



# SEA-PLM 2019 Technical Standards



Please source this publication as follow:

UNICEF & SEAMEO. (2019). SEA-PLM 2019 Technical Standards. Bangkok, Thailand: United Nations Children's Fund (UNICEF) & Southeast Asian Ministers of Education Organization (SEAMEO) – SEA-PLM Secretariat.

© UNICEF 2019

All rights reserved.

Published by the United Nations Children's Fund (UNICEF) & Southeast Asian Ministers of Education Organization (SEAMEO) Bangkok (Thailand)

This document is also available in digital format at [www.seaplm.org](http://www.seaplm.org)

You can copy or print this publication for your own use in documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgement as source and copyright owner is given.

# Acknowledgment

The Technical Standards of the first round of Southeast Asian Primary Learning Metrics (SEA-PLM), SEA-PLM 2019, was made possible through the valuable contributions and collaboration of SEAMEO, UNICEF and the national teams of potential participating countries of SEA-PLM 2019 in ASEAN namely: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor Leste and Vietnam. This publication lays the foundation for the first regional assessment of SEA-PLM, as well as paves the way for future rounds of assessment.

Without the financial partnership between UNICEF and Ministries of Education of participant and honorary members of SEA-PLM, the institutional commitment of SEAMEO, the technical expertise of ACER and other international experts from international agencies and universities, this important general guidelines of procedures for the implementation of the SEA-PLM regional assessment could not have been carried out.

SEAMEO and UNICEF also wish to particularly acknowledge and thank experts from ACER for their ongoing technical support, expertise and coordination assistance throughout the conception phase and during the implementation of the assessment.

Finally, SEA-PLM Secretariat is thanked for their technical and administrative support.

The Australian Council for Educational Research Ltd (ACER) has been contracted to design and implement the first round of SEA-PLM assessment, SEA-PLM 2019. This report has been prepared by experts from ACER in 2018-2019.



## Table of Contents

1	Security of the material.....	4
2	Target population and sampling.....	5
3	Language of testing.....	8
4	Field Trial participation.....	10
5	Adaptation of tests, questionnaires and manuals .....	12
6	Translation of tests, questionnaires and manuals.....	14
7	Test administration .....	16
8	Implementation and notification of regional and national options.....	18
9	Quality monitoring .....	19
10	Printing of material.....	20
11	Response coding.....	21
12	Data submission .....	22
13	Communication with ACER.....	23
14	Schedule for submission of materials.....	24
15	Management of data .....	25
16	Availability and Publishing of data.....	26
17	Archiving of materials.....	28
18	National feedback .....	30
19	Resources.....	31

## Purpose

The purpose of this document is to specify the standards which will guide data collection activities for the first edition of the Southeast Asian Primary Learning Metrics (SEA-PLM 2019). These standards provide a benchmark against which compliance of data quality and project implementation procedures by countries and organisations participating in SEA-PLM 2019 can be assessed.

An outline of the standard, its rationale and the mechanism by which achievement of the standard can be demonstrated is herein defined, in accordance with existing regional assessment standards. The need for consistency, precision and generalisability of the data collected is recognised, while also acknowledging that a certain level of variability is required for a regional assessment of this nature.

A clear distinction is made between those standards that are applicable to activities undertaken during the field trial and those relating to the main survey, as certain allowances are necessitated by the trialling of activities in preparation for the main study.

Issues relating to the attainment of the standards by participating countries will be addressed by ACER as the consortium in charge of implementing the methodology of SEA-PLM 2019. This includes assessing the degree to which standards have been met, using the methods developed for data quality monitoring and evaluation. Additionally, these standards outline the requirements in performing these activities.

These Technical Standards have been established on the basis of project components or activities that relate to major processes, milestones and deliverables. These components can be categorised into three major aspects of the project, which serve as the core elements upon which all standards are based:

1. Data standards;
2. Management standards; and
3. National involvement standards.



1.  
Data  
Standards



2.  
Management  
Standards



3.  
National Involvement  
Standards



## Data Standards

### 1 Security of the material

#### Rationale

The goal of the SEA-PLM project is to improve quality of education through system level monitoring of learner achievements. Prior familiarisation with test materials, or the training of students to respond explicitly to test items, can heavily degrade the validity and comparability of data derived from the SEA-PLM assessments. In order to effectively assess student achievement resulting from schooling, rather than short-term learning success, confidentiality of test materials is extremely important.

#### Standard 1.1

SEA-PLM materials designated as secure are kept confidential at all times. 'Secure materials' include all test materials, draft materials, data, results pertaining to the technical implementation of the assessment, and any project information marked as confidential. In particular:

- Only approved project staff and participating students are able to access and view the test material, and only during specified timeframes;
- Only approved project staff have access to secure SEA-PLM data and embargoed material; and
- Confidentiality arrangements are in-place to ensure that all participating staff agree to maintain the security of the project.

