PISA 2018 TRANSLATION AND ADAPTATION GUIDELINES

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Contents

PISA 2018 TRANSLATION AND ADAPTATION GUIDELINES

1. The PISA studies are carried out in a large number of countries with different languages, different cultures and different school systems. The aim is to assess 15-year-old students' proficiency in three major domains: Reading, Mathematical and Scientific literacy, using equivalent **test batteries**, translated and adapted into each of the languages of instruction of the participating countries. A fourth domain may be included in PISA studies: PISA 2003 and PISA 2012 assessed problem-solving, and PISA 2015, Collaborative Problem Solving. In PISA 2018, the fourth domain is Global Competence. In addition to test batteries, the survey instruments also include: **questionnaires**, used to collect information on the students' background and educational environment, which might help explain the differences in achievement observed among groups of students within and across countries; and **manuals**, to ensure that field operations and test administration procedures are as uniform as possible.

2. In order to collect internationally comparable data in the study, the equivalence of national versions is a requirement, which means that the translation of materials must meet stringent quality standards in each of the national versions used by participating countries. It is crucial to ensure that the translation process does not introduce biases likely to distort international comparisons by:

   - Making the comprehension of texts, graphics or tables used as stimulus in the various test units more difficult (or easier);

   - Unintentionally modifying the difficulty of the questions asked to the student, through a formulation that changes the type of mental strategy required or the item construct;

   - Introducing ambiguities that could impair some of the variables collected through the background questionnaires (because of lack of comparability across countries); or

   - Adapting manuals to the national context in ways that extensively change the data collected (e.g. when adaptations result in undesired changes in the sampling, test administration or coding procedures).

3. The Contractors responsible for implementing PISA therefore make recommendations and implement procedures to ensure equivalence across all national versions:

Double translation and reconciliation

4. To comply with PISA translation standards, it is *required* that the national versions of all test and questionnaire instruments used in the assessment are developed through a **double-**

translation and reconciliation procedure[1]. That is, two translators should first independently translate the source material into the target language; then a third person should reconcile these two translations into a single national version.

5. The Contractors develop two parallel source versions of the test and questionnaires[2], one in English and the other in French. It is *recommended* that countries use the English source version for one of the translations into the national language; and the French source version for the other. In those countries where finding competent translators from both source languages would be a problem, an alternative consists of double translation and reconciliation from one of the source languages, followed by extensive crosschecks against the second source language (Grisay, 2003).

General translation/adaptation guidelines

6. General translation/adaptation guidelines are developed for use by PISA translators, reconcilers, reviewers, etc. and are described in this document.

Translation notes and item-specific translation/adaptation guidelines

7. A number of translation notes and item-specific translation/adaptation guidelines are included in the monitoring tools in Excel format (Test Adaptation Spreadsheets - TAS and Questionnaire Adaptation Spreadsheet - QAS) and provided in the All Notes version of the questionnaires. These notes are provided in English only. Their purpose is to guide translators on specific issues.

International verification

8. As part of the quality control procedures implemented in PISA, all participating countries will be requested to submit their national versions[3] for verification against the English and French source versions by a team of independent verifiers with native command of the respective PISA languages and who have been specially appointed and trained by the Contractors. Appendix A contains definitions of the Verifier Intervention Categories used by verifiers to classify their interventions and from which verification statistics are derived.

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[1] No double translation is requested for manuals and coding guides/instructions.

[2] Manuals and Financial Literacy test instruments and questionnaires are developed in English only.

[3] A national language version of PISA 2018 instruments needs to be submitted for verification if that a language is administered to more than 10% of the target population, as per note 5.1 related to Standard 5.1.

Adaptation approval procedures

9. An adaptation is an intentional deviation from the source version(s) made for cultural reasons or to conform to local usage. The NPMs will be asked to document any national adaptations they need or wish to implement in the materials by describing them in specially designed forms: *Test Adaptation Spreadsheets* (TAS) for cognitive tests, orientations and helps; *Booklet Adaptation Spreadsheet* (BAS) for the common test booklet parts (also known as 'Booklet Shell', applies to the paper-based materials only); *Questionnaire Adaptation Spreadsheet* (QAS) for Questionnaires; and *Manual Adaptation Spreadsheet* (MAS) for Manuals.

Flagged item reports

10. Item analyses are conducted on the Field Trial data and/or on Main Survey data in order to determine whether test items appeared to have poor psychometric qualities. Participating countries receive information on the items that behaved poorly in their dataset. They will be requested to review them for translation or other flaws, and either to correct possible errors (after the Field Trial phase) or to advise on item deletion (after the Main Survey phase).

PURPOSE OF THIS DOCUMENT

11. This document is intended for all national staff in PISA participating countries that may be involved in translation and adaptation of PISA assessment materials, that is:

- The NPM or the person(s) who will co-ordinate translation activities for the National Centre. If different persons or different teams are in charge of the development of national versions in different languages, each co-ordinator or each team should receive copies of the *Guidelines*.

- Translators who will be in charge of producing the national version(s) of the materials. It is recommended that the *Guidelines* be used as training materials in the session where translators are instructed about the aims of the PISA study and about the special requirements that must be attended when translating assessment materials.

- Reconcilers who will be in charge of reconciling the two independent translations i.e. merging the versions received from the translators into a final national version as equivalent as possible to the source version(s) provided by the Contractors.

- Adaptors who will be in charge of adapting one of the source versions, a base version or a borrowed verified version from another country, and to negotiate required adaptations in questionnaires.

- Domain experts who will be in charge of reviewing the materials for terminology.

12. The PISA Guidelines are based on existing literature on international test adaptation (Hambleton, 1994; Hambleton and Patsula, 1998 and 1999; Jeanrie and Bertrand, 1999, Hambleton, 2002), on similar guidelines developed for previous IEA studies (O'Connor and Malak, 2000; Kelly and Malak, 2001), and on experience acquired through the verification of the PISA materials.

13. Section 1 of the document contains general instructions. Section 2 includes a number of recommendations to address common translation traps encountered when translating test materials. Section 3 lists adaptations that are desirable, acceptable, mandatory, or ruled out when translating PISA cognitive tests. Sections 4 and 5 contain specific notes on translation and adaptation of Questionnaires and Manuals. Appendix A contains the Verifier Intervention Categories used by PISA verifiers [4].

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[4]The examples used throughout this document to illustrate possible translation problems were mainly drawn from materials prepared for the PISA Field Trials. Most of these items were NOT used in the final assessments. However, *some* of the examples were drawn from the actual materials used. Please consider all of the examples as confidential materials.

