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Translation projects — General guidance

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National foreword

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Foreword

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ISO/TS 11669 was prepared by Technical Committee ISO/TC 37, *Terminology and other language and content resources*, Subcommittee SC 2, *Terminographical and lexicographical working methods*.

Introduction

This Technical Specification reflects the variety of projects that translation service providers (TSPs) carry out. It provides guidance concerning best practices for all phases of a translation project. It will also be useful to institutions that train and educate translators. It is not meant to compete with current regional and national standards, but is intended to improve communication among all relevant stakeholders in a translation project, including the persons requesting the translation service, those providing the service and those who make use of the resulting translation product. It is based in part on translation service standards adopted in Canada[7], China[8] [9], Europe[5] and the United States[6].

An organizing principle of this Technical Specification is the importance of structured specifications in translation projects (as elaborated in Clauses 6 and 7). A system is described for making decisions about how translation projects are to be carried out. Those decisions — project specifications — then become a resource for both the requester (the party that requests a translation product, sometimes called the client or customer) and the translation service provider throughout all phases of a translation project. Translation project specifications can be attached to a legally binding contract to define the work to be done. In the absence of a contract, they can be attached to a purchase order or other document supporting the request. Project specifications can be developed and used both within and outside commercial customer-vendor relationships.

A basic and implicit translation project specification is that the target content be readable in the target language and correspond in some way to the source content. However, the nature of the correspondence between the source and target contents will vary according to the needs of the project, as determined by the project specifications.

In practice, requesters do not always provide project specifications. However, that is not best practice. Requesters and TSPs should work together to determine project specifications. Those who do so are more likely to be satisfied with both the translation project and the final translation product. When both requesters and TSPs agree on project specifications, the quality of a translation — from a workflow and final delivery perspective — can be determined by the degree to which the target content adheres to the predetermined specifications. All parties involved in the production of a translation product should have access to the necessary project specifications.

After the requester receives the final translation product, the role of the project specifications does not end; they are the starting point for all assessments, both qualitative and quantitative. Any assessment standards would therefore benefit from taking into account the system of structured specifications presented in this Technical Specification. Keeping the translation product and the project specifications together provides a uniform basis for assessment. The project specifications can be used to guide assessments made by either the TSP or the end user. The use of the same specifications by all parties avoids assessment based on personal opinions of how source content should be translated. In some cases, the specifications themselves will be found to be unclear or ill-advised. In other cases, it will be determined that the specifications were not followed. In all cases, the use of project specifications can improve communication within the document production chain and promote ongoing improvement.

In summary, quality translation *projects* and quality translation *products* result from developing and following appropriate project *specifications*.

Translation projects — General guidance

1 Scope

This Technical Specification provides general guidance for all phases of a translation project. Its main purpose is to facilitate communication among the parties involved in a project. It is intended for use by all stakeholders of the translation project, including those who request translation services, those who provide the services and those who make use of the results of the project — in particular, the translation product. It applies to multiple sectors, including the commercial and government sectors, and non-profit organizations.

It provides a framework for developing structured specifications for translation projects, but does not cover legally binding contracts between parties involved in a translation project. It addresses quality assurance and provides the basis for qualitative assessment, but does not provide procedures for quantitative measures of the quality of a translation product.

It is not applicable to interpreting services.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1 Translation terms

2.1.1
translate
render information in the *source language* (2.1.2) into the *target language* (2.1.3) in written form

2.1.2
source language
language from which content is translated into the *target language* (2.1.3)

2.1.3
target language
language into which content is translated from the *source language* (2.1.2)

2.1.4
source content
text and other content to be *translated* (2.1.1)

Note to entry: The source content for a translation project can, for example, range in size and complexity from a single road sign to a one-page document, set of large documents or user interface for a complex software system.

2.1.5
target content
text and other content translated from the *source content* (2.1.4)

Note to entry: *Target content* and *translation product* (2.1.9) are related terms. Translation product generally refers to content at a late stage or at the end of a translation project, after the content has undergone translation and other translation services such as *revision* (2.2.2.2) or *review* (2.2.2.3). Target content generally refers to content as it is undergoing translation and translation services.

2.1.6
A-language
native language, or language that is equivalent to a native language, into which the translator typically translates from his or her *B-language* (2.1.7) and/or *C-language* (2.1.8)

Note to entry: The A-language is generally the language of education and daily life for a translator.

2.1.7
B-language
language, other than a translator's native language, of which the translator has an excellent command and from which the translator typically translates into his or her *A-language* (2.1.6)

2.1.8
C-language
language of which a translator has a complete understanding and from which the translator sometimes translates into his or her *A-language* (2.1.8)

Note to entry: A translator can have several C-languages.

2.1.9
translation product
content created through the process of *translation* (2.2.2.1) and other translation services

Note to entry: *Translation product* and *target content* (2.1.5) are related terms. Translation product generally refers to content at a late stage or at the end of a translation project, after the content has undergone translation and other translation services such as *revision* (2.2.2.2) or *review* (2.2.2.3). Target content generally refers to content as it is undergoing translation and translation services.

2.1.10
locale
value that reflects the language, local conventions and culture of a geographic region

Note to entry: Local conventions can include specific formatting rules for dates, times and numbers, as well as other conventions and preferences.

EXAMPLE French Canada (fr-CA), Chinese Singapore (zh-SG).

2.1.11
overt translation
type of *translation* (2.2.2.1) in which aspects of the *source language* (2.1.2) and source culture are intentionally left visible

2.1.12
covert translation
type of *translation* (2.2.2.1) intended to make the *translation product* (2.1.9) appear as though it had been authored originally in the *target language* (2.1.3) and target culture

2.1.13
translation memory
electronic collection of source- and target-language segment pairs

Note 1 to entry: A segment is typically a sentence, bullet point, or header.

Note 2 to entry: The purpose of a translation memory is to facilitate the retrieval and use of previously translated content.

2.1.14
bi-text
text segmented and linked to corresponding segments of target text

2.1.15
competence
ability to apply knowledge and skills to achieve intended results

2.2 Translation project terms

2.2.1 Terms related to stakeholders

2.2.1.1
requester
person or organization requesting a translation service from a *TSP* (2.2.1.2) or *language service provider* (2.2.1.3)

Note 1 to entry: The *requester* is usually the person or organization that asks for, and receives, the *translation product* (2.1.9) on behalf of the end users, and that usually directly or indirectly determines the TSP's compensation for rendering the translation service. In the case of government or non-profit organizations, pro-bono transactions, or in-house translation within a company, there is sometimes no monetary compensation for translation services.