#### Mechanism for Quality Assurance



Quality Monitoring



Security arrangements as specified within the SEA-PLM Operations Manual



## Data Standards

### 2 Target population and sampling

#### **Rationale**

Measures need to be undertaken to ensure that samples from each of the countries participating in SEA-PLM are representative of the desired target population. Specific sampling techniques must be defined to demonstrate that the datasets derived from the country-level assessments can be compared cross-nationally with a sufficient level of accuracy, and that efforts are taken to avoid biases in sampling.

Samples from each country must be drawn using sound and transparent sampling theory and meet equivalent specified quality standards across countries within the agreed-upon timelines for SEA-PLM.

#### **Regional Target Population**

The population is defined in terms of the number of years of formal schooling in order to facilitate comparisons between participating countries.

UNESCO's International Standard Classification of Education (ISCED) is an internationally accepted classification scheme for describing the levels of schooling. ISCED Level 1 corresponds to the first stage of basic education or primary schooling.

The target population for SEA-PLM is all students enrolled in the grade that represents five years of schooling counting from the first year of ISCED Level 1, referred to in SEA-PLM as Grade 5.

#### **Eligible Schools and Students and Exclusions**

SEA-PLM is designed to describe the achievement of students across the entire target Grade. Therefore all students in the target Grade are eligible, unless they fall into an exclusion category. All schools containing the target grade are eligible, unless they fall into an exclusion category.

##### *School Level Exclusions*

Exclusion of entire schools is anticipated to be rare, however schools entirely devoted to students with special needs (described in the student level exclusions) are excluded.

##### *Student Level Exclusions*

Students with functional disabilities. That is, physical disabilities such that they cannot perform in the SEA-PLM assessment situation are excluded. Students with a physical disability who are able to perform in the SEA-PLM assessment should not be excluded.

Students with intellectual disabilities. That is, students who, in the professional opinion of the school principal or other qualified staff, are emotionally or mentally unable to follow even the

general instructions of the assessment, or students who have been assessed as such, are excluded. Students are not excluded on the basis of poor academic performance or normal disciplinary difficulties. Students with dyslexia or other learning disabilities should be accommodated if possible rather than excluded.

---

### **Standard 2.1**

Participating countries and ACER maintain an agreed upon timeline of activities for the exchange of sampling related information.

---

### **Standard 2.2**

The defined national target population is agreed upon between each National Technical Team and ACER. The defined national target population covers 95% or more of the regional target population. School exclusions and student exclusions combined do not exceed 5%. Proposed exclusions are documented and quantified in each national sampling plan.

---

### **Standard 2.3**

The target population is sufficiently described so as to allow for the implementation of random scientific sampling procedures, including systematic sampling of schools from the most recently available lists of schools that enrol students in the defined target population; and systematic sampling of classes from the most recently available lists of classes within sampled schools.

---

### **Standard 2.4**

The sampling plan for each country is agreed upon between National Technical Teams and ACER.

---

### **Standard 2.5**

Participating countries agree upon a stratification plan with ACER that achieves maximum efficiency from the sample.

---

### **Standard 2.6**

Accurate sampling procedures are needed to ensure that the information derived from each assessment is sufficient to produce valid and reliable results. Unless otherwise agreed, ACER draws school samples for the main survey using scientifically valid and consistent methods consistent with practice in other international projects.

---

**Standard 2.7**

National Technical Teams will provide ACER with up-to-date lists of schools, known as the sampling frame, that contains information about student enrolment in the target grade or, where not available, other equivalent and agreed-upon information indicating student enrolments at each school. In addition to student enrolment estimates, the sampling frame should include sufficient information to enable contact with sampled schools and complete information for all stratification variables agreed upon according to Standard 2.5.

---

**Standard 2.8**

National Technical Teams draw classroom-based samples within selected schools using software tools provided by ACER and record all students within sampled classes in sampling tracking forms.

---

**Standard 2.9**

Unless otherwise agreed, only eligible students in the national desired target population are assessed.

---

**Standard 2.10**

The testing period is agreed upon between the National Technical Teams and ACER and does not exceed 6 weeks.

---

**Standard 2.11**

The minimum sample size is 150 schools and 4,000 students. In countries with fewer than 150 schools, all schools will be assessed and an appropriate increase of within-school sample may be agreed between National Technical Teams and ACER. 95% confidence interval widths around estimates of major survey outcomes at the national level should be within  $\pm 5\%$  for student percentage estimates and within 0.1 of a standard deviation for an estimated mean.

---

**Standard 2.12**

For survey results to be reported without annotation, countries must have a minimum school response rate of 85% and/or student response rate of 85% and/or a combined response rate of 75%. If a country reaches the required sample participation rate only through the agreed-upon use of replacement schools, results will be accepted but have to be annotated accordingly.

---

**Standard 2.13**

Absent sampled students may not be replaced by non-sampled students.

---

**Standard 2.14**

Sample weights will be calculated to reflect the contribution of each participating student to the survey estimates, taking into account the sample design and adjustments for non-response.