GENERAL INSTRUCTIONS

Materials

14. It is the responsibility of the National Project Manager to ensure that s/he has access to both source versions (in the English and French language) of all the materials to be translated and to organise their distribution so that the team of translators and reconcilers appointed for this work can access the workflows. The paper-based and computer-based materials will be available on the PISA Portal, except the computer-based English source version of questionnaires, which will be available on the online Questionnaire Authoring Tool (QAT).

15. The materials to be translated include:

- **New Reading units** (the New Reading assessment materials exist only as computer-based materials; are online; and are dispatched in the form of XLIFF files i.e. tagged .xml localisation interchange file formats accompanied with Test Adaptation Spreadsheets in Excel format)

- **New Global Competence units** (as for New Reading units: computer-based only)

- **General and domain-specific orientations and help content** (the computer-based components that serve as directions for the computer-delivered tests).

  — General orientation to introduce the screen design (location and meaning of the progress bar, unit and item identification, etc.), general navigation (clicking on Next and Back), and Help content.

  — Domain-specific orientations which will include information about domain-specific functionality (e.g., the equation editor for math, paging and scrolling interface for reading, simulations for science, etc.)

- New Financial Literacy units (International option) (as for New Reading units: computer-based only)

- Trend Mathematics, Trend Reading, Trend Science tests (and the Trend Financial Literacy option). These units will need to be translated only, if the country did not participate in PISA 2015 or in any of the preceding cycles where the same units were administered. All trend units (except the New Science units from 2015) exist in both paper-based and computer-based format.

- Coding Guides for Trend Reading, Trend Science and Trend Mathematics (and Trend Financial Literacy option). These guides will need to be translated only, if the country did not participate in PISA 2015 or in any of the preceding cycles where the same units were administered. The coding guides will be translated in a consolidated format, and coding instructions for automatically coded items are not included in the consolidated coding guides.

- Coding Guides for New Reading and New Financial Literacy units. The coding guides will be translated in a consolidated format, and coding instructions for automatically coded items are not included in the consolidated coding guides. There is no coding guide for Global Competence units, as these units are all coded automatically.

- **Booklet Shell** (paper-based booklet cover pages, general directions to be included at the beginning of each test booklet, formula sheet etc.). This will only be needed for countries administering paper-based test, and will only need to be translated, if the country did not participate in PISA 2015. There may, however, be some minor updates to be done versus the Booklet Shell used in 2015.

- **Background Questionnaires.** These Questionnaires will be provided in different formats and modes, notably with and without explanatory notes. Explanatory notes (in English only) are included, in particular, to help with translation and adaptations. They do **NOT** need translation except for those notes aimed at test administrators.

- **Manuals** intended for the *School Co-ordinator* (SC) and for the *Test Administrator* (TA) (in English only*).* These will be provided both as separate manuals (for countries where the school co-ordinators will be different persons from the test administrators) and as a single combined *School Associate* (SA) manual (for countries where the same persons will be in charge of both school co-ordination and test administration).

- In addition, it is recommendable that the coding workshop materials are translated into the national language. However, this is not a requirement, and these materials (even if translated) will not be verified.

16. Specific instruction manuals will be made available for the persons in charge of preparing the national version of computer-based instruments:

- the two Materials Preparation documents contain step-by-step instructions that are specific to the PISA2018 Field Trial:
  <CY7_1603_PISA2018_Materials_Preparation_FT_Cognitive> and
  <CY7_1610_PISA2018_Materials_Preparation_FT_Questionnaire>;

- the more technical guides: Guides for translators, reconcilers and reviewers; user guides for OLT (Open Language Tool) are available online in:
  http://wiki.capstan.be/manuals/doku.php?id=pisa:start. These guides include video tutorials as well as user guides in written format. The user guides can also be extracted to PDF format.

17. These are all included in the *Translation Kit*, and are available for download from the PISA Portal, for which you must be a registered user, in the document repository folder named *Documents* > *Materials* > *2018 Field Trial Resources* > *Translation*.

18. All countries (except old countries taking the paper-based assessment) will need to translate/adapt the materials for the current PISA assessment. A more detailed description of the test material to be translated/adapted can be found in both *Materials Preparation* documents, which are available on the PISA Portal at the above locations.

Security requirements

19. Translators, as well as any other persons who handle these documents (members of the national research team, national experts, secretaries, etc.) should note that the whole of the PISA material is under embargo, and therefore must be kept **strictly confidential.** A template PISA Confidentiality Agreement is included in the *Translation Kit.*

Translators

20. PISA translators should have:

- Perfect command of English (and French, if they translate from French) and the target language;

- An appropriate level of computer literacy.

21. Each translator should receive the following:

- the present Translation and Adaptation Guidelines;

- access to the online user guides and video tutorials related to their role;

- access to the source version of the (sections of the) materials s/he is requested to translate; for computer-based materials, this may include access to previews of the source and target versions of the authored items;

- Blank Adaptation Spreadsheets related to the materials s/he is requested to translate (TAS, BAS, QAS, MAS);

- a schedule for the return of the translated documents;

- contact details of the NPM (or of the member of his/her staff in charge of translation activities);

Reconcilers/Adaptors

22. In the PISA translation process, the role of the reconciler(s) is essential. The main task of the reconciler will be to "merge" the two independent translations in such a way that the resulting national version is semantically equivalent to the source versions and that the wording is as fluent as possible – without the "translanese flavour" that is so often characteristic of translated material. This means that the reconciler's role can *never* be limited to just selecting the "best" of the two translations and proof-reading it. First-hand translations need reworking.

23. In effect, the reconciler will have to read both translations, select one of the them as a starting point and, sentence by sentence, see which parts of the other translation will

improve the first with regard to faithfulness to the source version(s) or fluency in the target language, as needed. The aim is to strike the right balance: the translation should neither be literal to the point that it sounds awkward, nor deviate from the source version in ways that might affect the functioning of the items. When in doubt, reconcilers who can read both English and French may find very useful to consult both source versions, to assess the degree of translation freedom that might be deemed acceptable.

24. The reconciler or adaptor will also be responsible for finalising the single translation of coding instructions for constructed response items. In particular, s/he will need to ensure consistency between the coding instructions and the reconciled version of the stimuli and items.

25. Another important task for the reconciler and the adaptor will be to document all national adaptations i.e. intentional deviations from the source version to conform to local usage. The reconciler will complete the Adaptation Spreadsheets (in Excel format) received with the materials, which include entries for cases where national adaptations are expected by the test developers. S/he will describe the adaptations made in each of these cases, and mention all additional adaptations next to the items in which they occur. For the background questionnaires, the reconciler or adaptor should work closely with the NPM for adaptations linked e.g. to the national education system, wealth indicators, income quartiles etc.