Note 2 to entry: In the commercial sector, the requester is sometimes called the client or customer. These terms, however, are ambiguous and could refer to the *end user* (2.2.1.6). For this reason, *requester* is the preferred term.

2.2.1.2
TSP
translation service provider
person or organization supplying a translation service

EXAMPLE Translation companies, translation agencies, freelance translators, in-house translators, revisers, reviewers, translation organizations (profit, non-profit or governmental).

Note 1 to entry: The concepts of *TSP* and *language service provider* (2.2.1.3) are connected by a generic relation, with language service provider being the generic concept and TSP the specific concept. TSPs generally provide only translation services, which can include *revision* (2.2.2.2) or *review* (2.2.2.3). Depending on their qualifications and abilities, TSPs can provide other services.

Note 2 to entry: Often a larger *TSP* asks several smaller TSPs to each take care of part of a translation project — for example, translation into one target language each. There can be even more than two levels of providers. However, in such cases, each TSP is considered to be a provider, not a *requester* (2.2.1.1). Only the person or organization making the initial request to the highest-level TSP is called the requester in this document.

2.2.1.3
language service provider
LSP
person or organization that provides translation, interpreting and/or other language-related services such as transcription, terminology management or voice-overs

Note 1 to entry: The concepts of *language service provider* and *TSP* (2.2.1.2) are connected by a generic relation, with language service provider being the generic concept and TSP the specific concept. TSPs generally provide only translation services, which can include *revision* (2.2.2.2) or *review* (2.2.2.3). In some cases, language service providers provide mainly translation services but in many languages.

Note 2 to entry: LSP is also an abbreviation for "Language for specific purposes"; in this Technical Specification, however, LSP refers only to language service provider.

2.2.1.4
translator
person who *translates* (2.1.1)

2.2.1.5
freelance translator
translator (2.2.1.4) who typically provides outside services for several requesters directly or several *TSPs* (2.2.1.2) or a combination of the two, on a per project basis

2.2.1.6
end user
person or group of persons who ultimately make use of the *translation product* (2.1.9)

Note to entry: The *end user* is often not the same entity as the *requester* (2.2.1.1).

2.2.1.7
reviser
person who performs *revision* (2.2.2.2)

2.2.1.8
reviewer
person who performs *review* (2.2.2.3)

2.2.2 Terms related to translation project tasks

2.2.2.1
translation
process of *translating* (2.1.1)

2.2.2.2
revision
bilingual editing of *target content* (2.1.5) based on a comparison between the *source content* (2.15) and the target content

2.2.2.3
review
monolingual editing of *target content* (2.1.5) with respect to the conventions of the *subject field(s)* (2.3.2) to which the target content belongs

2.2.2.4
localization
process of adapting products and services for distinct *locales* (2.1.10)

Note to entry: *Localization* consists of 1) the translation of textual materials according to the target locale, and 2) adaptation of non-textual materials to the same locale. It includes input, output and delivery mechanisms.

2.2.2.5
back translation
translation (2.2.2.1) of the *target content* (2.1.5) back into the *source language* (2.1.2)

Note to entry: Back translation can be misunderstood or misused. See discussion of back translation in 7.3.2 for details.

2.2.2.6
machine translation
process in which *source content* (2.1.4) is given to a computer system and *target content* (2.1.5) is produced without human intervention

2.2.2.7
raw machine translation
output of *machine translation* (2.2.2.6) prior to *post-editing* (2.2.2.8)

2.2.2.8
post-editing
revising *raw machine translation* (2.2.2.7)

2.2.3 Terms related to project specification framework

2.2.3.1
project specification
value for a *translation parameter* (2.2.3.2) relative to a particular translation project

2.2.3.2
translation parameter
one of a set of key factors, activities, elements and attributes of a given project used for creating *project specifications* (2.2.3.1)

Note 1 to entry: The set of *translation parameters* as enumerated in 7.2 is applicable to all translation projects and the translation parameters' values (project specifications) are to be determined for each project to fully define the conditions and output of *translation* (2.2.2.1).

Note 2 to entry: There are multiple categories of *translation parameters*, including linguistic parameters, production parameters and environment parameters.

Note 3 to entry: In the context of translation projects, the term *translation parameter* is often referred to simply as "parameter" for practicality.

2.2.3.3
translation sub-parameter
subdivision of a *translation parameter* (2.2.3.2)

EXAMPLE Sub-parameter 19a: Copyright.

2.3 Linguistic terms

2.3.1
text type
class to which content is assigned based on its function, format or the intention of the author with respect to the target audience

2.3.2
subject field
domain
field of activity characterized by a specific body of knowledge, terminology and phraseology

2.3.3
register
usage register
set of properties that is characteristic of a particular type of content, and which takes into account the nature of the relationship between the creator and audience, the subject treated and the degree of formality or familiarity of the content

2.3.4
interpreting
rendering of the spoken or signed information in a *source language* (2.1.2) into a *target language* (2.1.3) in oral or signed form

3 Working together — Requesters and translation service providers (TSPs)

3.1 Division of labour

This clause provides requesters with suggestions on how to identify an appropriate TSP for translation projects. Additionally, TSPs can review it to determine the conditions under which they should or should not accept work that is offered by requesters.

The division of labour between the requester and the TSP can vary widely; many tasks can be performed by either the requester or the TSP. For this reason, the division of labour should be determined and formalized in the project specifications (see Clause 6).

3.2 Selecting TSPs

3.2.1 Different types of TSPs

3.2.1.1 In-house TSPs

When applicable, requesters can select TSPs from within their own organizations. Otherwise, requesters can choose to outsource their content to TSPs.

When applicable, TSPs can choose in-house staff to translate the requester's content. The TSP also has the option to outsource the content to other TSPs.

3.2.1.2 Multi-person TSPs

Multi-person TSPs are often translation companies. They often have a larger translation capacity than freelance translators.

Multi-person TSPs can employ other TSPs, including freelance translators. Often a larger TSP, sometimes called a language service provider, asks several smaller TSPs to each take care of part of a translation project — for example, translation into one target language each. There can be even more than two levels of providers. However, in such cases, each TSP is considered to be a provider, not a requester.

3.2.1.3 Freelance translators

A freelance translator is a TSP acting as an individual.

When requesters work directly with freelance translators, a project manager should be designated who will assume responsibility for developing the project specifications based on the initial requirements of the requester (see 5.2). The project manager should also ensure that the specifications are adhered to throughout the project, particularly in the production and post-production phases (details given in 5.3 and 5.4, respectively).