## Data Standards

### 3 Language of testing

#### **Rationale**

Level of achievement can only be accurately reported for those students for which the test is administered in a familiar language. In instances where students have limited knowledge of the testing language, the test may underestimate their ability.

Using a common language for testing (or, in some cases, languages) within a country will contribute to the consistency of data acquired through the assessment.

---

#### **Standard 3.1**

Student assessment is undertaken using test booklets provided to students in the official language(s) of instruction.

Language of instruction may refer to:

- The language stated in the intended curriculum (*i.e.* published curriculum documents); or,
- The language(s) in which instruction takes place in the school or classroom.

Where more than one language of instruction exists, choice of language(s) is agreed between the National Technical Team and ACER. Preparing test booklets in more than one language typically occurs when this serves to more accurately measure student performance in the requisite domain, or when more than one language is required to accurately measure student performance across different sub-populations.

Appropriate sampling considerations (as designated under the Sampling standards) are required to accurately derive estimates for specific student groups.

---

#### **Standard 3.2**

The language(s) of the test booklets is determined prior to the Main Survey test administration. If it is decided that test booklets, and therefore test items, should be translated into an alternative language, the booklets must undergo field trialling prior to inclusion in the main survey.

---

#### **Standard 3.3**

National Technical Teams are required to participate in and complete all stages of translation, verification, booklet layout and printing processes for each of the languages that the test will be delivered (as outlined in the SEA-PLM operational manuals). These include contributions to, and consultations with, third-party processes involved in the translation and verification activities. Individual requirements regarding each stage are agreed between the National Technical Team and ACER.

---

**Standard 3.4**

National Technical Teams and ACER will confirm the type of font to be used in advance of commencing translation work.

---

**Standard 3.5**

The demands for increased staffing and financial resources associated with administering the test in more than one language should be fully costed and planned for in advance of implementation.



## Data Standards

### 4 Field Trial participation

#### **Rationale**

Field Trials have two important purposes:

1. To give the assessment team an opportunity to trial the logistics of their test procedures; and
2. A psychometric purpose to allow for a detailed analyses of the items so that only those items that are suitable are included in the main survey.

The standards specified in this section highlight essential elements relating to activities undertaken as part of the Field Trial.

---

#### **Standard 4.1**

An assessment should be field trailed in a particular language if that language is used for instruction in more than 10% of the target population. In large-scale assessment, this standard has substantial implications for translation costs and logistics. As such, cost considerations need to be taken into account to establish context-specific standards regarding the number of language groups in the assessment project.

---

#### **Standard 4.2**

The Field Trial sample should include at least 200 students per test item, in each subject and language, for languages of instruction that apply to more than 50% of the target population. For assessment languages that apply to between 10% and 50% of the target population, a minimum of 100 students per item is set.

The specifications for the assessment of languages that constitute less than 10% of the target population, which are not required under project guidelines but which may be assessed as an interest group, are agreed upon between the National Technical Team and ACER.

---

### Standard 4.3

Sampling approaches undertaken for SEA-PLM field trial activities do not need to be as rigorous as for the Main Survey, because data derived from the field trial are used for predominantly item analysis purposes, the results from which are not publicly reported. The Field Trial may be restricted to a limited number of states or districts in order to contain costs and to minimise the burden on smaller jurisdictions.

The minimum sample size for the SEA-PLM Field Trial is 1800 for each participating country, from a minimum of 30 schools with students in Grade 5. It is recommended that the majority of schools selected should have at least two classes (target cluster size ~60-70 students per school). However, it is acceptable to include more than 2 classes with fewer students.

The selection of schools for the SEA-PLM field trial should be broadly representative of the range of different school types that occur within the target population. For example, the Field Trial sample should cover different sectors and geographical locations. The possible stratification variables for the SEA-PLM Field Trial include:

- Urbanisation (urban/rural)
- Funding (e.g. public/private)
- Management (e.g. secular/religious)
- School type (e.g. primary / middle)
- Socio-economic background (e.g. wealthier or poorer locations)

Agreement on the variables used to specify school selection within each country is agreed upon between National Technical Teams and ACER.

---

### Mechanism for Quality Assurance



A table showing the number of responses per item for each participating country



A table comparing the proportion of the Field Trial sample and the population across the chosen stratification variables



Item and scale statistics



## Data Standards

### 5 Adaptation of tests, questionnaires and manuals

#### **Rationale**

In order to ensure that measures derived from assessment instruments are comparable across countries it is necessary for a set of standardised items to be used across all participating countries. Efforts should be made to ensure that each adapted item and booklet are both relevant to the target population and equivalent to the source version. Specific terms within instruments need to be adapted in such a way to ensure their comparability across countries. Both a lack of adaptations and their inappropriateness can jeopardise the comparability of data.

Similarly, it is essential that equivalent information is provided to all students participating in SEA-PLM. Any instructions given to the students, as well as the procedures used throughout the test administration need to be equivalent. To achieve this, all individuals involved in the data-collection process (e.g. the test administrators, school coordinators) should each receive and deliver a set of standardised instructions.

