TRANSLATION AND ADAPTATION GUIDELINES FOR PISA 2012

Doc: NPM(1010)4e
Also known as: Trans_Adapt_Guide_PISA12

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PISA 2012 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 strictly equivalent **test batteries**, translated and adapted into each of the languages of instruction of the participating countries. A fourth domain (Problem Solving) was also assessed in PISA 2003 and will be part of the PISA 2012 assessment. The survey instruments include **questionnaires**, used to collect information on the students' background and educational environment, that might help explaining 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 of the student, through a formulation that changes the type of mental strategy required;
- 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 Consortium responsible for implementing PISA therefore makes recommendations and implements 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 Consortium develops 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.

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[1] No double translation is requested for manuals and coding guides/instructions.
[2] Manuals are developed in English only.

Translation notes and item-specific translation/adaptation guidelines

7.	A number of translation notes and item-specific translation/adaptation guidelines are embedded in the paper-based and computer-based instruments and/or included in the accompanying adaptation spreadsheets (see later), 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 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 Consortium. Appendix A in this document contains the checklist that will be used by the international verifiers to identify possible translation problems and to suggest edits and corrections.

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, *Booklet Adaptation Spreadsheet* (BAS) for the common test booklet parts (also known as 'Booklet Shell'), *Questionnaire Adaptation Spreadsheet* (QAS) for Questionnaires, and *Manual Adaptation Spreadsheet* (MAS) for Manuals.

"Dodgy" item analyses

10.	Item analyses are conducted on both the Field Trial and Main Survey data in order to determine whether any 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 bugs (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 Consortium.

- Domain experts who will be in charge of reviewing the materials for appropriateness of content and 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 Verification Check-list used by PISA verifiers[3].

General instructions

Materials

14.   It is the responsibility of the National Project Manager to ensure that s/he has duly received both source versions (in the English and French language) of all the materials to be translated and to organise their distribution to the team of translators appointed for this work. The paper-based materials will be available on My PISA and the computer-based materials will mainly be available on the online Translation Management System (TMS).

15.   The materials to be translated for the paper based-assessment include :

- **Mathematics, Reading, Science tests (and the Financial literacy and Reading Components[4] options)** are presented as an item pool composed of separate electronic files, each of which will contain one complete test unit, i.e.: a *stimulus* (text, graphic, diagram, ...), which shall be used as a basis for the work of the student; one or several *questions*; and the *coding instructions* to be followed when coding the answers. Note that the translation of the coding instructions for automatically coded items is not required.

- **Booklet Shell** (booklet cover pages, general instructions to be included at the beginning of each test booklet, short survey at the end of the booklet etc.).

- **Background Questionnaires.** These Questionnaires will be provided in different formats, notably with and without explanatory notes. Explanatory notes 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).

16.   The materials to be translated for the computer-based assessment include Problem Solving and, optionally, Maths and Reading tasks presented as an item pool composed of separate electronic files, each of which will contain one complete test unit. Units will be downloadable as XLIFF files and will include all translation/adaptation relevant information. Specific instruction manuals will be made available for the persons in charge of preparing the national version of computer-based instruments:

- *Computer-Based Assessment: Translation Management System* (NPM(1010)4b and TMS_CBAManual_FT12)
- *PISA 2012 Translator's user guide to Open Language Tool* (NPM(1010)4c and OLT_CBAManual_Trans_FT12)

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[3] 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.

[4] Note that the Reading Components option has its own Translation and Adaptation Guidelines and these are not covered by this document.

- *PISA 2012 Reconciler's and National Reviewer's user guide to the Open Language Tool* (NPM(1010)4d and OLT_CBAManual_RecNR_FT12)

These are all available for download from MyPISA (https://mypisa.acer.edu.au/) > Materials > 2012 FT Resources > NPM Meeting > 2012 NPM Meetings > Budapest October 2010 or Materials > 2012 FT Resources > Test Preparation. The coding guides for open-ended items will be downloadable as Word files on My PISA > Materials > 2012 FT Resources > Coding.

17.   All countries will need to translate/adapt the materials for the current PISA assessment. A more detailed description of the test material to be translated can be found in *Material Preparation FT12* (NPM (1010)4a and Material_Prepare_FT12, both of which are available on MyPISA at the above locations).

