district centre staff. Publications and booklets about methodology, theory. Internships at ECZ for interested parties – **established**
- availability of ILSA training: Opportunities to learn about ILSA are available to a wide audience, in addition to the country's/system's ILSA team members. Opportunities should be made available to prospective team members and the general public through a publicly available website – **advanced**
- providing teachers with opportunities to learn about the NLSA: There are some courses or workshops on the NLSA offered on a regular basis – **established**.

**Phase II (2015-2016): Design a continuous professional development programme with sequential study modules dealing with different aspects of LSA**

Activity 1	E-learning specialists produce a syllabus that forms the design specifications for a web application that delivers information on LSA in Zambia to stakeholders, including general principles, methodologies, protocols, and background information about specific LSA projects.
Deliverables	Finalised syllabus for professional development in LSA in Zambia. The syllabus contains independent learning modules with a prescribed sequence of delivery. Each learning module includes knowledge prerequisites, learning objectives, reference material, pedagogical recommendations, and descriptions of any recommended data or multimedia. The deliverables should also describe the development methodology, including a list of contributors and any assumptions about audience and technology. The overall syllabus should reference the design and content of similar applications, such as the OECD PISA website.
Country responsibilities	ECZ advertises the programme to stakeholders within the ECZ, the MoE and universities to gauge level of interest and determine specific needs. ECZ will also provide supporting documents on practices and procedures as well as provide any information requested by the consultants.
In-country costs	USD 35 000.
Activity 2	Web developers design, build and deploy the web application.
Deliverables	A web application that provides access to learning modules and background information on LSA in Zambia. The web application should have role-based security, which allows universal public access to certain documents and learning modules while restricting access to other materials. The application should be integrated with any relevant LSA project websites.
Country responsibilities	ECZ adapt the e-learning syllabus and design specifications into ToR for the web developers.
Administrative details	ECZ will contract the service providers directly and provide necessary access to IT systems and information required to develop and integrate the web application.
Relevant documentation	E-learning syllabus and design specifications for LSA in Zambia.
In-country costs	USD 40 000.
Activity 3	The LSA learning application is fully deployed and institutionalised, with credentials granted to learners who reach specific milestones.
Deliverables	Formal plan for roll-out and utilisation of the web application with different stakeholder groups.
Country responsibilities	The ECZ promotes the web application to key stakeholder groups and provides institutional mechanisms to recognise individuals who have achieved learning milestones. Recognition may include consideration for hiring decisions for LSA operations or participation in future training activities.
In-country costs	USD 1 000.

Phase II (2015-2016) total cost: USD 76 000

**Summary: Total capacity-building element cost = USD 76 000**

#### 5.2.4. Dissemination of results

Engagement of different stakeholders and development of strategies for messaging and long-term roll-out of results.



Specific programme capacity targets:

- perceptions of external survey-based large-scale assessment (LSA) of lower-level stakeholders: Stakeholders recognise external uses of LSA information and make internal use of LSA results to inform policy and practice. Increase accessibility of published results and encourage use of raw data (or on-request data analysis) by stakeholders to monitor effects of specific interventions or policy changes – **advanced**
- use of ILSA: Results from the ILSA are used in a variety of ways to inform decision making in the country/system. Champions of the LSA activities need to engage stakeholders in order to 1) identify specific information needs of their decision-making processes, and 2) determine the best ways to utilise the LSA to address these needs – **advanced**
- autonomy of NLSA structures: Political considerations sometimes hamper technical considerations. Although it may not be possible to entirely prioritise technical quality over political considerations, the ECZ will need to establish the importance of international technical standards that affect how results are calculated and reported – **established**
- breadth of stakeholder engagement: Multiple stakeholders are engaged including non-government or indirect educational stakeholders. There is growing desire to engage a broader range of stakeholders (e.g. employers) in educational discourse. the curriculum has recently been modified to incorporate life skills, and the recent 2014 Joint Annual Review included presentations discussing the importance of education to broader social issues – **advanced**
- dissemination of ILSA results: Country/system-specific results and information are regularly and widely disseminated in the country/system – **advanced**
- feedback from ILSA: Products to provide feedback to schools and educators about ILSA results are systematically made available – **advanced**
- media coverage of ILSA: There is national and local media coverage of detailed ILSA results. There should be a strategy to release information relevant to local regions/communities in addition to broad national comparisons. Examples include comparison of linguistic groups or focusing on results that relate to issues that are historically more important to different regions – **advanced**
- positive washback of ILSA: Decisions based on the ILSA results have had a positive impact on students' achievement levels. Use of ILSA results should take a more rigorous scientific approach than can support inferences about effectiveness of different policies. Reporting should address specific policy issues – **advanced**
- NPM experience with dissemination of results from large-scale assessment: LSA reporting uses multiple narratives to multiple audiences, referencing relevant data where appropriate – **advanced**.