26. The reconciler or adaptor, together with the NPM, will also be in charge of submitting the translated material including the proposed national adaptations to the country's national experts for discussion and possible edits, and then to the Contractors for international verification.

Use of electronic files

27. PISA 2018 includes paper-based and computer-based assessments, and countries will administer the test either in paper-based or in computer-based mode, but not both: In PISA 2018 there is no mode-effect study as in PISA 2015. For PISA 2018 translators and reconcilers will need to use the Translation Editor of Open Language Tools (OLT), which is an open source Computer-Aided Translation tool or CAT tool. Using such a tool to edit the tagged XML file format, or XLIFF, makes it possible to fully separate text from layout and allows translators and reconcilers to focus on content rather than on format issues. Translators, Reconcilers and Adaptors should nevertheless preview their work using the preview functionality. The OLT tool and the preview functionality are described in detail in the various user guides and video tutorials available online in: http://wiki.capstan.be/manuals/doku.php?id=pisa:start.

28. For countries participating in the paper-based assessment only, the translators and the reconciler should be proficient in MS Office 2007 or 2010, so as to be able to overwrite the English or French text, replacing it with the text in their target language. This is a time-saving way to reproduce the layout, styles, fonts and graphic material from the source version, while reducing the risk of errors or omissions.

29. It is recommended that translators should be briefed about the electronic aspects of the job. These would include accessing the PISA Portal; previewing computer-based units; organising directories in which to save successive versions of the files; using proofing tools; using an equation editor; entering comments in an Excel spreadsheet, etc.

Consistency

30. It is useful that the translation team take advantage of the blank **List of recurrent instructions** to create a customised **glossary** and decide from the start how each of them will be translated. Most of the recurring instructions that are listed in this file have already been used in the past cycles (e.g. "*Read the introduction. Then click on the NEXT arrow.*", *"Explain your answer"*, etc.) so the final translation for most of these instructions already exist.

31. Similarly, it is recommended to provide translators and reconcilers with a copy of their country's typographic and style conventions to harmonise their decisions. For your convenience some of these aspects were listed in the blank **Adaptation style guide**.

32. In PISA 2018 countries will be provided with a searchable database that contains all the translations from PISA 2015 for their national version(s) for the cognitive items. This will help in ensuring consistency in new units vs. trend materials. This tool is called **MemoryLn**, and it is accessible through the PISA portal for all countries administering computer-based assessment.

33. Taking advantage of these new tools and of the Translation Memory (TM) in the Open Language Tool will help the translators and reconcilers ensure consistency within the instruments and across cycles. The List of recurring instructions and the Adaptation style guide are included in the Consistency tool Excel file that can be found in the Translation Kit.

Errata

34. The PISA test developers do not intend to make any changes or edits to the source versions after their distribution to the NPMs for translation. However, *some* errors will be identified, and errata may then be made available to the National Centres on the PISA portal during the translation process. **Please make sure that errata are implemented in your national material.** The international verifiers will be asked to check whether you have taken errata into account.

TRANSLATION OF THE INSTRUMENTS

35. Many factors can undesirably bias the answers to items in different languages. The advice provided below will help you to control frequently encountered issues. Take good note of the fact that they are to be regarded as *advice*. In practice, too strict application of any one the following recommendations may lead to an overly cumbersome translation or it may occur that applying one recommendation would imply violating another. One should then give the priority to one or the other, with a view to choosing the lesser of two evils.

Respect the layout and presentation of the source document

36. Often, a translated document is longer that the original. This is due to the characteristics of each language, and does not seem likely to have a significant effect on performance. For example, languages less concise than English often have a morphology and syntax which are more redundant, and overall the latter is likely to make up for the former in terms of reading difficulty.

37. In computer-based assessment this may lead to text not being fully visible in a text box, scroll bar missing to access the entire text, or overlapping an image or other parts of text. These kinds of issues are generally not possible for the translator or reconciler to fix, and they will be taken care of by Core A at the Layout Adaptation stage. However, it is the reconciler's responsibility to document any such layout issues in the TAS for the attention of the team implementing the layout changes.

38. However, sizeable changes must be avoided in the **page or screen set-up** of the test — for example, the student should not turn a page or scroll to read questions that appear next to the stimulus (on the same page, on the facing page, or on the same (part of the) screen. For the paper-based instruments, if necessary, use a slightly smaller or bigger font than in the original, if this enables you to keep a page set-up true to that of the source version. For computer-based instruments, the Contractors will assist you in resolving such issues.

39. Respect the **typographical clues** provided in the original materials:

    - Check whether the **instructions** given to the students are consistent with your final layout (e.g. "As shown in the table *below*", "In the box *above*", etc.).

    - Make sure that any word or expression that is emphasised in the original text by using **bold**, *italics*, underlining, or CAPITALIZATION has equivalent emphasis in your target version. To do this correctly, you may need to use the "inline formatting" features of OLT described in the OLT user guide.

Check the rendering of illustrations and graphic elements.

40. While translating computer-based segments, you can ignore illustrations and graphics, since XLIFF files are designed to separate text from layout. However, it is important to already

take length of the segments into account when previewing translated units or items. However, for right-to-left languages, it is the reconciler's responsibility to document in the TAS, if an illustration or graphic needs to be mirrored for the national version vs. international master.

41. For paper-based text, you will review materials assembled for you by the contractors and check that no alteration has occurred while importing elements in your booklets. You will be responsible for the rendering of your printed instruments. National Centres will be requested to submit samples of hard copies of their booklets, so that the quality of their printed materials can be checked before materials are sent to the schools.

Linguistic difficulty

42. Avoid complicating or simplifying the vocabulary and the syntax. This applies to the text materials used in the stimulus, and the wording of the items (both in the stem and in proposed responses).

Length of sentences

43. It is no coincidence that average word length and sentence length almost always feature among indices of complexity used in readability formulas, regardless of the language for which the formulas have been developed. Longer words tend to be less frequent, more technical and/or more abstract than short words. The basic vocabulary of a majority of languages (the most frequent and easiest 1500 to 3000 words of a language) is mainly made up of very short words. Long sentences often contain several subordinate clauses and/or embedded clauses; the word order and the syntax in those sentences are usually more complex than when the passage is made up of two or three separate sentences conveying the same content.

44. In the following example, the b version is more complex than the a version, not only because of its vocabulary (term: *relief variation*) but also because of its syntax (subordinate clause):

    a. It was easy: the route of the marathon consisted of few important differences in height.

    b. I found that easy, inasmuch as the route of the marathon consisted of few important relief variations.

45. Items where the student is asked to **quote a sentence** in the text that contains some specific information may be affected when, for example, the original sentence was embedded into another sentence, or split into two new sentences.