Security requirements

18.   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 copy of the PISA Confidentiality Agreement is included in the *NPM manual* (https://mypisa.acer.edu.au Materials > 2012 FT Resources > Cycle Wide > Key Documents).

Translators

19.   PISA translators should have:

- Perfect command of both the source language and the target language;
- An appropriate level of computer literacy; and

20.   Each translator should receive the following documents:

- A copy of the present Translation and Adaptation Guidelines;
- A copy of the *PISA Translator's user guide to OLT*; reconcilers will have a *PISA Reconciler's user guide to OLT*;
- The source version of the materials (or sections of the materials) s/he is requested to translate;
- A copy of the Adaptation Spreadsheet related to the materials s/he is requested to translate (TAS, BAS, QAS, MAS);
- A schedule for the return of the translated documents;
- The contact details of the NPM (or of the member of his/her staff in charge of the co-ordination of translation activities);
- The login information and URL address of the TMS (for computer-based materials).

Reconciler

21.   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 as equivalent as possible to the source versions, that all possible translation errors have been corrected, 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" translation out of the two and briefly proof-reading it! First-hand translations *always* need accurate, in-depth reworking.

22.   In effect, the reconciler will have to read both translations, to check each sentence against the source version(s), and to carefully rework the translated text in order to make it as accurate and fluent as possible. The aim is to strike the right balance: the translation must not be literal to the point that it sounds awkward, but neither should it deviate too far from the source version, which would likely affect the functioning of the assessment items in unexpected ways. When in doubt, reconcilers who can read both English and French may find very useful to consult both source versions, to have a more precise idea of the degree of freedom in translation that would be considered as acceptable.

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

24.   Another important task for the reconciler will be to document all national adaptations that the translation team deemed necessary. For the paper-based instruments, s/he will complete the Test Adaptation Spreadsheet received together with the materials, in which all assessment items will be listed together with entries for all 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. The procedure for recording adaptations in computer-based instruments is different and is described in the *PISA Translator's user guide to OLT* and the *PISA Reconciler's user guide to OLT*, respectively. For the background questionnaires, the reconciler should work closely with the NPM for the adaptations linked e.g. to the national education system, wealth indicators, income quartiles etc.

25.   The reconciler, 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 Consortium for international verification.

Use of electronic files

26.   PISA includes paper-based and computer-based assessments. For the paper-based assessment, the translators and the reconciler should be sufficiently familiar with MS Office 2007 – which is official standard in PISA 2012 – to be able to use a copy of the source version of the material as a basis for their translation (where they will 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. For the computer-based assessment, the process will be facilitated if the translators and the reconciler are already familiar with CAT (Computer-Aided Translation) tools. Note that for PISA 2012 translators and reconcilers will need to use the XLIFF Translation Editor of Open Language Tools (OLT), which is an open source CAT-tool.

27.   It is recommended that in the training session organised by the NPM to familiarise the translation team with the materials and with the PISA Translation Guidelines, some time be spent on instructions about the electronic aspects of the job.

- Paper-based instruments: all translators should know how to (i) access text boxes in the graphics; (ii) use the "track changes" function when revising the materials; (iii) use an equation editor (iv) use the proofing tools included in MS WORD; (v) name or rename the electronic files to avoid confusing "old" and "new" versions of a same translated unit; (vi) apply styles and formats; (vii) use Excel spreadsheets.
- Computer-based instruments: in addition to the list above, all translators should be trained to use the TMS and the OLT.

Consistency

28.   It is useful that the translation team lists the headings and other recurrent expressions that occur very frequently in the materials, such as: "*Question*", "*item*", "*task*", *"Give a reason for your answer"; "Give an explanation to support your answer" "Show your work"; "Scoring"; "Full credit", "partial credit", "no credit";* etc) and decide from the start how each of them will be translated.

29.   Similarly, it is recommended to provide translators with a copy of their country's typographic and style conventions, to harmonise their decisions in terms of use of abbreviations, punctuation, use of brackets, use of italics, etc.

30.   Having copies of widely used, up-to-date Mathematics and Science textbooks used in national secondary schools may greatly help the translators in finding the appropriate terminology when dealing with PISA Mathematics and Science materials.