**Phase II (2015-2016): Develop a draft dissemination strategic plan that spans the four years following the initial release of results**

Activity 1	Training in dissemination and research knowledge mobilisation methods. The workshop should be co-ordinated with the first year activities planned under the Research and Development for LSA CBE. The consultant should work with the ECZ team to go through the steps required in producing a dissemination plan. The outcome of the workshop will be the completed framework for the dissemination plan.
Deliverables	A dissemination / knowledge mobilisation framework, including a list of audiences to be targeted in each year following the initial release of results. Each target audience should be characterised by their specific information needs (e.g. topics, themes, research questions), preferred medium for receiving information, and factors influencing the timing of release of information products (e.g. similar-themed political or public events).
Reporting requirements	A workshop summary, which includes the list of participants and description of methodology used to collect the information contained in the deliverables.
Country responsibilities	ECZ identifies staff for participation in the workshop, manages logistics (training site, refreshments and meals, arranging transportation), and nominates/approves the external consultant responsible for delivering the workshop.
Administrative details	This workshop should be included in the ToR for one of the larger workshops on analysis methods. Alternately, it may be combined with international training workshops provided by the international contractor. The costs allocated to this activity are incremental and do not include air fare.
Relevant documentation	This workshop requires the final summary document from the review of stakeholder interests (deliverable from Activity 1).
In-country costs	USD 23 000.
Activity 3	Creation of an Advisory Group (AG) of non-education-sector stakeholders. Membership in the AG should include senior level executives or directors representing large institutions, NGO's and employers. The membership may overlap with the Steering Committee, but the focus should be to collect perspectives on the broader social and economic context of education. The AG does not have authority over project decisions, but their recommendations should guide the development of the dissemination plan and should be considered when making operational decisions. AG total membership in the AG should be no greater than 20. The group will meet after each National Project Managers meeting.
Reporting requirements	Summary resolutions will be agreed upon at the conclusion of the initial meeting, following OECD institutional practice. Draft minutes will be produced and circulated electronically within three months of the initial meeting. The minutes will be review and accepted at the following meeting.
Country responsibilities	The ECZ contacts representatives of stakeholder organisations and requests nominations for participation in the AG. After confirming memberships, the ECZ develops and circulates a proposed meeting schedule. The AG should meet a minimum of once per cycle, preferably at the beginning of the cycle, and should review the dissemination plan prior to its implementation. The ECZ is responsible for co-ordination and logistics of meetings.
Administrative details	In-country costs include meetings logistics and material costs. These costs have been accounted for elsewhere.
In-country costs	USD 0 000.

Phase II (2015-2016) total cost: USD 23 000

**Phase IV (2017-2018): Prepare and release results (where applicable) following the dissemination plan**

Activity 1	In the context of the National Project Managers meeting number 8 to be held in Antigua (Guatemala) in July 18, the PISA-D international contractor leads a workshop on the statistical analysis and interpretation of main survey results and preparations for reporting and dissemination of country reports. Specific topics covered by the workshop should include estimation and reporting of data quality indicators (e.g. standard errors), how to identify and test the interpretability of observed relationships between variables in the data, proper formatting of statistical tables, and how to visualise relationships in common charting software (e.g. Excel, R, Stata).
Administrative details	The costs for this meeting have already been taken into account elsewhere
In-country costs	USD 0. The costs for this meeting have already been taken into account elsewhere.
Activity 3	Peer-to-peer dissemination of results activity for learning what other countries have done to engage stakeholders.
Administrative details	Note that this peer-to-peer learning activity is happening at the same time as another activity, so there are no travel costs associated with this peer-to-peer activity.
In-country costs	USD 0.
Activity 4	End-of-cycle AG meeting. Distribution of penultimate dissemination plan to AG members for possible revisions or additions.
Deliverables	The final dissemination plan, including an approximate schedule of release dates. The dissemination plan is intended to be used in annual performance contracts and operational planning of the ECZ.
Country responsibilities	The ECZ is responsible for distribution of the draft plan, logistics details for the AG meeting, and incorporation of recommendations from the AG.
Administrative details	In-country costs include publication and distribution of the dissemination plan to AG members. The costs for this activity have been taken into account above.
In-country costs	USD 0
Activity 5	Implementation of initial activities of the dissemination plan. Preparation of the public print report and media package for the initial release of results.
Deliverables:	The initial results include a print-format report, following OECD PISA standards, a short video summarising results and the PISA-D project, and summary brochures.
Administrative details	In-country costs include purchase of air time on the national television station and print space on other media.
In-country costs	USD 20 000.
Activity 6	Initial release of results. The results are released in a symposium format that gathers key stakeholders and media to review the project, including the focus on capacity building, and the main findings in the first publication. In addition, the symposium should discuss the dissemination plan in light of the results. The event will include a launch of results with teachers, students and parents and a media campaign to disseminate the results of PISA-D.
Country responsibilities	The ECZ is responsible for identifying and inviting participants and managing logistics details of the symposium.
In-country costs	USD 100 000.