---

#### **Standard 5.1**

All test instruments translations are equivalent in meaning to source versions, as dictated by the application of national adaptations to local contexts. National adaptations are a subject to agreement between the National Technical Team and ACER.

---

#### **Standard 5.2**

Questionnaire instruments are equivalent to source versions, as dictated by the application of national adaptations to local contexts. National adaptations are a subject to agreement between the National Technical Team and ACER.

---

#### **Standard 5.3**

The Test Administrator Script from the Test Administrator's Guide is equivalent to the source version, as dictated by the application of national adaptations to local contexts. National adaptations are a subject to negotiation and agreement between the National Technical Team and ACER if required.

---

### **Standard 5.4**

Pre-determined schedules for instrument adaptation will be developed for the SEA-PLM field trial and Main Survey. These schedules will be applicable to activities undertaken by both the National Technical Team and ACER.

---

### **Mechanism for Quality Assurance**





## Data Standards

### 6 Translation of tests, questionnaires and manuals

#### Rationale

In order to ensure that measures derived from assessment instruments are comparable across countries, it is necessary for a set of linguistically equivalent materials to be used across all participating countries. Efforts should be made to ensure that each translated item and booklet are equivalent to the source version. Inappropriateness of translation resulting in deviations from source documentation can jeopardise the comparability of data.

---

#### Standard 6.1

The following documents will be required to undergo translation into the assessment language as specified in Section 3 – language of testing:

- All test instruments
- All questionnaires instruments
- The Test Administrator script from the Test Administration Guide
- Scoring Guides

The translations should be linguistically equivalent to the English *source version*.

ACER will work with the National Technical Team to follow the following stages of the translation process:

- **Translation:** ACER will manage an independent translation company to complete all the translations and necessary adaptations using the agreed upon NAF. The translation company will prepare two independent translations from the source version into each target language (or 'each test language')
- **Reconciliation:** The translation company will merge the two independent translations into a single version.
- **National Review:** the National Technical Team Manager and a Domain Expert on Mathematics, Reading, and Writing should complete the review of translations. The National Technical Team Manager should review all translated material. The Domain Expert(s) should also review the material pertaining to the Mathematics, Reading, and Writing test material. The Domain Expert's task is to ensure language is suitable for the country's educational context. Results of the review will be recorded in a specific form (for example, an Excel spreadsheet) and the review will include recommendations for modifications to the translations where considered necessary.
- **Verification:** Following the National Review, the verifier should complete an independent review of the translated material. The verifier should provide feedback

in a Test Adaptation Spreadsheet (TAS) and send it to ACER. The feedback will provide responses to the comments made during the National Review as well as any necessary comments and suggested revisions.

- *Translation review:* ACER will respond to feedback in the TAS, and either accept the revisions proposed by the National Technical Team and the Verifiers or provide explanations for why the revisions cannot be accepted.
- *Final translations:* The translation company will revise translations based on the feedback.
- *Final TTM Check:* ACER will send the revised translations to the National Technical Team Manager to check that the translated material has been modified in line with the accepted feedback.
- *Final Verifier's Check:* The verifier should complete a final review of the material to ensure the translated material is acceptable and that the translated material can be developed into test booklets and questionnaires.

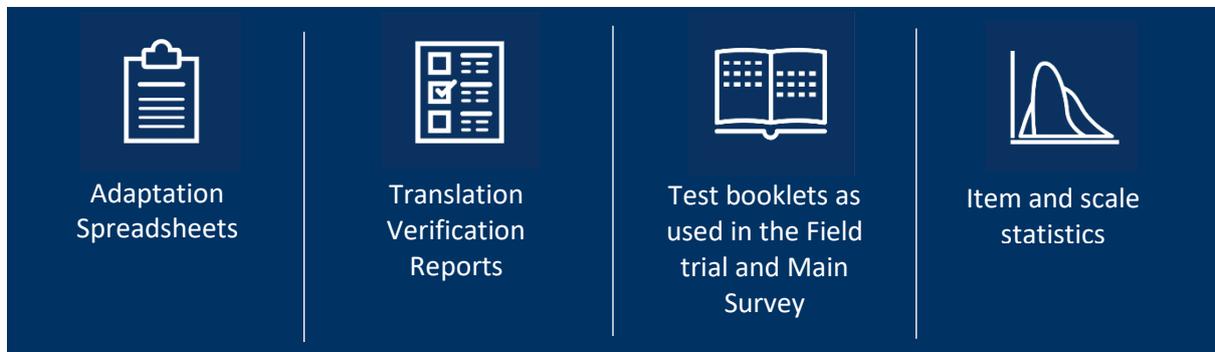
---

## Standard 6.2

All translation activities are required to be undertaken via the formal translation processes. No translation can occur during the test administration.