When the agreed-upon project specifications call for a translation to be revised, the revision should be performed by someone other than the translator. The exception to this practice is when there is no one available who is more qualified than the translator to revise the translation product; in that case, the translator should do a thorough revision of his or her own work. However, requesters and TSPs should be aware that some regional and national translation standards require, with limited exceptions, that someone other than the translator revise every translation. Freelance translators can fulfil this requirement by making arrangements with other TSPs to revise their work.

3.2.2 Selecting an appropriate TSP

Before selecting a TSP, requesters should first define the preliminary project specifications (see 5.2.3), which will aid them in determining the best types of TSPs for a project (i.e. whether to outsource the translation project and to whom, or to keep the project in-house).

It is the responsibility of the requester to choose an appropriate TSP that meets the needs of the project. The requester should search for and select a TSP that applies a structured specification approach to translation projects (see Clauses 6 and 7). Requesters should also select TSPs that have the necessary competences as described in 3.2.3 to 3.2.4.

Providing specific measures of competence (i.e. scores and numbers) for individuals is beyond the scope of this document because of its international reach and because each translation project has unique needs and specifications.

Upon request, TSPs should provide any desired information to the requester for evaluation.

3.2.3 Competences of translators and revisers

3.2.3.1 Source- and target-language competence

For a translator, the ability to read the source language and the ability to write in the target language are both critical, but those qualifications alone are not sufficient for either translators or revisers. Indications of true source and target language competence include

— length of experience providing professional translation services in the relevant language combination and subject field,

— amount of university-level study in source language or target language,

— amount of university-level specialization in relevant subject fields,

— scores on standardized language proficiency tests, and

— period of language immersion or residence in a country or region where either language is the dominant language.

When relevant, a translator should demonstrate competence in the necessary language variants (i.e. Arabic Egypt), especially in the target language.

3.2.3.2 Translation competence

In addition to demonstrating language competence, translators and revisers should demonstrate translation competence in the given language pair and direction. For example, French-to-English and English-to-French are the two directions of the language pair French and English. Considerations for determining whether a translator or reviser is competent in translation include, among others,

— a degree in translation from a university or college,

— length of experience providing professional translation services in the relevant combination of languages,

— certification from an official translation industry body or an internationally recognized translator association umbrella organization,

— references from previous work, and

— when possible, and without violating confidentiality, samples of previous work.

3.2.3.3 Other competences

Revisers should have additional competences to those of a translator (see 3.2.4).

In addition to language, subject field and translation competence, translators and revisers should have competence in the following additional areas:

— prior translation experience with the given project's text type (patent, corporate annual report, software user interface, etc.),

— understanding of the translation project phases and the structured specification approach as described in this Technical Specification,

— proficiency in using the technology that is required by the project specifications,

— research skills in finding both subject-field information and target-language terminology that are relevant to the given project,

— understanding of the source and target cultures,

— social skills needed to function effectively on a translation team, and interact with stakeholders in the translation process, and

— evidence of ongoing professional development in translation and relevant subject fields.

According to the demands of the translation project and as time permits, a translator's research competence can sometimes substitute for previous knowledge and experience with the text type, technology, etc.

Specific genres of the source content can require additional types of competence.

EXAMPLE A translator hired to translate a marketing brochure has creative writing competence (the ability to identify stylistic devices and expressive means in the source content and to render them clearly in the target language, etc.).

As with other competences, the degree of competence necessary is unique to each translation project and is not discussed here.

3.2.3.4 Translation direction — A-, B- and C-languages

Requesters should be aware of the differences between a translator's A-, B-, and C-languages, and translators should be forthcoming about their own translation strengths in their A-, B-, and C-languages. Translators sometimes have more than one A- or B-language, and often have several C-languages.

Generally, a translator's A-language is the one that he or she grew up speaking at home, at school, in the community, and which was the language of post-secondary instruction. When not all these conditions apply, determining a person's A-language can be less obvious. Factors beyond speaking a language in one's infancy and childhood can influence the designation of one's A- and B-languages. A translator's native language is often designated as his or her A-language, but that is not always the case; likewise, an acquired language is often designated as the B-language, but the B-language is not necessarily an acquired language. For example, if the translator grew up speaking his or her native language in the home but another language in the community and in education, he or she may have a higher proficiency in the second language; the second language is therefore the speaker's A-language, and, depending on the speaker's proficiency, the native language may take the place of an A- or B-language.

NOTE 1 Individuals who grew up speaking their native language at home but a different language in community and educational environments are often called "legacy" or "heritage" language speakers. Their native language is often not their A-language.

Generally, translators should translate from their B- or C-languages. Ideally, translators should always translate into their A-language, but if the agreed-upon project specifications call for a translation with a lower degree of target-language proficiency, translators may translate into their B-language. Translators should not translate into their C-language.

For many types of projects, it is essential for a translator to have excellent writing skills in his or her A-language.

NOTE 2 Occasionally, TSPs are asked to have their staff revise translations from their A-language into their B-language because the source content is so difficult that a reviser for whom the source is a B- or C-language may not be able to fully understand it.

The following are combinations of A-, B- and C-languages that are used in practice:

B → A

C → A

A → B

C → B

3.2.4 Competences of revisers and reviewers

Revisers and reviewers should

— have a high degree of proficiency in the target language,

— have access to and understand the same project specifications followed by the translator (see Clauses 6 and 7), and

— have an extensive knowledge of the subject field.

When it is not feasible that both the reviser and reviewer have knowledge of the subject field, at least the reviewer should have this knowledge.

In addition, revisers should

— have the competence of a translator,

— be able to read and fully understand the source language, and

— have at least as much translation experience as the translator.

3.2.5 Competences of project managers

Project managers working in translation projects should have

— skills in the use of translation tools and other relevant software, and

— an understanding of the translation process and terminology management concepts.

In addition, proficiency in a second language and previous experience in translation, revision and/or review is desirable.

Translation project managers can increase their effectiveness by additionally turning to principles and practices defined as good practice by the project management profession (e.g. see ISO 21500).

NOTE A project manager can be someone working for the TSP who specializes in project management, someone working for the requester, or the translator, as designated by the project specifications (see Clauses 6 and 7).

3.3 Accepting work from requesters

Before the production phase begins (see 5.3), TSPs should ensure that the project specifications have been finalized (see Clauses 6 and 7) and that both the requester and the TSP have officially approved the project (see 5.2.6). TSPs should not accept work when the project specifications are unclear.

TSPs should not accept work that they will be unable to complete in accordance with the agreed-upon project specifications.