Everyday vocabulary vs. specialised terminology

46. As a general rule, translators should try their best to avoid translating difficult words in the text by using easier words, or paraphrases that use more common terms. Conversely, everyday terms used in the source materials should not be translated as more 'technical', 'scientific' or 'literary' expressions.

Affective vocabulary and register

47. Test items based on nuances of vocabulary often raise insuperable translation problems. It is rarely easy to find terms that have the same connotations in one's own language as in the source language. Again, translation and adaptation notes have been inserted in the TAS to help you translate such expressions.

48. When translating the PISA test materials, attention to the register is crucial. Some units are more difficult than others in terms of register because of the different real life situations they are meant to reflect (e.g., formal/informal scenarios). It is important that the same register is echoed in the translation and that the unit is not made easier with more simplified vocabulary or syntax, or more difficult in using more complex terms or syntax?

49. Special attention needs to be given to the register in the chat segments in Global Competence units, as these provide a different, more relaxed and casual context where it is important to keep plausible register for such chats among 15-year-olds.

Idioms and metaphorical expressions

50. Overly literal translation of idiomatic expressions is a frequent source of awkwardness in translated materials. Failure to find a fluent equivalent expression in the target language may result, in extreme cases, in unintelligible passages or sentences.

51. As far as possible, make sure that the metaphoric meaning of English expressions like "*to see to it*", "*in small steps*", "*to disappear into thin air*" is adequately rendered through similar idioms in your language. Translation and adaptation notes have been inserted in the TAS to help translators with idiomatic and metaphorical expressions.

Abstract words or turns of sentences

52. Do not unnecessarily modify the degree of abstraction of the sentence by using nouns where the author uses verbs, or vice versa. In the following example, *a* will be more difficult than *b*:

    a. The presence of humour in a violent scene can increase the chances that viewers will imitate or learn aggression.

    b. When humour is present in a violent scene, viewers are likely to imitate or learn aggression.

Active vs. passive turns of phrase

53. If possible, avoid, translating an active turn of phrase in the original by a passive one, or vice versa. Passive voice does not exist in a number of languages, and in some others it is used only in very specific context. However, even in languages where both active and passive are widely used, the readability and complexity of the sentence may be affected. In the following example, the *b* version increases the difficulty of the sentence, not only by the use of the passive form, but also because this version (as is often the case) uses as the subject an abstract word (*problems*) instead of an animate term (*families*):

    a. Many Russian families traditionally present their children with hundreds of problems of this type.

    b. In Russia, traditionally, hundreds of problems of this type are presented to children by their families.

Reference chains

54. Avoid modifying reference chain(s) in a passage if this is not strictly necessary for fluency reasons. A reference chain is the set of occurrences in the text where the same character or the same notion is alluded to, often with the help of various linguistic tools (pronouns, synonyms, etc.).

55. The following passage, from an article on violence on TV, is quite complex. It contains three reference chains: one relating to the notion of violence (V), the other to the notion of punishment (P), and the third referring to the young viewer (Y).

   "If the <u>punishment</u> (P1) for <u>violence</u>(V1) is delayed until the end of the program, this <u>deterrent</u>(P2) may go unnoticed by a <u>young child</u> (Y1). <u>Punishment</u>(P3) must occur in the same scene for a <u>younger viewer</u> (Y2) to connect <u>it</u>(P4) to the original <u>aggressive behaviour</u>(V2) which gave rise to <u>it</u>(P5)."

56. In a case of this type do your best to respect the nature of the elements of reference:

   - Repeat the word if the author repeated it (*punishment* in P1 and P3).

   - Use a synonym if the author used one (*violence* in V1 / *aggressive behaviour* in V2; *punishment* in P1 and *deterrent* in P2).

   - Use the combined repetition and synonym when this is the case with the author (*young child* in Y1 and *younger viewer* in Y2).

   - Use pronouns where the author uses them (P4, P5).

57. In many languages, repeating words in a text is less readily accepted than in English, thus translators often tend to use synonyms rather than repeating same words. Note, however, that the text above will become more difficult, for example, if you choose to avoid the repetition in P3 by using a synonym (*sanction* instead of *punishment*), or in Y2 by using a reference by position (*thelatter* instead of *younger viewer*).

Generic articles

58. The English 'indefinite' article ("*a cell*", "*a molecule*") is often used to convey a generic meaning, such as in the sentence: "*The milk of a cow, a wolf and a human do not contain the same amounts of proteins*". This differs from other languages that use articles, where indefinite articles are normally used to refer to an *individual* cow, or wolf, or cell, or molecule. To prevent misinterpretation, please turn these expressions in the way that is used in your language to express the same "generic" idea.

59. For example, the sentence "*A tidal power station uses a different method to generate electricity from many other power stations*" needs to be turned into plural when translated into French ("*Tidal power stations use a different method from other power stations*").

Common psychometric traps

60. When translating the items, avoid either providing clues that direct the student towards the key (correct answer) or, conversely, making a distracter (wrong answer) more attractive.

Do not modify the proportional length of key and distracters in multiple-choice items

61. In multiple choice items, make every effort not to unnecessarily modify the respective lengths of key answer and any of the distracters. Long answers are more attractive than short ones; therefore, the item might become easier in your version if the correct answer is more elaborate (relative to other answers) than in the source version. On the other hand, the item might become more difficult if a distracter stands out from the others because it is longer than in the source version.

62. Other factors, like differences in sentence structure or differences in style or tone of the translated text, may also cause one of the proposed answers to stand out from the others more than it does in the source version. If the response options of a multiple choice question follow a given pattern, it is desirable to echo that pattern in the target language.

Respect literal matches

63. If the wording of an item literally echoes expressions contained in the text, take care that the same applies for the translation. If, on the contrary, the author of the item uses a different formulation from that of the text (synonym, indirect allusion) do not simplify the student's task by using words of the text or derivatives of the same word in the stem or distracters. This aspect deserves special attention, since it is a frequent cause of variability in item functioning.

Check all of the "Which of the following…?" questions

64. In multiple-choice items, respect the indication contained in the source version on whether *only one answer* or *more than one answer* are asked of the student. Pay special attention, for example, to all items where the English stem reads as "*Which of the following…*" Some of them do not contain any information at all on whether the student should circle *only one* or *several* of the proposed statements. This ambiguity MUST be conveyed by the translated stem, which is not an easy issue for languages where the interrogative pronoun "*Which*" carries an intrinsic plural or singular morphologic mark. When applicable, translation notes to draw your attention on this particular issue have been inserted in the TAS.