Phase IV (2017-2018) total cost: USD 120 000

**Summary: Total capacity-building element cost = USD 143 000**

## 6. Overall cost summaries

The costs for the two types of investment are shown over the four years in the table below. The total cost for the CBP is USD 668 012. A lot of these costs are related to the development of increased capacity for large-scale assessments in general, i.e. that is not solely related to minimum PISA implementation, which reflects the strong existing capacity of ECZ for conducting large-scale assessments. The activities related to increased capacity account for USD 284 000.

The costs of capacity building activities vary from year to year throughout the cycle. In the first year, USD 195 000 is spread across a variety of activities, with the majority allocated to the development of measurement of skills in context. This share reflects the priority of fostering knowledge and skills for life that is also transforming the Zambian curriculum and learning materials. The second year capacity building expense are the lowest, at USD 222 412. The prevailing theme in the second year is the development of required operational capacity for the additional quality standard of PISA-D. The final year, with a total allocation of USD 250 600, gives the most attention to production of results and dissemination of relevant findings to a variety of stakeholders. The third year capacity building activities continue the focus introduced in the most recent rounds of the Zambian NAS on outreach and knowledge mobilisation.

Many activities in the CBP do not have any associated costs. These activities are largely related to institutional arrangements to be made either within the Ministry or within ECZ specifically. Although they may not require explicit training, the dedication of staff, definition of project roles, and allocation of secure funding represent important capacity elements to the sustainability of PISA-D and other large-scale assessments.

Some phases of certain CBP elements do not have explicit activities associate with them. In these cases, the CBP implies the continuation of processes that were initiated by previous activities. The subsequent activities are assumed to require routine operation activities to support the continued development.

**Table 1. Capacity building plan Zambia**

Total capacity building plan cost by capacity element (in US dollars)

Capacity building element		Phase II (2015-16)	Phase III (2016-17)	Phase IV (2017-18)	Total
PISA-D implementation	School, student and out-of-school youth sampling		92 000	36 000	128 000
	Response-coding methods and protocols	12 000	23 452		35 452
	Research and development for LSA		36 000		36 000
	Stable funding for co-ordinated LSA activities				
	Measurement of skills in context	36 000			36 000
	Data collection	34 000	54 960	11,600	100 560
	Preparation of publications			48,000	48 000
<b>Sub-Total</b>		82 000	206 412	95 600	384 012
Increased capacity for large scale assessments	Psychometric methods				0
	Staffing	14 000	16 000	35 000	65 000
	Develop capacity to understand and work with LSA	76 000			76 000
	Dissemination of results	23 000		120 000	143 000
<b>Sub-Total</b>		113 000	16 000	155 000	284 000
<b>Grand Total</b>		195 000	222 412	250 600	668 012

The funding for programme implementation has been allocated by the Ministry. Current funding is unlikely to cover all of the capacity building activities in the CBP. Funding should prioritise capacity building activities identified as necessary to implement PISA-D. The total for such activities is USD 395 968 over the four years of the programme, from 2015 to 2018. However, the integrated plan allows for the ECZ to easily respond to additional sources of funding that may arise throughout the implementation. The opportunities identified here and the estimated funding requirements for these activities only covers capacity building and therefore excludes activities that are necessary for the implementation of PISA-D. Therefore the total budget for PISA-D includes other activities not considered here (such as staff costs at ECZ, implementation of the field trial and main study, e.g. data collection, codification and data management). Therefore, the total budget is larger than the totals specified above.

## 7. Monitoring and evaluation

The ultimate goals for the capacity building elements provide a framework for monitoring and evaluation. Each ultimate goal presents an output or an outcome of the set of capacity building elements that are found under each area of development and these can be converted into indicators for monitoring and evaluation. The table below presents the area of development, the ultimate goal and the indicator. It should be noted, that it is the ensemble of areas of development that results in the desired capacity, rather than individual areas of development, which is why the programme for capacity building is carefully sequenced over the four years in relation to the PISA implementation schedule. The indicators can be monitored over the four years using the indicators.