4 Translation project management

4.1 Translation project stakeholders

Stakeholders in a translation project include

— requesters (see Clause 3);

— TSPs, comprising

  1) project managers (see 3.2.5),

  2) translators (see 3.2.3),

  3) revisers (see3.2.3 and 3.2.4),

  4) reviewers (see 3.2.4), and

— end users

Other possible participants include authors, desktop publishers and proofreaders; however, the involvement of such parties is beyond the scope of this clause.

4.2 Complexity as a result of project specifications

Translation projects can range from very simple to very complex. With ongoing innovations and increasing availability of technology, requesters and TSPs can effectively manage projects of all types and sizes.

Examples of translation projects

Translation projects can require the TSP to translate

- only one or two documents into a single target language using only a word processing application,
- a large number of source content files in a variety of file formats into multiple target languages and according to multiple locales requiring specialized formatting, or
- source documents from several source languages into one target language purely for informational purposes.

A TSP can be involved in a highly complex project that involves content

- from multiple source languages,
- provided in a great variety of file formats (including audio, video, and more complex digital formats or databases),
- to be translated into multiple target languages,
- to be delivered according to a complex schedule and in many separate packages,
- requiring significant communication between requester, TSP and third-party stakeholders, and/or
- to be tested before the translation product is released to the end users.

A large project such as this can take months to complete.

The structured specification approach (see Clauses 6 and 7) helps the requester and the TSP identify the relevant aspects that influence the complexity of a translation project and its management. When requesters and TSPs understand these aspects, they can make informed decisions that will guide the overall management of the translation project and influence the project's outcome.

Requesters and TSPs should be aware that certain aspects of the project specifications can greatly increase the complexity of a translation project and its management. These factors include

- multiple target languages and language variants requested,
- uncommon combinations of source language and target language,
- need for the creation of a terminology database,
- target audience for the target content that is different from that of the source content,
- purpose of the target content that is different from that of the source content,
- budgetary restrictions,
- tight deadlines given the volume of the source content,
- multiple source content files to be translated,
- source content in file formats that are difficult to edit,
- source content files that have complex formats,
- special formatting of the target content, and

— limited access to confidential content.

When the requester provides multiple source contents or requests multiple language combinations, or both, the set of project specifications sometimes needs to be tailored for each of the source contents and language combinations.

See also 7.2.1.4 for the complexity and challenges of a project.

See Clause 5 for translation project phases.

5 Phases of a translation project

5.1 Terminology work

Terminology work applies to all stages of a translation project. For this reason, references to tasks in terminology work appear throughout this Technical Specification. See Annex B for a compilation of statements about terminology work.

NOTE For the purpose of this Technical Specification, phraseology is understood to be included in *terminology work.*

Sometimes terminology tasks (identifying terminology, harmonizing terms within a terminology database, and ensuring consistency) are neglected as separate tasks in a translation project, and terms are simply dealt with as they are encountered. The consequences of this neglect vary according to factors such as the volume of the source content and the number of translators involved in the project. A relevant glossary or terminology database, however, helps prevent terminology errors and inconsistencies, particularly when large project teams or large volumes of source content are involved.

Terminology work is crucial to nearly all translation projects and at all stages of the translation project.

5.2 Pre-production

5.2.1 Extent of pre-production

The pre-production phase begins when the requester selects source content for translation; the phase ends when both the requester and the TSP have agreed upon the final project specifications.

5.2.2 Source content identification and preparation

The requester should identify the source content that requires translation. The requester should also examine the reasons for translating the source content. The obvious assumption is that the requester has decided to have the source content translated rather than have it delivered in its original language to the end user.

In order to best utilize resources, the requester should perform a search to determine whether the source content has previously been translated. If it is determined that the source content has previously been translated, the requester should first ensure that the quality of the translation product is acceptable and address any intellectual property issues before using the translation product.

When applicable, source content can be adapted during this phase in order to facilitate translation. In particular, when it is known beforehand that a document will be translated, authors should consider eliminating as many obstacles as possible by optimizing the source content for clarity, conciseness and consistency in order to make the translation process more efficient and less costly (see 5.2 and 8.2.1.5). Also, decisions should be made as to whether to avoid references to source-culture concepts that may not have equivalents in the target culture. Changes to the register in the source text should also be considered at this point.

When applicable, the source content should be checked and prepared for any specific software (i.e. a translation memory system) required for the translation project.

5.2.3 Preliminary project specifications

The requester should prepare the preliminary project specifications and determine the date on which the final translation should be delivered. Whenever possible, the preliminary project specifications should cover many of the linguistic translation parameters 1–13 (see 7.2), specifically:

— 1–5: source content information, including source language, text type, audience and purpose, subject field, volume, known complexity and challenges, and origin (see 7.2.1);

— 6–8: target language, audience, and purpose, as well as whether the target audience or purpose of the target content is different from that of the source content (see 7.2.2.1 and 7.2.2.2); and

— 11: file format (see 7.2.2.5); and, when applicable,

— 16: technology (see 7.4.1).

The preliminary project specifications should also include the following, if applicable:

— 20: qualifications for TSP selection (7.5.2).

When the source content is to be translated into multiple languages, the set of project specifications sometimes needs to be tailored for each language combination.

5.2.4 TSP selection

The requester should select a TSP that will meet the requirements of the project (see 3.2.1 and 7.5.2). The requester should provide the preliminary project specifications to the TSP.

The TSP should review the preliminary project specifications before agreeing to do a project. The complexity of the project and capacity of the TSP can be grounds for discussing daily capacity with the requester or negotiating the deadline or both. Once the preliminary project specifications have been analysed, the TSP and requester should include compensation in the specifications.

5.2.5 Final specifications

The TSP and requester should prepare the final specifications in consultation with one another. The project specifications should be made in accordance with the structured specification approach (see Clauses 6 and 7); each translation parameter given in that approach should have a corresponding specification. The division of labour within the production phase should be clearly laid out.

5.2.6 Approval of specifications

Complete project specifications are critical to ensuring that all processes have been outlined and the responsible party responsible for each task has been clarified. Once the requester and the TSP are satisfied with the project specifications, both parties should approve the final project specifications.

Approval of project specifications can be in the form of a signed contract, email, purchase order, etc. Although in many cases, no legal contract is required at any point (e.g. an in-house translation department fulfilling a request from another department in the same organization), in those cases in which a legal contract is signed, the project specifications can be included to formally define the work to be done. Nevertheless, nothing else in this Technical Specification should be interpreted as guidance for writing legal contracts regarding translation projects.