Consortium errata

31.   The PISA test developers intend to limit as much as possible any changes or edits made to the source versions after their distribution to the NPMs for translation. However, it is possible that *some* errors will be identified, requiring that errata and/or new versions of certain test units (with changes highlighted in "track changes" mode) be sent to the national Centres during the translation process. **Please make sure that errata are implemented in your national material**.

Many reviews of both the source versions and the national versions will take place throughout the process leading to the final version of the instruments. The risk that translators and/or the reconciler might work on a version that is not up to date, or forget to insert one of the required corrections, is substantial. It is therefore crucial to organise meticulous monitoring of successive versions throughout the process.

Translation of the instruments

32.   Many factors can undesirably bias the answers to items presented to the students 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. So please regard the following as an informative/general list of what MIGHT raise a problem with respect to equivalence between the source version and your version.

Respect the layout and presentation shown in the source document.

33.   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).

34.   However, sizeable changes must be avoided in the **page or screen set-up** of the test — which would oblige the student, for example, to turn a page or scroll to read the questions, whereas in the source version text and questions appear side by side or on a single 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 consortium will assist you in resolving such issues.

35.   Respect the **typographical cues** provided in the original materials:

- Make sure that **titles**, **subtitles**, possible **numbering of lines** and paragraphs, and **numbering of items** are the same in your national version as in the source version.

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

Check the rendering of illustrations and graphic elements.

36.   Check that no alteration occurs while importing these elements in your translated file, or during printing of the paper-based instruments. For example, make sure that the graphic layout is compatible, particularly regarding any grey-shaded elements. For computer-based units, please document any layout problems observed in the unit preview according to the procedure described in the *TMS manual* for this upload task.

37.   Do not forget to translate the **text boxes** contained in graphic elements (in particular the keys, captions, scales, units of measure). A number of bugs observed in previous PISA studies resulted from small errors in the text boxes included in some of the graphics.

38.   The NPMs will be requested to submit to the Consortium sample hard copies of some of the pages of their booklets, so that the quality of their printed materials can be checked in advance of the dispatch of materials to the schools.

Linguistic difficulty

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

Length of sentences

40.   It is no coincidence that average word length and sentence length almost always appear among the indices of complexity used in readability formulas, whatever 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 language (the most frequent and easiest 1500 to 3000 words of a language) is, more often than not, made up of very short words. Long sentences often contain many 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 rendering the same content.

41.   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.

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

"Common" vocabulary vs "scientific" terminology

43.   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, common language terms used in the source materials should not be translated into more 'technical', or 'scientific' or 'literary' expressions.

44.   "Common language" vs "scientific terminology" represents a particularly important challenge when translating the PISA Mathematics and Science test materials, due to the very nature of the study, which aims at assessing students' **literacy** (i.e., how well can the students apply *in real life situations* their mathematical and scientific knowledge and skills?).

45.   Common language often uses less than precise words to describe mathematical concepts, or chemical, physical or biological phenomena – sometimes 'common' words may even convey usual misconceptions, such as '*weight*' used to mean '*mass*', '*heat*' used to mean '*temperature*', '*circle*' used to mean '*disk*', etc. In a number of PISA test units, where everyday life contexts are used, it is recommended NOT to change any such 'common language' expression into the 'strict' terminology. But some other units have a more formal Mathematics or Science context, where accurate terminology is needed. When appropriate, translation notes have been added in the materials to help the translators with terminology.

Affective vocabulary

46.   Test items based on nuances of vocabulary often raise difficult translation problems. It is rarely easy to find terms in one's own language having exactly the same

connotations as those in the source language. Again, translation notes have been inserted in the TAS/BAS/comment fields of the XLIFF files to help you translate such expressions.

Idioms and metaphorical expressions

47.   Too literal translation of idiomatic expressions is a frequent source of awkwardness in translated materials, and probably the most common cause of "translanese" flavour. Failure to find a fluent equivalent expression in the target language may result, in extreme cases, in unintelligible passages or sentences.

48.   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 notes have also been inserted in the TAS/BAS/comment fields of the XLIFF files to help translators with idiomatic and metaphorical expressions.

Abstract words or turns of sentences

49.   Do not unnecessarily modify the degree of abstraction of the sentence by using nouns where the author uses verbs, or vice versa.