Try to respect the order of information in the item stems

65. The order in which the author has presented the various pieces of information contained in the stem of an item is often important. Try to reproduce that order insofar as possible.

66. When the stem is long, you may occasionally observe that the author has privileged certain elements of the question by placing them either beyond or right at the end of the phrase. Try to highlight the same elements in your national version.

67. Conventions with respect to word order differ significantly from one language to the other. However, various stylistic devices often make it possible to enhance one or another segment of the question. Teachers generally prove to be outstanding judges as far as formulating the items of a test is concerned. If some members of your national panel are teachers, draw their attention to that point and ask them to be particularly aware of it: they will probably assist you in improving those items whose formulation is somewhat awkward or unclear due to the translation.

Small details are sometimes important

68. It may occur in a multiple-choice item that some of the alternatives proposed only differ by one **key detail**. Be particularly vigilant: it does occur that, during the course of the translation procedure, the element that makes the difference between both responses may be toned down, thus impairing the item.

Other

Pay attention to coding instructions

69. More often than not, when an item proves easier or more difficult in one language than in another one (for students of equal ability), this is because the formulation has somewhat modified the strategy required to find the correct answer, or the item construct. *Coding Instructions* can help the translator understand the nature of the item, because they contain information about the strategy and construct that the test authors wish to assess.

70. The coding instructions are meant for an adult audience (people in charge of coding student's answers). The translation register may thus be on a different level than in stimuli and items. However sample student responses should reflect the actual way students would answer the items and thus may be translated including structural awkwardness, grammatical and spelling mistakes.

Respect all translation notes and item-specific translation/adaptation guidelines

71. For cognitive units, Translation and Adaptation Guidelines are included in the Test Adaptation Spreadsheets (TAS) to draw your attention to important aspects. In the questionnaires, the Notes for the NPMs and for the translators are included in the Word and PDF version of the questionnaires ('All Notes' version) as well as in the Questionnaire Adaptation Spreadsheet (QAS). Scrupulously conform to the instructions contained in these notes and guidelines. Their aim is to:

- Ask the translator to imitate as closely as possible one or the other stylistic feature of the source versions (for example, the familiar tone of a letter).

- Point at cases where strict scientific or mathematical terminology should be used and cases where everyday language is preferred.

- Draw the translator's attention to particularly important cases of literal/synonymous matches between item stem and stimulus.

- Point out aspects for which translators are explicitly requested to enter a national adaptation.

- Indicate a particular case where the translated text must remain strictly true to the original and where even a slight deviation could compromise the efficient functioning of one or several test items.

- Warn translators against specific translation traps

- Provide alternative wording in case of translation difficulties.

ADAPTATION OF THE COGNITIVE MATERIAL

72. Considerable efforts are made during the development of the material to prevent the content or presentation from abnormally favouring or putting at a disadvantage students of certain countries or certain cultures. The selected texts and documents are of various origins; they are selected with due consideration for plausible shared interests and concerns of 15-year-olds worldwide. Moreover, National Centres of each participating country are asked to have national experts evaluate the texts and documents, and to indicate to the International Centre those items that are deemed ill-suited to that country's culture.

73. The general principle will be to restrict national adaptations to those cases where they are required, so as to avoid confronting students with expressions or concepts that are much less familiar to them than to students in other countries, but without affecting the substance of the text or items.

74. However, the majority of the PISA stimuli are texts that the student would normally be likely to encounter in daily life when reading books, newspapers, magazines, web sites, etc. Make it a rule to have national adaptations only in those cases where it would appear usual to make them in your country, should the text occur for example in a magazine or a school textbook.

What should be adapted, what should not be adapted?

Never adapt the format of an item

75. Items that are open-ended in the source version should never be turned into multiple-choice items in your national version, or vice-versa. Never change the order or the content of headings of responses presented as columns in tables. For example, do NOT invert "Yes/No" or "True/False" categories into "No/Yes" or "False/True".

Do not include explanatory notes nor additional instructions

76. In some cases, you may be tempted to add a footnote or a parenthetical explanation to provide the meaning of a particularly difficult word. Please note that such adaptations should be avoided and, if they are deemed unavoidable, they must be submitted for approval.

77. Similarly, avoid adding extra instructions (e.g. to explain where the students should write their answers, or to indicate that *two* answers are requested).

Adapt mathematical symbols, abbreviations and formulas

78. Adapt the abbreviations of measurement units and the symbols used for operations, with particular attention to information provided in graphs (captions, measurement units, coordinates of the axes, graduations etc.).

79. Pay attention to the following:

- Units may have different written forms ("cl, ml", vs. "cL, mL").

- The symbol used for multiplication can be (.) or (*) or (x).

- Approximation is sometimes noted (~) or (+/-).

- Hours are noted as 7:20 AM, 4:30 PM in some countries, while other countries would use 7h20 and 16h30.

- Decimal period (e.g. 2.5) may need to be replaced with decimal comma (2,5) and appearance of numbers (e.g. separators for thousands) may need to be changed when that is the convention in the country.

Check the use of mathematical and scientific terminology

80. Mathematical and scientific language is far less "universal" than it is often said to be. It is therefore essential for the translation team to include members who are competent in mathematics and science, or for its work to be carefully checked by specialists.

81. Similarly, expert advice will be needed, in particular, to know whether one should adapt "real life" vocabulary, or not, when mathematical or scientific concepts are expressed in the English and French source versions in the form of non-technical, "everyday" language.

Check "common language" quantitative expressions

82. Be particularly careful in translating all "common language" quantitative expressions when translating Mathematic items. Many of these expressions are less equivalent than they seem to be across languages. Differences occur, for example, in the way various languages count certain things, and on whether the first (or last) item should be included in the total.

83. For example, in items where intervals are specified (such as "*Temperatures between 60 ºC and 74 ºC*), the boundary values (*60* and *74 °C*) are considered as included in the interval in certain languages, but as excluded in other languages.

Do not adapt the "zed" currency

84. The PISA materials sometimes refer to a fictional country (*Zedland*) or a fictional town (*Zedtown*), where a fictional currency is used: the *zed*. Please **never adapt** these names to national location names or to real currencies, because the adaptation of currencies would be likely to affect the arithmetic demands of the item. For countries that participated in PISA 2015 or preceding cycles it is important to use the same adapted names as in trend materials.

85. Conversely, currencies other than *zeds* should be adapted to your national currency in most of the Reading materials, where no computational task is asked of the student. A translation note will indicate explicitly when currency should be adapted and when the original currency should be retained.