5.3 Production

5.3.1 TSP and requester interaction

It is sometimes the case that the TSP finds that the project specifications need to be changed during production. For this reason, it is important that the requester designate a contact person to ensure that communication between TSP and requester can take place. Contact procedures should be described under translation

parameter 21b (7.5.3.2). Project specifications should only be changed during production upon agreement of both the requester and the TSP.

5.3.2 Preparation

The preparation stage begins with the verification of all aspects of the project specifications, including who will perform each task in the production phase and where the various resources are to be found. Parties that will be involved in the production phase should have access to those project specifications that are relevant to their work.

During this stage, the TSP should examine the source content for terms that are not included in any terminology resource provided by the requester. This process includes term extraction and can be performed with the aid of a software tool. Such terminology tasks can be vitally important to the translation project and should not be neglected.

This stage can also include preparing, aligning and/or revising a translation memory and running pre-translation commands in a translation memory environment (inserting exact matches into the target text, etc.), if these tasks were not completed in the pre-production phase.

See also 7.3.1.2 for the translation sub-parameter relevant to preparation tasks.

5.3.3 Initial translation

In the initial translation stage, the source content can be translated initially by either a human or a machine, if appropriate, depending on the type of translation specified in the project specifications. See 7.3.1 for the translation sub-parameter relevant to initial translation.

NOTE For further information about machine translation, see Annex C.

When the project consists of assessing and correcting an already completed translation product, this stage is skipped and the project moves directly to the in-process quality assurance stage.

5.3.4 In-process quality assurance

Tasks that fall between the initial translation and delivery to the requester pertain to the in-process quality assurance stage. Typically, there are several tasks to be performed in this stage, such as self-checking (or post-editing), revision, review, final formatting or compilation, and proofreading. See 7.3.1 for the elaboration of these tasks. Because each project is unique, all or none of the tasks might be performed for a project. The project specifications should indicate exactly which tasks are required for a given project.

The responsibility for in-process quality assurance tasks can fall upon either the requester or the TSP. For this reason, it is important to specify the division of labour in the specifications. Qualitative or quantitative assessment of the translation project can be conducted at any point in the production phase. When project specifications are clearly defined, requesters and TSPs can expect to conduct effective qualitative assessments. Quality can be defined as the degree to which the translation product conforms to the project specifications. More specific guidance for qualitative assessment is beyond the scope of this document.

Interaction between the requester and the TSP can be important during this stage to clarify any questions and ensure that the project specifications are appropriate.

5.3.5 Delivery

After all production tasks have been completed, the TSP should deliver to the requester the final translation and other items as determined by the project specifications. See 7.5.2 for the translation parameter relevant to terms of delivery.

Generally, both the TSP and the requester should archive all relevant documents and other files exactly as exchanged in order to document and track the work performed.

In some jurisdictions, file retention time is governed by legislation or other standards.

5.4 Post-production

5.4.1 Commencement of post-production

The post-production phase occurs after the TSP has completed the project and has delivered all of the required items to the requester. The tasks described in 5.4.2 to 5.4.5 can be performed during the post-production phase but are not required.

5.4.2 Requester-managed post-delivery inspection

The requester can choose to conduct post-production inspection (also known as third-party review) of the final translation product. Those assigned to conduct this inspection should refer to the project specifications and use them as the basis for their evaluation, ensuring that all evaluative comments (see examples below) are justified by the specifications.

EXAMPLE 1 The register of this document (e.g. too academic and formal) does not match the register (e.g. 7th-grade reading level news item) indicated in the project specifications. (Translation parameter 7: Target audience, see 7.2.2.2)

EXAMPLE 2 The terminology used in this paragraph is not consistent with the terminology that the requester has provided to the TSP. (Translation parameter 2: Specialized language, see 7.2.1.2)

Comments, queries, and changes should be based on the project specifications and should be submitted to the TSP. When dictated by the specifications, changes made to the final translation should also be approved by the TSP. Such feedback can be valuable to the TSP because it can help the TSP improve future translation work. The provided feedback can also facilitate discussion about the project specifications; the requester and TSP can then determine whether specifications should be altered for future translation projects.

5.4.3 Acquiring end-user feedback

In order to foster ongoing improvement, the requester and the TSP should discuss both the outcome of the project and their level of satisfaction with that outcome. To facilitate the discussion, the requester or TSP can make arrangements to obtain feedback from the end user or end users. Although end-user feedback can be challenging to gather, it should be obtained when feasible.

The means by which feedback is gathered can vary. They may include customer satisfaction surveys and questionnaires administered digitally or on paper. An analysis of project specifications can help the requesters and TSPs decide when and how to gather end-user feedback.

NOTE This task is also called product evaluation.

5.4.4 Incorporating end-user feedback into the specifications

End-user feedback can help the requester and TSP evaluate both the specifications and the degree to which the TSP adhered to the project specifications. For example, both the TSP and requester can determine whether or not

— the audience was correctly defined in the project specifications (audience, see 7.2.2.2),

— end users might prefer an overt (non-localized) translation product rather than a covert translation product (content correspondence, see 7.2.2.3.2),

— the final format was an adequate means for presenting the translation product (file format, see 7.2.2.5, layout, see 7.2.2.6.4),

— the target content contained general language or terminological errors (language, see 7.2.2.1), and

— the linguistic and subject field competence of translators, revisers and reviewers was suitable for the project (selecting TSPs, see 3.2).

Once the requester has gathered end-user feedback about the translation product, the feedback should be provided to the TSP, and both parties should incorporate the feedback into the specifications for future projects.

5.4.5 Other feedback

The TSPs should also consider feedback made by anyone who was involved in the translation project, including requester, translators, reviewers, revisers and project managers. The TSP should document procedures to improve further projects based on relevant feedback received.

6 Developing structured specifications for translation projects

6.1 Translation parameters and project specifications

In this document, a distinction is made between a specification and a translation parameter. A translation parameter is one of a given set of factors that are applicable to all translation projects and whose values (the project specifications) should be determined for each individual project to fully define the conditions and output of the translation process. The structured set of translation parameters is predetermined (see 6.4), and translation parameters apply universally to all translation projects. A translation parameter can be paraphrased as a question.

EXAMPLE 1 **Translation parameter**: subject field(s) **Question**: What is the subject field?

EXAMPLE 2 **Translation parameter**: volume **Question**: How long is the source text?

A project specification is the value of a translation parameter for a particular project. Project specifications vary by project according to the needs of the project. A project specification can be considered to be an answer to the question associated with the corresponding translation parameter.

EXAMPLE 3 Translation parameter 2a: source subject field

Possible project specifications: plasma physics; family psychology; etc.