---

## Mechanism for Quality Assurance





## Data Standards

### 7 Test administration

#### **Rationale**

Certain variations in the testing procedure are likely to affect test performance. Some examples of these variations include: session timing, the administration of test materials and instructions given prior to and during testing, and rules for excluding students from the assessment. Ensuring the data is collected consistently across countries will contribute to the development of a regional dataset that allows for valid cross-national inferences as well as country level system-wide monitoring of learner achievements.

Additionally, the goal of the assessment is to obtain results that cover a wide range of areas. Given the time constraints, test booklets include clusters of test items on a rotated basis, and booklets are allocated to students in a statistically random fashion. Student tracking forms will be used to ensure the correct allocation of booklets to students by Test Administrators.

---

#### **Standard 7.1**

All test sessions should follow the procedures specified in the SEA-PLM operational manuals (e.g. the School Coordinator and Test Administrator manuals). Particular attention is drawn to those procedures that relate to:

- Test session timing;
- Maintaining test conditions;
- Student tracking; and
- Assigning booklets.

---

#### **Standard 7.2**

Test Administrators are trained<sup>1</sup> in-person. In instances where this is not possible, a suitable alternative that is feasible and aligns with the existing standards is negotiated and agreed between the National Technical Team and ACER.

---

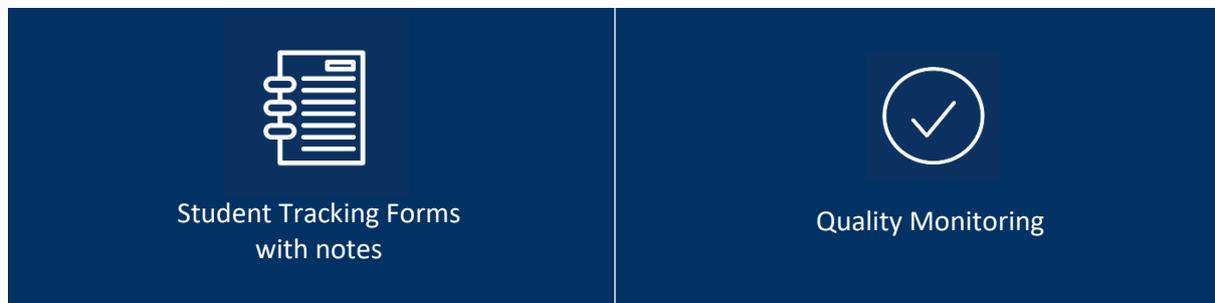
<sup>1</sup> Training procedures for Test Administrators are described in the National Technical Team Manager's manual.

### Standard 7.3

The relationship between Test Administrators and participating students must not compromise the credibility of the test session. The Test Administrator should be independent from the students and the school staff. The Test administrator should **not** be:

- An instructor of any student in the assessment session they administer;
  - A member of staff in the school in which they administer the assessment;
  - A relative of any of the staff on the school in which they administer the assessment;  
and
  - A parent or close relative of any of the participating students.
- 

### Mechanism for Quality Assurance





## Data Standards

### 8 Implementation and notification of regional and national options

#### Rationale

Survey implementation procedures should ensure that any additional survey components implemented by a country as part of the administration of SEA-PLM do not compromise the integrity and comparability of the regional data collection.

---

#### Standard 8.1

Participating countries must advise both the Regional Partners and ACER of any planned additional survey component to SEA-PLM in advance of implementation.

---

#### Standard 8.2

Additional survey components intended for students in the SEA-PLM sample should only be administered after the administration of the common SEA-PLM instruments, except where there is a justifiable reason for incorporating content within the existing regional material. Directions on the administration of the test are located within the operational manuals (e.g. Test Administrator's Manual).

---

#### Standard 8.3

Any additional components should have a demonstrated level of relevance for the participating country, should not interfere with existing content and be of a suitable length and complexity for the respondent.

---

#### Mechanism for Quality Assurance



Test Administrator  
Manual



Quality Monitoring



## Data Standards

### 9 Quality monitoring

#### Rationale

To obtain valid results from the assessment, the data collected must be of a high quality, using consistent, reliable and valid approaches. Independent Quality Monitors (Observers) are responsible for assessing the implementation of activities that align with this goal during the test administration.

#### Standard 9.1

At least 5 site visits are conducted in each participating country, to observe test administration procedures. It is recommended that at least one school in each state/province is monitored and preferably a range of different types of schools should be included in the sample for monitoring. These site visits are conducted by independent monitors to observe test administration sessions. Test administration sessions to be observed will be randomly selected.

#### Standard 9.2

In order to select the sites for monitoring, National Technical Teams will select double the number of schools to be monitored by state/province and ACER will then randomly select half of these schools for monitoring. It should be possible to access the schools with some degree of ease and be reasonably representative of the school population.

#### Standard 9.3

A maximum of 2 quality monitors (observers) can be present at any one school at any one time.

#### Standard 9.4

Quality monitors (observers) should be familiar with the test implementation procedures of SEA PLM, complete the observation checklist, and be familiar with the education system of that country. Also, quality monitors (observers) must not have a personnel interest in the results of the school, or be personally affiliated with the observed school.