Mathematical aspects of words and pictures

86. Mathematical Literacy is a much broader domain than just computational activities. Some items included in the survey will not appear to contain numbers or require any computations, but will describe mathematical aspects of situations by picturing relationships. In other items, a mathematical activity is implied but not explicitly stated by the words in the instructions; the words carry mathematical implications that must be understood by the respondent without additional explanatory text. For example, items may contain statistical terms (e.g., "average"), or ask for interpretation of text or graphs. Translators should thus also focus on non-numerical or linguistic elements that are less obvious than numbers or amounts, yet just as critical.

Names of persons and locations can usually be adapted

87. In most of the test units, you can use names and locations that are familiar to the students in your country. It is recommended to use national names that start with the same initial letter as in the source version and that represent the same gender as in source, as the PISA materials have been designed to be gender-neutral in that characters of both genders appear in the materials equally. Having the same initial letters as the source version will also help avoiding errors when translating complex lists of names, or distracters in multiple choice questions.

88. In some other units though, the geographic location and people names cannot be adapted because the unit specifically refers to existing places, researchers, authors and studies. In these cases, the item guidelines will ask you not to make any adaptations.

Some names should NOT be adapted

89. In some **literary texts** the names of characters, places, currencies are part of the universe described by the author; therefore, the only acceptable changes are those slight spelling adaptations that are generally used by your country's translators.

90. Adapt the **biographical names** of famous characters only in case they are usually adapted in your country. For example in both English and French the name of the Portuguese explorer de Magalhães would be adapted as Magellan.

91. Do not adapt the **names of institutions or agencies** (unless there is a well-known national version of the name); rather leave the name of the institution or agency in the original language and add its translation if some of the information it contains is deemed important for understanding the stimulus.

92. Similarly, please leave in the original language any references presented in a note or at the bottom of the text (such as **author and title of the text**). Add a translation if needed.

93. In **geographical maps**, translate only those proper names, for which it is customary to have them translated in your country's most recent atlases. Leave all other names in the original language.

94. In **newspaper articles, brochures, leaflets** only translate or adapt what you would expect to see translated or adapted if the text was published in your country's. As a rule, the spelling of proper names used in the country's most popular newspapers or weekly magazines should be followed. For example, current English newspaper articles would write *Beijing* and *Mumbai* rather than *Peking* and *Bombay*. Again, items guidelines will help you deal with these.

95. **In functional texts** (advertisements, instruction manuals, catalogues etc.), make sure that you comply with the *item-specific translation/adaptation guidelines*. These generally specify which aspects should be adapted so as to bring the document "closer" to advertisements, instruction manuals, catalogues etc. such as those which the student is likely to encounter in daily life, but without making amendments that could be harmful to proper item functioning.

Check that adaptations are consistently applied

96. It often happens that adaptations are entered in a unit in an inconsistent way. If you change a proper noun or the name of a currency, do not forget to do it **every time** these terms appear in the text or in the items, or in any illustration accompanying the text. If decimal commas need to be used in your national version rather than decimal periods, please check **all** decimal numbers in your materials.

Think of possible other adaptations that may be needed in your country

97. The most common adaptations are known by the teams responsible for the development of international tests. Most of them will be described in the *item-specific translation/adaptation guidelines*. However, not everything can be foreseen. Your team of translators may be confronted with new problems requiring deviations from the source versions.

- For example, in countries where the school week goes *from Sunday to Thursday*, it would be necessary to modify the headings of a possible school timetable, which would go *from Monday to Friday* in the source version. Of course, one must be careful that this modification does not affect the item(s) in any way.

- Some items ask for numeric responses, such as: "*How many of the cans are likely to be damaged? Answer: ……….cans*". In Slavonic languages, one of several different forms of plurals may be used for the word "*cans*", depending on whether the expected numeral is less than 5 or 5 or more. The prompt may need to be adapted (e.g. into "*Number of cans*: …….") in order to avoid giving the student undesirable clues on the magnitude of the expected answer.

98. For queries related to translation or adaptation, please do not hesitate to e-mail them to the translation referee (contact address: beatrice.halleux@skynet.be).

Document all national adaptations made in the test materials

99. It is mandatory that **all** adaptations (whether required by a translation/adaptation guideline or recommended by one of the directions above, or added by the translators or reconcilers for whatever reason) be documented in the *Test Adaptation Spreadsheets (TAS).*

Translation of literary texts

100.   If a literary text included in the PISA test material stems from an author in a different language than yours and a version of that text translated in your language exists, you may use the published version to support your translation, provided that:

- Permission has been granted by the owners of the copyright and the references are duly quoted; and

- The translated version's equivalence with the English and French source versions has been carefully verified. In case of diverging versions, the PISA source version will be the reference.

Adapting duplicated segments in Global Competence units

101. Global Competence units, as Collaborative Problem-Solving units in 2015, include a *chat* functionality where the respondent exchanges messages with virtual characters. In languages with gender variation this creates an added complexity in that some of the translations would need to different depending the gender of the respondent. For example, in the phrase "*I'm tired*", tired may take a different grammatical form depending on who is talking (male or female). The workaround for this problem is to have two versions of each segment: one that is visible to the male respondents, another one that is visible to female respondents. In gender-neutral languages that do not have any gender variation these two segments can be translated identically in all cases. In gender-sensitive languages the two segments *may* have different translations. More information about adapting the chat segments will be found in a specific guide among the online user guides.

ADDITIONAL GUIDELINES FOR THE TRANSLATION/ADAPTATION OF QUESTIONNAIRES

102.   Translation of background questionnaires poses some slightly different and/or additional problems. The aim of these instruments is not, as in the tests, to assess competencies. In order to properly translate a *questionnaire*, the key issue is to be perfectly understood: the questions about the educational context and the instructions on the implementation of the survey must be as **transparent** as possible and have the **same meaning** in every participating country.

103.   The PISA source questionnaires are developed and finalised before translation begins. A *Translatability Assessment* of new questionnaire scales was performed by a team of linguists before the items were finalised, with due consideration for the Ask-the-Same-Question (ASQ) model. This model allows for the most extensive forms of analysis, but makes it both essential that the source questionnaire gets the questions right and that the translations maintain the intended measurement properties (Harkness, van de Vijver and Johnson, 2003). Furthermore, the translation process of the French source version and the following domain expert review triggered also some changes in the English source.

104.   The following specific guidelines should be taken into account in addition to the more general guidelines given in the section "Translation of instruments".

Keep in mind that some respondents will misunderstand anything that can be misunderstood

105. The smallest ambiguity in the formulation of a question can make the interpretation of the answers difficult. Try to anticipate problems that could arise in your country, and to formulate the question in a way that will prevent them. Pay attention to the vocabulary and the turn of phrase. Remember that the Student Questionnaire must be well understood even by those students whose reading skills are poor. Likewise, remember that the (optional) Parent Questionnaire must be understood by adults who are not necessarily highly educated. Conversely, the School and Teacher Questionnaires are targeted at school heads and teachers, i.e. adults with higher education.