EXAMPLE 4 Translation parameter 3: volume

Project specification: 1,000 words; 5,000 words; etc.

Additionally, some translation parameters are subdivided into translation sub-parameters in order to allow specifications to be more precise.

EXAMPLE 5 Translation parameter 19: permissions

Translation sub-parameter 19a: copyright

Translation sub-parameter 19b: recognition

Translation sub-parameter 19c: restrictions

6.2 Structured specifications

Translation parameters form a framework for creating structured specifications. Without this framework, the descriptions and order of the specifications can vary considerably from project to project and the specifications would be unstructured.

A structured set of specifications has three characteristics that set it apart from an unstructured set of specifications:

— each specification is the project-specific value of a translation parameter that applies to all types of projects;

— each translation parameter has a standard name and description and can, where feasible, have a predetermined pick list of allowed values — this aspect of the specification framework making it easier to understand a new set of specifications or to compare two sets of specifications;

— each set of specifications is presented in a standard order with a standard grouping of translation parameters into categories and includes a place for the value of each translation parameter, even if that value has not yet been specified.

When requesters and TSPs develop structured specifications, they create a resource that not only defines and guides a translation project but also allows the entire translation project to be evaluated fairly and accurately. Evaluation according to project specifications includes “fitness for purpose” and goes beyond them to include assessment based on adherence to project specifications other than purpose.

The project specifications are relevant during all phases of a translation project.

6.3 Translation parameter categories

The structured set of translation parameters can be divided into four major categories, listed below followed by a brief description of each. The numbers indicate the parameters that pertain to a particular category. Thus a parameter is referred to as a *linguistic* parameter, a *production task* parameter, an *environment* parameter or a *relationship* parameter.

a) **Linguistic**

Translation parameters 1–13 identify information about both the source content and target content. Parameters 1–5 identify the source content (e.g. language, audience and purpose, text type and volume in number of words or some other measure). Parameters 6–13 identify information about the target content (e.g. target audience and purpose, target language or layout).

b) **Production tasks**

Translation parameters 14–15 define the tasks that are relevant to the production phase; these tasks should only be performed after the final project specifications have been approved.

c) **Environment**

Translation parameters 16–18 specify the technological and workplace environment in which the translation takes place, as well as resources to be consulted.

d) **Relationships**

Translation parameters 19–21 specify all information that concerns deliverables not covered by the previous categories of translation parameters, including, but not limited to, legal and ethical considerations, deadlines, and compensation to the TSP, if applicable.

6.4 Translation parameters

6.4.1 General

All 21 translation parameters are listed in 6.4.2 to 6.4.5. Clause 7 describes each in greater detail. National and regional translation standards for translation quality contain many of these parameters, but they do not always use the same parameter names as those used in this Technical Specification[15].

6.4.2 Linguistic — Parameters 1 to 13

6.4.2.1 Source content information — Parameters 1 to 5

1 source characteristics

1a source language

1b text type

1c audience

1d purpose

2 specialized language

2a subject field

2b terminology

3 volume

4 complexity

5 origin

6.4.2.2 Target content information — Parameters 6 to 13

6 target language information

6a target language

6b target terminology

7 audience

8 purpose

9 content correspondence

10 register

11 file format

12 style

12a style guide

12b style relevance

13 layout

6.4.3 Production tasks — Parameters 14 and 15

14 typical production tasks

14a preparation

14b initial translation

14c in-process quality assurance

14c1 self-checking

14c2 revision

14c3 review

14c4 final formatting

14c5 proofreading

15 additional tasks

6.4.4 Environment — Parameters 16 to 18

16 technology

17 reference materials

18 workplace requirements

6.4.5 Relationships — Parameters 19 to 21

19 permissions

19a copyright

19b recognition

19c restrictions

20 submissions

20a qualifications

20b deliverables

20c delivery

20d deadline

21 expectations

21a compensation

21b communication

7 Description of translation parameters

7.1 Relevance of translation parameters

Requesters and TSPs should ideally create project specifications for all the translation parameters according to the translation parameters described in this clause. In cases where requesters and TSPs have previously worked together, requesters and TSPs can choose to omit certain specifications that are implicitly understood or retrieve and modify a set of stored specifications.

Translation parameters 1–5 are descriptive of characteristics of the source content and are therefore independent of the target content. These parameters should be used to develop preliminary project specifications during the pre-production phase (see 5.2). In particular, correctly identified information about the source content aids the requester in selecting an appropriate TSP for a project. It also allows both the requester and the TSP to have clear expectations at the outset of the project.

NOTE 1 Project specifications for translation parameters 1–5 are especially important to pre-production activities in projects where the source content is marked confidential and only a few people in the production chain are allowed to see it.

Translation parameters 6–21 are relevant to product assessment and/or project assessment. The project specifications not only define and guide a translation project but also allow the entire translation project to be assessed. Requesters and TSPs can also use all of the project specifications to assess any issues that increase the complexity of the content, a factor that influences cost estimates (see 4.2).

NOTE 2 The relevance of project specifications to all aspects of the production phase is direct and is therefore not reiterated in these descriptions.

NOTE 3 See Annex A for a visual representation of the relationship between translation parameters and project phases.

7.2 Linguistic parameters — 1 to 13

7.2.1 Source content information — Parameters 1 to 5

7.2.1.1 Source characteristics: 1

7.2.1.1.1 Source language: 1a

The source language (e.g. Portuguese or English) and the source language variant or locale (e.g. Brazilian Portuguese/language code pt-BR, or UK English/language code en-GB) should be identified by the requester if known or by the TSP if not.

NOTE Language codes are treated in BCP 47[16].

Other source characteristics should also be identified by the requester if known to him or her, or by the TSP if the requester is not in a position to identify those characteristics of the source content.

7.2.1.1.2 Text type: 1b

The text type and genre of the source content should be identified

EXAMPLE Utility patent, persuasive brochure, appliance user manual, annual address to stakeholders of a public company.

7.2.1.1.3 Audience: 1c

The intended audience of the source content should be identified

EXAMPLE Patent officials, technicians, employees of a specific company.

7.2.1.1.4 Purpose: 1d

The original purpose of the source content should be identified

EXAMPLE Identify all uses of product to be patented, allow scheduled maintenance, entertainment.

7.2.1.2 Specialized language: 2

7.2.1.2.1 Subject field: 2a

The requester should identify the subject fields of the source content. These should be given as precisely as possible.

EXAMPLE 1 Chemical engineering, civil engineering, asphalt, street maintenance and repair.