#### Mechanism for Quality Assurance



Observation Checklist



Observers Guidelines



## Data Standards

### 10 Printing of material

#### Rationale

Variations in print quality may affect data quality. When the quality of paper and print is very poor, the performance of students is influenced not only by their levels of proficiency, but also by the degree to which test materials are legible. To rule out this potential source of error, and to increase the consistency and precision of the data collection, paper and print quality samples are solicited from national centres in their first cycle of participation.

---

#### Standard 10.1

All student assessment material is printed using 80gsm paper and must meet minimum print quality.

---

#### Standard 10.2

The cover page of SEA-PLM assessment instruments used in schools contains all information as specified by the SEA-PLM Steering Committee and outlined in the operational manuals.

---

#### Standard 10.3

The layout and pagination of all SEA-PLM test material is the same as in the *source versions*.

---

#### Standard 10.4

The layout and formatting of SEA-PLM questionnaire material is equivalent to the *source versions*.

---

### Mechanism for Quality Assurance



Technical Team Manager's  
Manual



Data Management  
Manual



## Data Standards

### 11 Response coding<sup>2</sup>

#### **Rationale**

To ensure the comparability of data across each of the participating countries, the responses from all test participants should be coded following a single coding scheme. To facilitate this, all coding procedures are standardised, and all coders are required to complete training sessions specific to coding activities to ensure consistency in the way coding is undertaken.

---

#### **Standard 11.1**

The coding scheme described in the coding guide is implemented according to instructions provided by the item developers from ACER. Only response codes described in the coding guide are utilised.

---

#### **Standard 11.2**

Representatives from each National Technical Team are required to attend a SEA-PLM coder training session for both the Field Trial and the Main Survey. This will aim to ensure that members of the National Technical Team in each country are familiar with the specific requirements for response coding on SEA-PLM assessments.

---

#### **Standard 11.3**

Both the single and multiple coding procedures as specified in the SEA-PLM operations manuals or an agreed upon variation thereof, are implemented. Any variations require agreement between the National Technical Team and technical contractor.

---

#### **Standard 11.4**

Coders are recruited and trained following *agreed procedures*. Preferred procedures for recruiting and training coders are outlined in the SEA-PLM operations manuals. The optimum number of Coder Training sessions is dictated by the expertise of National Technical Team members, and resource availability, as agreed between the National Technical Team and technical contractor.

---

<sup>2</sup> The terms coding, coders and codes are used instead of other terms such as marking, markers, marks, rating and raters.



## Data Standards

### 12 Data submission

#### Rationale

The timely progression of the project within the structured timelines depends on the quick and efficient submission of all data collected. With this in mind, one single data submission format is proposed, with a recommendation that all participating countries to submit one complete dataset to ACER.

#### Standard 12.1

Each SEA-PLM country submits its data in a single database, unless otherwise agreed between the National Technical Team and ACER.

#### Standard 12.2

Data are submitted in the format nominated by ACER using the database management tool developed for SEA-PLM.

#### Standard 12.3

Data for all instruments are submitted. This includes the test data, questionnaire data, and tracking data as described in the SEA-PLM operations manuals.

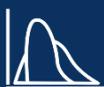
#### Standard 12.4

Data are submitted without recoding any of the original response variables, unless otherwise necessitated and agreed between the National Technical Team and technical contractor.

#### Standard 12.5

Each SEA-PLM participating country's database is submitted with full documentation as specified in the SEA-PLM operations manuals.

### Mechanism for Quality Assurance



SEA-PLM Database  
Management Software  
(e.g. KeyQuest)



Data Management  
Manual



Validity Reports



## Management Standards

### 13 Communication with ACER

#### **Rationale**

Given the tight schedule of the project, delays in communication between the National Technical Teams and ACER should be minimised. Therefore, National Technical Teams need continuous access to the resources provided by ACER.

---

#### **Standard 13.1**

ACER ensures that qualified staff are available to respond to requests by the National Technical Teams during all stages of the project. The qualified staff:

- Are authorised to respond to National Technical Teams queries;
- Acknowledge receipt of National Technical Teams queries by the next working day;
- Respond to coder queries from National Technical Teams within two working days;
- Respond to other queries from National Technical Teams within five working days; or, if processing the query takes longer, give an indication of the amount of time required to respond to the query.

---

#### **Standard 13.2**

National Technical Teams ensure that qualified staff are available to respond to requests by ACER during all stages of the project. The qualified staff:

- Are authorised to respond to technical contractor queries; and
- Respond to queries from ACER within five working days, or if processing the query takes longer, give an indication of the amount of time required to respond to the query.



## Management Standards

### 14 Schedule for submission of materials

#### Rationale

In order to progress according to project timelines, efforts should be made to ensure that the Technical Team Manager can submit project materials to ACER within the allocated timeframes.