50.   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

51.   If possible, avoid, translating an active turn of phrase in the original by a passive one, or vice versa. 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

Negations

52.   Be vigilant during the translation of passages containing negations, especially when double negations are involved: the latter significantly increase the difficulty of the sentence.

53.   In the following example, the *b* version is more difficult than *a,* as a result of the replacement of a negative term (*harmless*) by a double negation, syntactic and lexical (*is not harmful*):

   a.   This does not mean that the violence in cartoons is harmless.

   b.   This does not mean that the violence in cartoons is not harmful.

Reference chains

54.   Modify as little as possible any reference chain(s) in a passage. 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 of these 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 (*the latter* 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, where such articles are normally used to refer to an *individual* cow, or wolf, or cell, or molecule. To prevent misinterpretation, especially when translating Science materials, 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 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 stand out from the others more than it does in the source version.

Be careful with truncated items.

63.   In the newly developed material, there should be no truncated items. However some of the link units may still contain such items and it may happen that in your language a "full" item would behave as a truncated one.

64.   It may be quite challenging to translate in certain languages those item stems that are "truncated sentences" in the ENG or FRE source versions (i.e. multiple choice items where the stem is an incomplete sentence, and where the student must select the most appropriate answer among four or five proposed "endings"). Make sure that all proposed endings have in your language the same syntactical match with the incomplete stem; otherwise the item will

measure grammar skills instead of the intended process. If this is not possible in your language, use complete sentences in both the stem and proposed answers.

Respect literal matches

65.   If the wording of an item (or some coding instructions) <u>literally</u> matches 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

66.   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.

Try to respect the order of information in the question stems

67.   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.

68.   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.

69.   All conventions with respect to word order significantly differ 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 questions 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

70.   Mistranslations sometimes occur in extremely "easy" sentences, just because they were so simple, thus the translator paid less attention! Translators should pay equally careful attention to all materials.

71.   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.

72.   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. *Coding Instructions* can help the translator understand the nature of the item, because they contain information about the strategy that the test authors wish to assess.

73.   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 the stimuli

and items. However the sample student responses (dot point examples) 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.

74.   Test developers embedded a number of *Translation Notes* in the materials whenever they thought it necessary to draw your attention to an important aspect. These item-specific translation/adaptation guidelines are inserted in the adaptation spreadsheets (paper-based materials) or in the comment fields of XLIFF files (computer-based materials). Scrupulously conform to the instructions contained in these notes and guidelines. Depending on the particular case, 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.

Adaptation of cognitive material

75.   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.

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

77.   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 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.

78.   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.

79.   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

80.	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.

81.	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.

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

83.	Pay attention to the following:

- Units sometimes have differing 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 (as separators for thousands) may need to be slightly changed when that is the convention in the country.

- The captions, units of measure, coordinates of the axes must practically be translated every time.

Check the use of mathematical and scientific terminology.

84.	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.

85.	Similarly, expert advice will be needed, in particular, to know whether you 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

86.	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.

87.	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

88.	The PISA materials (particularly the Mathematics and Science materials) sometimes refer to a fictional country (*Zedland*) or a fictional town (*Zedville*), 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 seriously affect the arithmetic demands of the item. The use of these fictional numbers will guarantee that students from all countries are faced with the same computational requirements.

89.	In contrast, currencies other than *zeds* can be adapted to your national currency in most of the Reading materials, where no computational task is asked of the student. Most often, a translation note will indicate explicitly what aspects can be adapted or not.

Mathematical aspects of words and pictures

90.	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 expect to be asked to focus on non-numerical or linguistic elements that are less obvious than numbers or amounts, yet are just as critical.

Names of persons and locations can usually be adapted

91.	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 capital letter as in the source version. Having the same starting capital letters as in the source version will also help avoiding errors when translating complex lists of names, or distracters in multiple choice questions. It will also be essential for some Problem Solving items where lists and names appearance in the stimulus may be sorted alphabetically.

Some names should NOT be adapted

92.	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.

93.	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.

94.	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 in square brackets if some of the information it contains is deemed important for understanding the stimulus.

95.	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 in square brackets if needed.

96.	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.