EXAMPLE 2 Economics, poverty, family psychology, personal finance.

The subject field should not be confused with the text type or purpose. A document of the type “nonfiction novel” could have the primary purpose of entertaining the reader or pushing a political agenda.

EXAMPLE 3 A video game about a science fiction character who is on a quest to save the world might have the following project specifications for text type, genre, purpose, and subject field:

text type: video game

genre: science fiction

purpose: entertainment

subject field: space technology

NOTE There is no separate translation parameter or sub-parameter for the subject field of the target content, since it is assumed that the target content treats the same subject fields as the source content.

7.2.1.2.2 Source terminology: 2b

Requesters should identify any terms in the source content that TSPs should translate in a particular way. If a requester has a terminology database that is relevant to the source content, the requester should provide it along with instructions on how the TSP should appropriately use the terms (see also 7.2.2.3).

7.2.1.3 Volume: 3

This translation parameter is intended to identify the source content's volume.

Volume represents a commonly used method for projecting the cost of a translation project and can be measured by identifying the number of specific elements in a text, namely characters, words, lines or pages.

When compensation is based on volume, requesters and TSPs should agree on the element to be measured. They can either hand count or use commercially available tools to generate the volume specification. Because two software applications, or even two versions of the same application, can provide different word counts for the same document, when disagreement occurs, requesters and TSPs can refer to a publicly available standard for measuring volume known as GMX-V[10]. When volume is used for determining the cost of a translation project, either source-content volume or target-content volume can be used.

Alternative compensation patterns are sometimes used, such as hourly rates or lump sum payments.

7.2.1.4 Complexity: 4

The requester and TSP should identify any factors that influence the difficulty of translating the source content (see also 4.2). Many challenges can originate in the nature of the source content or in the text itself.

Source content can take many forms, including text, images and audio/video recordings, and a variety of formats, including standard documents, slide presentations, databases and entire websites. There is no limit to the type of source materials or to how they can be presented to the TSP. However, the complexity arises when TSPs must make special arrangements to access the actual text that is to be translated. For example, content containing special markup language, such as XML and HTML, can be more difficult to access than content presented as plain text. Such source-content obstacles can dramatically affect how difficult and time-consuming a translation project can be, with a resulting impact on cost.

Taking another example, the effort required to translate the text within a graphic, such as an image, diagram or even a Flash presentation, depends on whether the graphic is text-editable or whether the requester has provided a separate text file that accompanies the graphic. When a separate text file is available, the translated text can be added to the graphic as a separate layer. A project's complexity is increased immensely when a graphic is not easily text-editable.

Challenges can also originate in the text of the source content itself. The source content should be evaluated for cohesion, coherence, consistency, readability and errors due to non-native speaking authorship. Challenges include internally inconsistent terminology, lack of cohesiveness, errors in grammar, spelling or facts, difficult discourse structure, and inconsistent formatting. Such challenges can increase translation difficulty. The literary nature of the source content can also create challenges for the translator. For example, a play on words, such as rhyming or alliteration, can be especially difficult to translate. In addition, the writing of an author who does not possess native-like proficiency in the source language can exhibit interference from the author's native language. Knowing the source of this language interference can help the translator understand any unnatural expressions.

During the process of creating content that is intended for translation, authors should consider eliminating as many obstacles as possible by optimizing the source content for clarity, conciseness and consistency. These measures will make the translation process more efficient and less costly.

7.2.1.5 Origin: 5

The origin of the source content can be highly relevant to a translation project, especially in pre-production planning. Proper identification of the origin of the source content can influence the planning of a project as a

whole and, indeed, may affect the need for a new translation at all. The requester and TSP should ensure that the origin of the source content has been determined.

EXAMPLE A requester commissions a French text to be translated into English before discovering that an English version already exists and that the French source content had originally been translated from English. The appropriate step would have been to obtain the original text rather than to translate a translation product.

When possible, the requester, or the TSP as designated by the requester, should identify the native language of the source content's author, as this can sometimes add complexity to the project.

7.2.2 Target content information — Parameters 6 to 13

7.2.2.1 Target language information: 6

7.2.2.1.1 Target language: 6a

For a TSP to produce an adequate translation, it is insufficient for the requester to simply specify the target language. Requesters should also identify the desired locale for the target content. There are many differences between regional variants, such as US English vs.UK English, that could influence the TSP's work.

EXAMPLE Translation products targeted at an audience in Quebec might not be acceptable in France.

NOTE Language codes are described in BCP 47[16].

When requesters desire that the source content be translated into more than one language, the set of project specifications sometimes needs to be tailored for each language combination.

Language and region are also relevant to project assessment. Although it is seldom that projects go so disastrously wrong that the source content is translated into the wrong language, occasionally it happens that source content is translated into the wrong language variant.

7.2.2.1.2 Terminology: 6b

Target-language terminology goes beyond common, general-language usage in a particular language and region. Terminology is specific to a subject field and can be specific to an organization as well. This basic distinction is also known as the difference between general language and specialized (or domain-specific) language. Therefore, sometimes specifying only the subject field is not sufficient. For example, a particular requester may have company-specific terminology that overrides typical subject-field terminology and that is required to be taken into account by the TSP. In this case, the requester should provide such terminology, including definitions, to the TSP. See also 7.2.2.6.

Sometimes terminology resources contain conflicting information (e.g. several different terms for the same source concept) or incorrect terms. The TSP should consult with the requester as to how to resolve such issues.

7.2.2.2 Audience and purpose: 7 and 8

Both the audience and the purpose of a target content can be the same as, or different from, the audience and the purpose of the source content. The requester should identify whether the audience and the purpose of the target content are different from the audience and purpose of the source content.

In some sense, the target audience will always differ from the source audience because the target content is intended for speakers of a different language. However, the shift in audience can entail more than just addressing speakers of a different language. Sometimes the type of audience will be different. In that case, that information should appear in the specifications.

EXAMPLE A requester requests that a document that was originally written for specialists be translated for a more general audience.

The requester should identify the purpose of the target content. The TSP should be aware of the purpose of the target content and translate the source content accordingly. Any shift in the purpose of the target content

from the purpose of the source content should be documented and discussed by the requester and TSP before beginning the translation project.

Where a project has multiple purposes, each should be carefully documented in order to ensure an appropriate translation product.

Audience and purpose are related to many of the other translation parameters. In order to avoid redundancy, details about a project that appear as specifications under other parameters need not be repeated here. Specifications for this parameter should focus on how the audience and purpose of the target content compare to the audience and purpose of the source content.