#### Standard 14.1

A *work plan* will be developed highlighting key milestones throughout the SEA-PLM Field Trial and Main Survey. The work plan will be developed through collaboration between the National Technical Team Manager and ACER.

#### Standard 14.2

The following items should be submitted to ACER in accordance with the timeline agreed on the *work plan*:

- An e-copy of the final booklets as sent to the printers is shared with ACER in advance of the test administration.
- A print sample of booklets is archived for future reference (see Standard 10.1 for details);
- The National Adaptation Form (see Standard 5 for details)
- Complete sampling forms (*e.g.* sampling frame; see Standard 2 for details) for use in the main survey sample selection, or, for Field Trial activities, a list of selected schools (*e.g.* KeyQuest 'List of Schools');

#### Standard 14.3

The translation task should be completed in accordance with the timeline agreed on the *work plan* (see Section 6 for details).

#### Standard 14.4

Questionnaire materials should be translated after all adaptations have been *agreed upon*. Adaptations are agreed upon using the *National Adaptation Form* spreadsheet (see Section 5 for details).

Me

Insurance



Questionnaire materials will be submitted for linguistic verification with the corresponding National Adaptation Form spreadsheets

## 15 Management of data

### **Rationale**

Consolidating and merging national databases is a resource-intensive task. To ensure the timely and efficient progress of the project, ACER needs continuous access to national resources helping to rule out uncertainties and to resolve discrepancies. This standard aims to prevent substantial delays to the whole project.

---

### **Standard 15.1**

The timeline for submission of national databases to ACER is within four weeks of the completion of coding for the Field Trial and within twelve weeks of the last day of coding for the Main Survey, unless otherwise agreed between the National Technical Team and ACER.

---

### **Standard 15.2**

National Technical Teams execute data checking procedures as specified in the SEA-PLM Operation Manuals before submitting the database.

---

### **Standard 15.3**

National Technical Teams make a data manager available upon submission of the database. The data manager:

- Is authorised to respond to ACER's data queries,
- Is available to respond to queries for a month immediately following submission of the database unless otherwise agreed between the National Technical Team and ACER,
- Is able to respond to ACER's queries within three working days, and
- Is able to resolve data discrepancies.



## Management Standards

### 16 Availability and Publishing of data

#### **Rationale**

The success of SEA-PLM is dependent upon the sharing of data and the associated conclusions derived from the assessment between participating countries. To ensure that the circulation of information between these groups occurs within time periods that are appropriate to both participating countries and the project as a whole, standards are provided that specify how and when information will be shared. Further guidance on good practices for development, production, dissemination and communication of SEA-PLM data can be found

in the SEA-PLM Code of Practice for SEA-PLM 2019 which is equally informed by the ASEAN Community Statistical System (ACSS) Code of Practice<sup>3</sup> and EC Code of Practice for Data Sharing.

---

#### **Standard 16.1**

Each participating country will be provided with its own national micro-level SEA-PLM database (the “national database”) in electronic form once this has been processed and reviewed by ACER. The national database will contain the complete set of responses from the students, parents, teachers, school principals and surveyed participants in that country.

---

#### **Standard 16.2**

ACER will not release national data to other participating countries until participating countries/economies have been given an opportunity to review and comment on their national data, and until the release of such data has been approved by the national authorities and the Regional Steering Committee.

---

#### **Standard 16.3**

A deadline and procedures for withdrawing countries national data from the regional micro-level SEA-PLM database (the “regional database”) will be identified by ACER and approved by the SEA-PLM Steering Committee. Countries can withdraw data only prior to obtaining access to data from other countries. Withdrawn data will not be made available to other countries/economies, but remain under the sole copyright of the Country.

---

<sup>3</sup> See: [www.asean.org/storage/images/resources/Statistics/2014/Code%20of%20Practice-ADOPTED-CLEAN.pdf](http://www.asean.org/storage/images/resources/Statistics/2014/Code%20of%20Practice-ADOPTED-CLEAN.pdf)

---

#### **Standard 16.4**

ACER will discuss with participating countries any technical anomalies that may impact upon the inclusion of data within the regional database. The decision of withdrawing data will have to be approved by the SEA-PLM Steering Committee and will be final. Participating countries may, however, continue to use data that are excluded from the regional database at the national level.

ACER will then compile the regional database, which will comprise the complete set of national databases, except those data elements that have been withdrawn by participating countries or by the SEA-PLM Steering Committee. The regional database will remain confidential until the date on which the regional SEA-PLM report is released.

---

#### **Standard 16.5**

National data from all participating countries represented in the regional database will be made available to all participating countries represented in the regional database from the date on which the initial regional SEA-PLM report is released.

After release of the initial regional SEA-PLM report, the regional database will be made publicly available on a cost-free basis, upon approval by the SEA-PLM Steering Committee.

The database may not be offered for sale.

The regional database will form the basis for SEA-PLM reports and publications.