Avoid translating complex English questions into "translanese"

106. English is probably one of the most flexible languages in the world for the construction of interrogative sentences. Any English adjective or adverb can be used as a basis for a wh-phrase ("*How old…?*", "*How strong…?*", "*How valuable…?*", "*How often…?*", "*How likely…?*", and so on), while many other languages have a much more limited list of interrogative words or expressions.

107. In addition, the English syntax allows interrogative expressions to be embedded in other interrogative phrases (e.g. "*Which of the following factors determine* <u>*whether*</u> *students are admitted to your school?*"), while these complex expressions are not always possible in other languages.

108. Please do your best effort to keep the wording of question stems as simple and fluent as possible in your national language. If needed, you may want to split very complex questions into two different sentences, rather than producing a too literal translation, which might be confusing or difficult to understand for the respondent.

Do not change the question layout

109. **Length** of translated materials can also be a problem in questionnaires. The Questionnaire Authoring Tool (QAT) makes it possible to adapt the width of columns. Nevertheless, if items are too long in the target language this may require scrolling, which should be avoided. For computer-based questionnaires, this can often be solved by slightly changing the width of some text columns, or by slightly reducing the font, in order to keep the question on just one screen as in the source. In paper-based questionnaires, it may happen that a one-page question in the source version is spread across two pages in the translated version. If this is the case, please make sure you replicate on the top of the second page the column headings containing the question answer categories, so that the respondent does not have to flip back and forth to remember the meaning of each box to be ticked.

110. For the sake of consistency across questionnaires, it may help to list the instructions that appear several times in the questions (such as "*Please tick only one box*", "*Please tick all that apply*", "*Please select one response in each row*" or "*Please select one response*") or the most common answer categories (such as "*Strongly disagree/Disagree/Agree/Strongly agree*", or "*Never/ 1or 2 times a year/3 to 5 times a year/Once a month/More than once a month*") and to define the translation in advance.

Check the level of generality of the words used

111. A general notion such as "*remedial activities*" may correspond in your school system to a range of possible activities – e.g. small group "catching up" courses where the teacher re-explains difficult notions, or specialised help for dyslexic children, or extra language courses for immigrant students, or private individual lessons, etc. – each of which may have specific names in your language. Using a very specific term (such as "*catching-up lessons*") rather than a generic expression covering all types of remedial activities may alter the information captured by the item.

112. Similarly, in some languages, the notion of "*homework*" corresponds to separate terms referring on one hand to "*doing written homework*" and on the other hand to "*studying lessons*". Please make sure that the wording used does not reduce the scope of information conveyed by the item to only one of these activities.

Pay special attention to the wording of answer categories

113.   Imperfect translation of answer categories (like *"Strongly Disagree, Disagree, Agree, Strongly Agree"* or *"Not at all, Very little, To some extent, A lot"*) can have considerable impact on the responses. Please be particularly careful in finding words or expressions that are as equivalent and equidistant as possible to those in the source version.

Do not introduce mismatches between answer categories and the wording of items

114. Please make sure that, when translating multiple choice questionnaire items, the various proposed answers are **syntactically 'aligned'** with the stem of the question.

115. For example, the following question would sound awkward:

> *In your school, how do you usually group students?*
> A.   *We do not use grouping.*
> B.   *Age.*
> C.   *By ability.*
> D.   *Separating undisciplined students.*

116.   When translating questions that ask the respondent **how often** something happens (at home, or at school, or in the classroom), avoid including in the translation of the various items any indication of **frequency.** For example, in a question where the answer categories are "*Never, In some lessons, In most lessons*", do not add in the items any time adverbs or adjectives, such as in "*Students* often *spend time in laboratories*" or "*There is* constant *noise and disorder in my class"* or *"My teachers would* regularly *help the students who need it*").

117.   Similarly, in **"How much…?"** questions, avoid adding in the wording of the items any reference to **quantity.** For example, in a question where the answer categories are "*Not at all/Very little/To some extent/A lot*", avoid adding quantitative expressions in the items, such as "*Does your school have* huge rates *of students' absenteeism?"*

118.   In the same order of ideas, any overt grammatical **negation** should be avoided in the wording of items that have **answer categories containing negative expressions**, such as "*Yes/No*", or "*Not at all ….A lot*", or "*Strongly agree…Strongly disagree*". For example, a Likert-type item such as "*Learning advanced science topics would be* difficult *for me* (*Strongly agree… Strongly disagree*)" might confuse students if it were translated into *"Learning advanced science topics would* not *be* easy *for me"* in your national version.

Avoid increasing the social desirability of self-reported responses

119.   When answering questionnaire items that ask for self-reports, many respondents tend to conform to what they think are socially 'acceptable' or 'desirable' positions (i.e., they tend to report more 'positive' characteristics than what the real characteristics actually are).

120. This pattern is partly dependent on the 'positive' or 'negative' connotations of the vocabulary used in the items. Note that items containing particularly 'positive' or 'negative' words (e.g. "*In our school, teachers work with* enthusiasm"; "*School buildings are* inadequate") are more sensitive than others to this kind of artefact. When translating, please try to choose words that are as equivalent as possible in terms of 'positive', 'negative' or 'neutral' connotations.

Adapt all <bracketed> terms and expressions that relate to school organisation

121. In order to help translators and National Centres, all terms and expressions that usually require adaptation appear in the source version between <angle brackets>, with references to explanations and translation notes that follow. Please make sure that all these terms are translated into expressions, which are actually used by students and teachers in your country – rather than into technical terms used only by specialists – and which are adapted to your education system.

122. Specific NPM and Translator notes are included in the All Notes-version (in Word and PDF format) of the English source version of background questionnaires to help you adapt these terms. Such adaptations are subject to negotiation with the Core AContractor. It is recommended that the National Centre works closely with the translators or the reconciler for these specific adaptations

123. The adaptations implemented in the questionnaires have implications in terms of data cleaning and data management. For this reason, the ***Questionnaire Adaptation Spreadsheet (QAS)*** describing all adaptations that your country intends to introduce in the Questionnaires must be submitted first, for approval, to the Contractor in charge of questionnaire issues. Materials submitted for verification should reflect all agreed adaptations described in the QAS.

124. It may also occur that the NPM wishes to incorporate additional questions into the School or Student Questionnaire for the purpose of national analyses. Should this be the case, please bear in mind that:

- All additional questions that the NPM may want to implement must be submitted to the Core A Contractor for prior approval.