97.	In **newspaper articles**, only translate or adapt what you would expect to see translated or adapted if the article were published in one of your country's daily newspapers or periodicals. 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, for example, *Beijing* and *Mumbai* rather than *Peking* and *Bombay*.

98.	**In** f**unctional texts** (advertisements, instruction manuals, catalogues etc.), make sure that you comply with the *Translation notes*: they generally specify which aspects can be adapted – to bring the document "closer" to advertisements, instruction manuals, catalogues etc. such as those which the student is likely to encounter in his daily life – without making amendments that could be harmful to proper item functioning.

Check that adaptations are consistently applied

99.	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.

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

- For example, in countries where the school week goes *from Monday to Saturday*, 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.

- A number of Mathematics 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 would then need to be adapted (e.g., into "*Number of cans*: ……") in order to avoid giving the student undesirable cues on the magnitude of the expected answer.

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

Document all national adaptations made in the test materials.

102.   It is mandatory that **all** adaptations done to the materials (whether required by a translation note 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)* or, for computer-based materials, in the comment fields of the XLIFF files submitted to the Consortium via the online Translation Management System.

Translation of literary texts

103.   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 where possible 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. Please refer to the translation notes that are inserted in the units and that give you information about the degree to which the original version has been adapted.

Additional guidelines for the translation/adaptation of questionnaires

104.   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.

105.   The following guidelines should be taken into account in addition to the guidelines given in the section "Translation of instruments".

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

106.	The smallest ambiguity in the formulation of a question can make the interpretation of the answers difficult. Try to anticipate the problems, which could arise in your country, and to formulate the question in a way that will prevent them. Pay attention to the vocabulary and the syntactic turn of phrase used. 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, remember that the School Questionnaire is targeted at school heads, i.e. adults with higher education.

Avoid translating complex English questions into "translanese"

107.	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.

108.	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.

109.	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

110.	**Length** of translated materials can also be a problem in questionnaires. It may happen that one-page questions in the source versions are spread over two pages in the translated version. In some cases, this can 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 page as in the original text. If this solution is insufficient, please replicate on the top of the second page the column headings containing the question answer categories, so that the respondent doesn't have to flip back and forth to remember the meaning of each box or letter he or she has to tick.

111.	Pay attention to the **lettering** in the questions. In particular, never change into capital letters A, B, C, etc. the letters a), b), c) etc. that appear on the left of the items. Neither should you do the reverse: do not change A, B, C into a, b, c.

112.	For the sake of consistency across questionnaires, it may help to list the instructions that appear several times in the questions (such as "*Please circle one answer only*", "*Please circle the appropriate answer for each statement*") 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.

113.	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 too specific term (such as "*catching-up lessons*") rather than a generic expression covering all types of remedial activities may seriously alter the information captured by the item.

114.	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 information conveyed by the item to only one of these activities.

Pay special attention to the wording of answer categories.

115.   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.

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

117.   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.*

118.   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*").

119.   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?".*

120.   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*)" would become rather confounding for the 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

121.   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).

122.   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.

123.   In order to help translators and national centres, all terms and expressions that usually require adaptation appear in the source version between <angle brackets> (also known as <carets>), 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 the students and the teachers of your country rather than into technical terms used only by specialists, and which are adapted to your education system.

124.   Specific NPM and Translator notes are included in the background questionnaires to help you adapt these terms. Such adaptations are subject to negotiation with the Consortium questionnaire team. It is recommended that the National Centre works closely with the translators or the reconciler for these specific adaptations.

125.   The adaptations done in the questionnaires have important 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 Consortium's persons who are in charge of questionnaire issues. Only when the changes and adaptations are approved by the Consortium, they can be entered in the materials.

126.   It may also occur that the NPM wishes to incorporate additional items 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 as national options must be submitted to the Consortium for prior approval; and

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

Additional guidelines for the adaptation of manuals

Notes to NPMs

127.   A number of national adaptations must be made to the *School Co-ordinator* and *Test Administrator Manuals* (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 it is recommended that the NPM make adaptations.

128.   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 Consortium 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 Consortium if they have any questions about other proposed modifications.