---

#### **Standard 16.6**

The SEA-PLM Secretariat, in agreement with the SEA-PLM Steering Committee will ensure adherence to the above procedure and to the continued confidentiality of the SEA-PLM data and materials until the agreed release dates. These include confidentiality agreements with all individuals that have access to the SEA-PLM material prior to its release.

As guardian of the process and keeper of the regional database, the SEA-PLM Secretariat under legal permission by UNICEF will hold copyright in the database and in all original material used to develop, or be included in, the SEA-PLM Field Trial and SEA-PLM Main Survey (among them the assessment materials, items, booklets, questionnaires, field manuals, and coding guides) in any language and format.

---

### **Mechanism for Quality Assurance**



Confidentiality Agreements



## Management Standards

### 17 Archiving of materials

#### **Rationale**

A record of survey instruments administered as part of SEA-PLM should be kept by each National Technical Team. Instruments must be available to ACER to assist with data cleaning and processing.

---

#### **Standard 17.1**

ACER will establish and maintain an electronic archive of national instruments, and will retain those instruments until the SEA-PLM results are reported. At that time, the archive will be transferred to the appropriate authority (i.e. UNICEF under the SEA-PLM Secretariat) and ACER will delete all relevant material upon instruction by the appropriate authority.

---

#### **Standard 17.2**

The National Technical Teams will provide a complete set of SEA-PLM instruments as administered, to ACER before the first day of testing. The submission includes the following:

- Electronic versions of all administered test booklets
- Electronic versions of all administered questionnaires
- Electronic confirmation that hard copies of all administered test booklets and questionnaires are securely stored onsite, as per Standard 14.2.
- All guides and manuals
- All coding guides

---

#### **Standard 17.3**

National Technical Teams will archive and retain all Field Trial and Main Survey materials for a minimum of three years. Material to be archived includes the following:

- All completed test booklets and questionnaires
- Sampling forms
- Student list
- Student tracking instruments
- All data submitted to ACER

Archived materials should be stored in one location only and should be under the guardianship of the national implementing unit of SEA-PLM.

All nationally adapted and completed test booklets including the respective items are confidential and should remain confidential throughout period of archival. Any deviation from this standard should be approved by the SEA-PLM Secretariat.

Upon request by the appropriate authority materials will be deleted from all electronic sources and physical materials shredded in line with the requirements of national laws.

---

### **Mechanism for Quality Assurance**



Hard copies and electronic versions of all instruments as administered



# National Involvement Standards

## 18 National feedback

### **Rationale**

National feedback is important in maintaining the dynamic and collaborative nature of SEA-PLM. It ensures that instruments achieve cross-national, cross-cultural and cross-linguistic validity, and promotes the inclusion of the interests and involvement of national stakeholders.

---

### **Standard 18.1**

National Technical Teams develop appropriate mechanisms in order to promote participation, effective implementation, and dissemination of results amongst all relevant national stakeholders.

---

### **Standard 18.2**

National Technical Teams provide feedback to ACER on the development of instruments, domain frameworks, project processes, and other related matters that represent the perspectives of the relevant national stakeholders.

---

### **Mechanism for Quality Assurance**



List of Committees and Groups



Meeting Records of Representative Groups and/or Committees



Documented Strategies



Project Reports



# National Involvement Standards

## 19 Resources

### Rationale

Securing the required project resources is vital to enabling the effective implementation of project activities, according to agreed-upon timeframes. This includes physical, financial and human resources.

---

### Standard 19.1

A location is established within the Ministry of Education in each participating country which houses the National Technical Team and provides a training space for external staff.

---

### Standard 19.2

Appropriate National Technical Team members are appointed on a full time basis, including:

- Technical Team Manager;
- Data Manager;
- School Contact Person;
- Office Administration Staff;
- Logistics Coordinator;
- Sampling Coordinator; and
- Coding Coordinator.

---

### Standard 19.3

Non-permanent or part-time staff are needed to assist with specific tasks at different stages of the project. External staff are recruited and managed by the National Technical Team, and include:

- Item Review Teams;
- Translator Teams;
- Translator Reconciler Team;
- Test Administrators;
- Test Coders;
- Data Entry Operators;
- Quality Control Monitor(s);
- Data Analysts;
- Staff for instrument preparation;
- School Coordinators;
- Coordinators for the Item Review Teams;
- Translation Coordinators;
- Proofreaders;

---

**Standard 19.4**

Required equipment specified in the Technical Team Manager's Manual will be secured for the duration of the project.

---

**Standard 19.5**

Additional resourcing needs will be considered, as specified in the Technical Team Manager's manual.

---

**Mechanism for Quality Assurance**

List of National  
Technical Team  
Members



List of  
External Staff



Project Reports



 **SEA-PLM 2019**  
Southeast Asia Primary Learning Metrics

**unicef**   
for every child



SEA-PLM Secretariat  
Mom Luang Pin Malakul Centenary Building  
920 Sukhumvit Road, Klongtoey, Bangkok 10110, Thailand.  
Tel: +66 (0) 2391-0144 Fax: +66 (0) 2381-2587