- There is a limit of up to five questions that can be added to the PISA questionnaires.

- Additional questions must be added at the end of the questionnaire.

- The timing of the Student Questionnaire session may have to be modified accordingly, depending on the time the students will need to respond to such additional questions.

ADDITIONAL GUIDELINES FOR THE ADAPTATION OF MANUALS AND ASSESSMENT SCRIPTS

Notes to NPMs

125.   A number of national adaptations must be made to the *School Co-ordinator* and *Test AdministratorManuals* (or *School Associate's Manual*), to make sure that the instructions given to the School Co-ordinators and Test Administrators are consistent with decisions made by the NPM (for instance concerning the testing schedule). In the source version of manuals, text boxes titled "***Notes to NPMs***" draw your attention to those passages, in which the NPM may need to make adaptations. In addition, placeholder text indicates where changes must be made.

126.   Because NPMs need to adapt the Manuals to reflect the situation in their own countries, but in a way that is internationally consistent, it is very important that the Core A Survey Operations Contractor reviews all adaptations and approves them before the Manuals are printed and circulated. The list below identifies a number of procedures, and indicates whether they can be modified or not. NPMs are encouraged to contact the Core A Survey Operations Contractor if they have any questions about other proposed modifications.

Procedures that should NOT be changed in the Manuals or Assessment Scripts

- Coding information required on the tracking instruments;

- The timing of the sections of the Assessment;

- The text of the Script (after materials have been distributed to students) and the General Directions;

- The security of the items, and the importance of maintaining that security;

- The prohibition against the Test Administrator being a reading, mathematics or science teacher of students in the assessment;

- The requirement that a trained person administer the session.

Procedures that may be changed or adapted

- Separation of responsibilities between the School Co-ordinator and the Test Administrator – these positions may be combined or some responsibilities interchanged;

- Definitions of special educational needs and instructions regarding students to be excluded from the assessment – it is very important that exclusions be kept to a minimum. The wording may be changed, but the concepts should not be. The Core A Survey Operations Contractor will review carefully how countries modify the exclusion categories;

- Procedures for notifying teachers, students, and parents about the assessment;

- How the paper-based Assessment Booklets and Student Questionnaires are packaged and shipped from the National Centre;

- Length of break between parts of the Cognitive test session and between the Cognitive test session and the Student Questionnaire session;

- The requirement that a follow-up session be held if too many students are absent based on Expected Average Assessment Rate. NPMs may "suggest" that this be done "if at all possible" or they may delete the requirement. The goal is to increase student participation. Follow-up sessions are one way to increase student participation, but if NPMs think they will hurt participation, they should modify these procedures.

127. It is mandatory that all of the adaptations done to the Manuals be documented following the procedure described in the adaptation guidelines issued by Core A Survey Operations. Adaptations made to scripts will undergo linguistic verification by Core D contractor following approval of the adaptation by Core A Survey Operations.

REMINDERS

Change the Coding Guide if you change the item

128.   Any changes made in the stimuli and items, as small as they may be, must be reflected in the item text and coding instructions in the Coding Guide, consistently across all codes in each item or item set.

Keep documentation of all changes made

129.   You must keep a detailed and complete record of all changes made in each stimulus, item and coding guide, and of the reasons. This information is required to enable proper interpretation of the results and may be of extreme value when reviewing 'dodgy' items.

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APPENDIX A - Definitions of Verifier Intervention Categories

OK	**No intervention** is needed. The verifier has checked and confirms that the text element or segment is equivalent to source, linguistically correct, and – if applicable – that it conforms to an explicit translation/adaptation guideline. This category may also be used to report an appropriate but undocumented adaptation.
ADDED INFORMATION	An information is present in the target version but not in the source version, e.g. an explanation between brackets of a preceding word.
MISSING INFORMATION	An information is present in the source version but omitted in the target version.
MATCHES AND PATTERNS	1) A **literal match** (repetition of the same word or phrase) or a **synonymous match** (use of a synonym or paraphrase) in the source version is not reflected in the target version. Most important: literal or synonymous matches **between stimulus and item** and **between a question stem and response categories**. 2) A **pattern** in multiple choice items is not reflected in the target version (e.g. all but one option start with the same word, proportional length of responses options.)
INCONSISTENCY	A recurring element across units (e.g. an instruction or prompt) is inconsistently translated, and this appears to be unintentional.
ADAPTATION ISSUE	An adaptation is an intentional deviation from the source version made for cultural reasons or to conform to local usage. An adaptation issue occurs when an adaptation would be needed but was not made, or when an inappropriate or unnecessary adaptation was made.
REGISTER / WORDING ISSUE	1) *Register*: difference in level of terminology (scientific term >< familiar term) or level of language (formal >< casual, standard >< idiomatic) in target versus source. 2) *Wording*: inappropriate or less than optimal choice of vocabulary or wording in target to fluently convey the same information as in the source. This category is used typically for vague or inaccurate or not quite fluent translations.
GRAMMAR / SYNTAX ISSUE	1. *Grammar*: grammar mistake that could affect comprehension or equivalence, e.g. wrong subject-verb agreement, wrong case (inflected languages), wrong verb form. 2. *Syntax*: syntax-related deviation from the source, e.g. a long (source) sentence is split into two (target) sentences or two (source) sentences are merged into a single (target) one; or another syntactic problem due e.g. to overly literal translation of the source.
MISTRANSLATION	A wrong translation, which seriously alters the meaning. A <u>mistranslation should always be reported with a back-translation</u>. Note: a vague or inaccurate translation should rather be classified as a Register/Wording issue (or sometimes a Grammar/Syntax issue). This category covers cases where the source has been misunderstood, but also copy/paste errors that unintentionally result in a wrong text element or segment.
GUIDELINE NOT FOLLOWED	An explicit translation/adaptation guideline for a given text element or segment was overlooked or was not addressed in a satisfactory way.
LEFT IN SOURCE LANGUAGE	A text element or segment that should have been translated was left in source language.
MINOR LINGUISTIC DEFECT	Typo or other linguistic defect (spelling, grammar, capitalization, punctuation, etc.) that does not significantly affect comprehension or equivalence. Correcting such errors is usually not controversial and can be made in track changes without documenting them.
ERRATUM/UPDATE MISSED	An erratum or update notice has been overlooked.
LAYOUT / FORMAT ISSUE	A deviation or defect in layout or formatting: disposition of text and graphics, item labels, question numbering, styles (**boldface**, <u>underlining</u>, *italics*, UPPERCASE), legibility of captions, tables, number formatting (decimal separators, "five" versus "5"), etc. In computer-based materials, this includes truncated words in the preview, undesired scrolling, etc.