Procedures that should NOT be changed in the Manuals

- Coding information required on the tracking instruments;
- The timing of the sections of the Assessment Booklet;
- The text of the Script (after materials have been distributed) 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 education 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. ACER will review carefully how countries modify the exclusion categories;
- Procedures for notifying teachers, students, and parents about the assessment;
- How the Assessment Booklets and Student Questionnaires are packaged and shipped from the National Centre;

- Length of break between parts of the Assessment Booklet and between the Assessment Booklet session and the Student Questionnaire session;
- The requirement that a follow-up session be held if more than 5 students (or more than 15% of the cluster size being used) are absent. 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.

129.   It is mandatory that all of the adaptations done to the Manuals be documented in the appropriate Manual Adaptations Spreadsheet and submitted for approval to the Consortium.

Reminders

Change the Coding Guide if you change the item

130.   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

131.   You must keep a detailed and complete record of all changes made in each stimulus, item and scoring code, 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: Verification checklist

Verification of test units

1. **Instructions to the respondents** (intro in italics, at the beginning of a unit)

Check whether these instructions or prompts are present, whether they are located at the same place as in the source version and contain the same information.

2. **Stimulus (= Text or document in a test unit)**

2.1 Text heading: If the source text has a title or heading, verify whether it has been translated. If it does not have any, please make sure no heading or title was added.

2.2 Text body

2.2.1   Is the *presentation (layout)* the same as that of the source version? (E.g. column layout, font size, text on one or several pages, location of graphics or illustrations etc.). If the lines are numbered in the source text, check whether they are numbered in the national version you are verifying.

2.2.2   Is the text significantly *longer or shorter*?

2.2.3   How difficult is the *vocabulary* used (About the same as in the source text? Or is it harder i.e. are there more rare or abstract words? Or is it easier i.e. are there many cases where more common or concrete words were used?)?

2.2.4   How difficult is the *syntax* used (About the same as in the source text? Or is it harder i.e. are sentences longer, with too many phrases/subordinate clauses, is passive voice used more often, or complex negatives? Or is it easier i.e. are there many cases where the translation eliminates one or several difficulty factors)?

2.2.5   Respect of *style* and *tone* of the source text (casual, elevated…).

2.2.6   *Content-related* errors (mistranslation, incomprehensible passages, forgotten passages, incorrect vocabulary).

2.2.7   *Form-related* errors (spelling, syntax, punctuation).

2.3 Graphics (if any):

2.3.1.   Check whether graphics comply with the source version's (size, location, contrast of the shades of grey etc. The graph or illustration must be imported from the source file, not redrawn).

2.3.2.   Check whether all keys and captions that belong with the graph are translated, whether they are reproduced at the right place and make sure that none of those keys and captions are missing.

2.3.3.   Should certain questions refer to information contained in the graphs, verify whether the translation of acronyms, symbols, keys etc. do not make it harder or easier to find the correct answer.

2.4 Translation notes (if any):

2.4.1 Double-check whether the translator(s) actually complied with translation note(s).

3. **Items (= Questions)**

3.1 In a general way, it is very important to make sure that the wording would not make it harder or easier to understand the stem (due to its syntax, its vocabulary etc.) than the item's *stem* in the source version.

3.2 Check whether the question is presented the same way and that no facilitating elements were added or withdrawn (e.g. the translation should not add a prompt for the answer to an open-ended question if the source version does not propose any).

3.3 In questions that include several sub-items — presented as a table or list — the same format must be maintained in the translated version. In particular, please make sure that column headings do not contain more or less (specific) information than in the source version.

3.4 (Remark) In questions that include several statements whereby the student is requested to circle "Yes" / "No" or "True" / "False" or "Present" / "Absent" etc., in the source version this choice is printed on the left hand-side of the different statements. Should this order be inverted in the translation (statements on the left, answer choice on the right), then the question would still work the same way; as a consequence, this type of adaptation is acceptable.

3.5 Verify whether the stem (part of the item that poses the question) contains the same information as the source version does. For instance if the source version states that there could either be *one or several* correct answers [this is the case for Questions in English that begin with "*Which of the following...*"), check whether the translation brings this ambiguity over (it should neither suggest that there is only *one* correct answer, nor should it suggest that there are *several*; it must indicate that there may be *one* **or** *several* correct answers).

3.6 If the stem refers to line numbers from the text/stimulus, double-check whether the reference still relates to the corresponding lines in the translation, where line numbers are likely to be different.