**Table 2. Indicators for monitoring and evaluation**

	<b>Area for development</b>	<b>Ultimate goal</b>	<b>Indicators</b>
1	School, student and out-of-school youth sampling	Development/population of school, student and out-of-school sample frames using unique identifiers. The approach for out-of-school youth should first focus on including TVET and employed youth and then address the non-employed/non-student population.	<ul style="list-style-type: none"> <li>• Final microdata are able to support estimation of group-level statistics with the desired accuracy</li> <li>• A critical mass of staff participate in training in sample design and weight estimation.</li> </ul>
2	Response-coding methods and protocols	Implementation of best practices for ensuring quality and inter-rater reliability (double-coding, sampling, etc.).	<ul style="list-style-type: none"> <li>• Zambia results are included in an international report.</li> <li>• Best practices for coding and rating are incorporated into NAS operations.</li> </ul>
3	Research and development for LSA	The ECZ will institute a research programme based on LSA data. Features of the programme will include dedicated time and resources for research activities and capacity building activities.	<ul style="list-style-type: none"> <li>• A critical mass of staff undertake training in multivariate analysis.</li> <li>• Development of at least four research projects using data from NAS and PISA.</li> <li>• Use of multivariate statistics or multiple methods in research.</li> </ul>
4	Stable funding for co-ordinated large-scale assessment activities	Establish a line item in Yellow Book (Estimated of Revenue and Expenditure: Activity Based Annual Budget, Government of Zambia) for co-ordinated LSA and ILSA activities.	<ul style="list-style-type: none"> <li>• Large-scale assessment activities receive an explicit line item in the Yellow Book (Estimated of Revenue and Expenditure: Activity Based Annual Budget, Government of Zambia).</li> </ul>
5	Measurement of skills in context	Adaptation of PISA framework to measure skills learned in formal education as they are used in real-world contexts (specifically, the Zambian context).	<ul style="list-style-type: none"> <li>• A critical mass of staff undertake training in item development.</li> <li>• Development of an item bank incorporating contextual tasks.</li> <li>• Sharing the item bank with other countries and PISA.</li> <li>• Use of contextual items in NAS.</li> </ul>
6	Data collection	Implementation of training protocols and methods to manage and ensure quality of data collection and develop a pool of subcontractors who can be used for all LSA and examinations data collection. In the long term, this will develop into a profession of data collection with standards and legal responsibilities.	<ul style="list-style-type: none"> <li>• Zambia results are included in an international report.</li> <li>• Best practices for data collection are incorporated into NAS operations.</li> </ul>
7	Preparation of publications	The ECZ will develop and use standardised protocols and manuals for data visualisation and production of reports (both print and online formats).	<ul style="list-style-type: none"> <li>• ECZ produces and distributes manual of style</li> <li>• ECZ authors use templates to produce high quality informative charts and tables</li> </ul>
8	Psychometric methods	Familiarisation with psychometric methods for development and analysis of questionnaire scales and complex item types.	<ul style="list-style-type: none"> <li>• ECZ creates questionnaire scales to measure complex outcomes, attitudes or behaviours</li> <li>• ECZ includes questionnaire scales in NAS</li> <li>• Scores for questionnaire scales are estimated using IRT or Rasch modelling.</li> </ul>

**Table 2. Indicators for monitoring and evaluation (continued)**

Area for development		Ultimate goal	Indicators
9	Staffing	To provide dedicated clerical support for correspondence, co-ordination and scheduling (which may require establishing a new position and bureaucratic structure). If establishing a new position is not possible, then the responsibility may be assigned to a senior officer. Providing this support will enable key project staff to commit to and meet their project responsibilities.	<ul style="list-style-type: none"> <li>• The requirements for project management are clearly identified, particularly in the timing and protocols associated with co-ordinating between different stakeholders during project implementation.</li> <li>• These requirements have been institutionalised with a formal position title at ECZ.</li> <li>• The position has permanent or long-term human resource funding.</li> </ul>
10	Develop capacity to understand and work with LSA	Create opportunities and resources to develop LSA skills of teachers and junior staff, primarily through online resources and partnerships with universities. These resources may also be made available to educate the media and general public.	<ul style="list-style-type: none"> <li>• External LSA website receives regular traffic</li> <li>• External agencies partner with ECZ to develop research project and information products.</li> </ul>
11	Dissemination of results	Engagement of different stakeholders and development of strategies for messaging and long-term roll-out of results.	<ul style="list-style-type: none"> <li>• Regular meetings of the Advisory Group</li> <li>• Clear identification of the information needs of different stakeholders</li> <li>• Preparation of information products appropriate to different audiences</li> <li>• References to PISA results in information products produced by third parties (e.g. media, think tanks, NGO's).</li> </ul>