3.7 Both in the stem and in the remaining parts of the question, verify whether (possible) links with the relevant passage from the text are the same in the translation and in the source version: if the source question uses words or expressions identical to those used in the text/stimulus, this must also apply for the translation (literal match). However, if the source question uses synonyms or paraphrases, then the translated version should *not* use literal match. The nature of the connection must remain the same.

3.8 In multiple choice items, make sure that both the number and the order of the answer choices are the same as in the source version. As far as possible, the proportional length of the different answers should not differ too much from the source version. In particular, please make sure that the correct answer is not by far the longest if this is not the case in the source version. If certain distractors (incorrect answers) contain expressions identical to those used in the text/stimulus, the translation should reflect the same correspondence.

3.9 In open-ended questions, verify whether the number of lines (half-lines) provided for the student to fill in his/her answer is the same as in the source version. If these lines are numbered, they must also be numbered in the translated version. If they are not, make sure no numbers were added in the translation.

4 Scoring rubric

4.1 Check whether the scoring rubric has indeed been translated and make sure each question has its own rubric.

4.2 As far as possible, please check whether translations of the recurrent expressions in the scoring rubric were translated in a consistent way across all of the material.

4.3 In multiple choice items, make sure that the answer listed as correct answer is indeed the right one, and verify whether its wording is identical to that of the item.

4.4 In open-ended questions, double-check the relevant values for the different scores and see that they do not contain mistakes.

4.5 Verify whether the translation does not extend the scope of possible correct answers (due to a more vague description in the translation) or, conversely, make sure that this scope is not made too restrictive. For instance, when the scoring rubric indicates that an answer can be regarded as correct even if it does not *explicitly* contain a given element, provided that this element can clearly be *inferred* based on the content of the answer, check whether this indication is also stated in the translated version.

4.6 If the scoring rubric refers to line numbers from the text/stimulus, check whether those line numbers are correct in the translation.

4.7 If the scoring rubric quotes the text/stimulus, check whether the quotations are consistent with the text.

5 National Adaptations

5.1 Verify whether the adaptations listed in the *Test Adaptations Spreadsheet (TAS)* and in the comment fields of the XLIFF files comply with the guidelines stated in the *Translation Guidelines* and/or translation notes occurring within the unit itself. Please report adaptations that appear to go beyond authorised cases. When in doubt, consult the co-ordinator.

5.2 Also be watchful for possible adaptations to a unit that might not be listed on the *TAS* file or in the comment fields of the XLIFF file, and report such events.

5.3 In the same way, report cases where adaptations requested or advised have not been made in the translation.

Verification of questionnaires

Note: **in assessment materials the focus is on level of difficulty, while in questionnaire the focus is on unambiguous formulation, on clarity)**

6.1 Check the layout of the questions. If a question is spread over two pages, check that the headings are repeated at the top of the second page.

6.2 Check the question stems and items for possible awkwardness.

6.3 Verify whether any piece of information was omitted. In particular, check that none of the italicised instructions is missing.

6.4 Pay special attention to the translation of response categories.

6.5 Check the match between response categories and item wording.

6.6 In attitude items, check that affective expressions are consistently used across the item set (e.g., verify that the same words are used in all items that contain "*I like…*", and that a different word is used in those that contain "*I enjoy…*".

6.7 Check that all <bracketed> expressions were appropriately and consistently adapted. Cross-check on whether they correspond to the adaptations described in the Questionnaire Adaptation Spreadsheet.

Other Remarks

1.   Possible inconsistencies between the English and French source

Report the inconsistency to the Verification Co-ordinator.
The English version must be considered as the reference version.

2.   Verification Report

We expect to receive, on completion of your work,

a) The original electronic copy in the target language, on which you will have noted points that require improvement and correction suggested. The co-ordinator will forward those documents to the relevant NPM and archive one copy.

b) The Test Adaptation Spreadsheets, with your remarks on the adaptations suggested by the country's translation team, and documentation on your suggested corrections.

c) A short verification report. Please use the template that has been circulated at the Verifier's training session to summarise the main strong points and weaknesses of the national version you will have verified.

NB: Please note that the whole of the PISA Test Material must be regarded as strictly confidential.