## 8. Next steps

With funding secured, the most immediate activities are to begin the engagement process with different stakeholders and formalise the Advisory Group. Early identification of monitoring goals and research priorities will inform the development of survey content and the dissemination plan. High profile endorsement may also increase the likelihood of securing sustainable funding or even additional funding for the CBP. Other urgent operational activities include the identification and hiring of the core project and beginning the process of securing human resources for operational activities.

The final phase of Zambia's preparation, the preparation of a PIP according to its specific needs and operational conditions, is under way and will be completed by the end of September 2015. The PIP will be integrated with the overall international plan for implementation of PISA-D and the work of the international contractors.

## REFERENCES

Gondwe, E. (2013). “National Assessment Programme 1<sup>st</sup> Quarter Technical Committee Meeting 30 December 2013.”

Republic of Zambia Ministry of Education Science Vocational Training and Early Education (2013), “Annual School Census.”

Republic of Zambia Ministry of Education, Science, Vocational Training and Early Education (2012), “Zambia Educational Statistical Bulletin,” Lusaka.

Republic of Zambia Ministry of Education Curriculum Development Centre (2011), “Life Skills Education Frame Work,” Lusaka.

Zambia National Education Coalition Executive Director (2014), “National Assessment Programme 1<sup>st</sup> Quarter Joint Steering Committee Meeting 5<sup>th</sup> February 2014.”



## ANNEX A

Table A.1. Schedule of PISA-D international/NPM meetings

Meeting	Venue	Date	Content
1. International/NPM/capacity building meeting (4-5 days)	Quito, Ecuador	28 September – 2 October 2015	PISA cognitive and contextual frameworks, characteristics of the available item pools.
2. International/NPM/capacity building meeting (4-5 days)	Washington, DC, United States	25-29 January 2016	Adaptation, translation and verification of survey materials and sampling.
3. International/NPM/capacity building meeting (4-5 days)	Asunción, Paraguay	4-8 April 2016	Student sampling and field trial survey operations.
4. International/NPM/capacity building meeting (4-5 days)	Zambia	4-8 July 2016	Scoring and coder training and data management for the field trial.
5. International/NPM/capacity building meeting (4-5 days)	Saly, Senegal or Princeton/Washington, DC, United States	May 2017	Analysis and interpretation of field trial results and preparation for main study.
6. International/NPM/capacity building meeting (4-5 days)	Antigua, Guatemala	July 2017	Student sampling and main study survey operations.
7. International/NPM/capacity building meeting (4-5 days)	Saly, Senegal	March 2018	Data processing, results, scaling methodology and preparation for analysis.
8. International/NPM/capacity building meeting (8-10 days)	Antigua, Guatemala	July 2018	Analysis and interpretation of main study results, reporting and dissemination of results.

## PISA FOR DEVELOPMENT

# Capacity Building Plan: Zambia

PISA for Development is an initiative of the OECD and its partners that aims to identify how its Programme for International Student Assessment (PISA) can best support evidence-based policy making in emerging and developing economies – and contribute to the UN-led definition of global learning goals for the post-2015 agenda. In addition, the project will help to build country capacity in assessment, analysis and use of results for monitoring and improvement among participating countries. Zambia is one of six countries participating in the project, and the Ministry of Education, Science, Vocational Training and Early Education, through the Examinations Council of Zambia, is responsible for the project in the country. This plan covers the four-year PISA for Development cycle (2015-2018) and includes costed learning activities related to the implementation schedule of the project in Zambia. PISA for Development is technically complex, operationally demanding and statistically advanced, and the capacity building plan therefore focuses on PISA components that will allow Zambia to benefit from international benchmarking and from evidence on student performance derived from multivariate analyses, while also gaining capacity and competencies to raise the quality of its own national assessments through the use of item response theory methodology, rigorous international standards of implementation and increased analysis to provide explanations for the results.

The results from the Capacity Needs Analysis: Zambia report have been used to design this capacity building plan for Zambia that will be implemented by the OECD, its contractors, the Ministry of Education, Science, Vocational Training and Early Education, and the Examinations Council of Zambia, through the PISA for Development project.