7.2.2.3 Content correspondence: 9

7.2.2.3.1 General

Content correspondence is the manner in which the target content represents aspects of the source content, i.e. *how* the target content matches the source content. Typical dimensions of content correspondence are covert/overt, full/summary and idiomatic/non-idiomatic. Accuracy and fluency are expected, unless otherwise indicated in the content-correspondence specification.

The default project specifications associated with the content correspondence parameter are covert (7.2.2.3.2) and full (7.2.2.3.3), but there are many cases in which departures from this default are desired.

EXAMPLE A covert translation is not appropriate when an overt translation was specified.

The various dimensions of content correspondence are described in the following sections.

NOTE References [11] to [14] give more information on these dimensions and other aspects of functional approaches to translation quality.

7.2.2.3.2 Covert vs. overt

Requesters should specify if the target content should be “foreignized” or “domesticated”. That is, requesters should decide if the target content should reveal the foreign nature of its source content, or if it should read like a text authored in the target language with no trace of its origin. This contrast is also described by the terms overt and covert. An overt translation product discloses that it is a translation product. A covert translation product poses as an original text.

It is sometimes thought that the covert/overt distinction only applies to a literary translation. This is not so. Not all commercial, government, or non-profit translations are localized, i.e. made covert.

Localization is a process that includes covert translation of textual material and adaptation of non-textual material. The objective of localization is to create a target–locale version of a product or service that appears as if it were created in the target language and geographic region. A delicate issue in localization is whether or not the locations of the events described in the source content are to be adjusted to the locale of the intended audience.

There are two types of non-localized text: overt translation and untranslated text (i.e. pieces of source content that have not been translated into the target language). A requester can decide not to localize in translation in order to produce a translation product that can be used in multiple locales. This is sometimes called a generalized translation. A requester can also choose not to localize in order to reduce cost.

Examples of questions that can be asked in the localization process

There are many questions that the requester and TSP should discuss when the source content is to be localized.

— How are proper nouns to be handled? Should they be translated or left in the source language?

— Should concepts specific to the target culture be substituted for concepts specific to the source culture?

— Should references to explicit material (sex, violence) be reproduced in the target content, deleted, or adjusted?

— Should interjections in the source content be copied into the target content or replaced by their target-language equivalents?

— Should proverbs and sayings be replaced by their equivalents or translated literally to convey the original imagery?

— Should references to historical or folklore personae be accompanied by an explanatory note, left unchanged, or replaced by references specific to the target culture?

— Should names or words that sound bad in the target language be avoided?

— Should paralinguistic content (e.g. tables, diagrams, emoticons) be left unchanged, replaced by target-culture equivalents, or converted into language?

The TSP should notify the requester when a proper noun is potentially inappropriate for the target culture, even if the specifications call for leaving proper nouns unchanged in the target content.

7.2.2.3.3 Full translation vs. summary translation

Requesters should specify whether full translation or summary translation is desired. Summary translation, or rough translation, can be requested when issues of cost and time are more important than careful or complete translation. The requester can also ask for full translation of only portions of the text and summary translation of the rest.

7.2.2.3.4 Accuracy

TSPs should ensure that the target content is accurate, unless the requester specifies that accuracy is not important.

Accuracy refers to the connection between the target content and source content. Accuracy is relative to the type of content correspondence specified. In other words, an accurate translation is one free of translation errors relative to the specified content correspondence. Categories of accuracy errors include terminology errors, misunderstandings of the source content, inappropriate additions or omissions of material, and the use of false cognates — words in the source and target languages that appear to have the same meaning, but actually have very different meanings.

EXAMPLE A translation product that uses the Spanish word *pariente* to mean the English word “parent” would be inaccurate because *pariente* is a false cognate of “parent” that actually means “relative.” A more accurate translation would be *padre o madre* (“father or mother”).

7.2.2.3.5 Fluency

TSPs should ensure that the target content is fluent, unless the requester specifies otherwise. Fluency refers to the readability of the target content. It consists primarily of mechanical characteristics (such as spelling, punctuation, and grammar) and natural-sounding style (complexity of structures, use of redundant words, word choice, etc.).

Fluency can be assessed without reference to the source content. Accuracy cannot. The target content can be highly fluent without being at all accurate. Categories of fluency errors include incorrect word order, capitalization and spelling errors, punctuation and grammar mistakes, and awkward wording. The requester should explicitly specify when a fully accurate and fluent translation is not required for the target content.

EXAMPLE 1 A requester is not concerned with fluency because of time constraints and only needs a rough translation of the source content.

EXAMPLE 2 The requester and the TSP partially specify fluency requirements by agreeing on textual characteristics that hinder understanding (such as unjustified passive voice, long participle constructions, etc.) and that should be avoided.

7.2.2.3.6 Idiomatic vs. non-idiomatic

Idiomatic translations read as if they were written in the target language by a native speaker with substantial writing skills, using idiomatic expressions and other collocations typically used by native speakers. Fluency is a necessary but not sufficient condition for idiomatic text. Target content can be fluent, i.e. mechanically correct, but still not quite idiomatic. An analogy would be a non-native speaker who is fluent in a language but can still be distinguished from a native speaker whose speech is entirely idiomatic and devoid of a foreign accent. Requesters should specify if the target content is not expected to be idiomatic (e.g. when the translation project is solely for the purpose of gathering information).

7.2.2.4 Register: 10

The requester and TSP should agree on the desired register during pre-production.

EXAMPLE Formal academic presentation, informal conversation among friends, political speech.

Register is a complex topic, and a formal/informal contrast is a vast oversimplification. Typically, the target content is expected to use a register that corresponds to the register of the source content. An informal source content would be translated into informal language, and a formal source content into formal language, and so forth. However, sometimes a shift in register is desired.

Translation products are sometimes rejected because their register does not match the intended audience.

7.2.2.5 File format: 11

The requester should specify the file format of the target content (HTML file, word processing document such as .txt or .odt, image file such as .jpg or .tif, etc.). The source-content file format should be specified under translation parameter 4 (7.2.1.4). Stakeholders should not assume that the desired target-content file format is the same as the source-content format.

TSPs can use intermediate file formats in the translation process, provided that the final target content that is delivered to the requester is in the specified file format.

7.2.2.6 Style: 12

7.2.2.6.1 Style guide: 12a

The requester should make any relevant style guides available to the TSP, including any source-language style guides used when creating the source content. The requester should also make available relevant target-language style guides, if any.

If the style guides are not made available to the TSP during translation, revisers and reviewers at a later stage may need to make changes that would have been unnecessary had the TSP been able to follow the style guide from the beginning.

When the requester does not provide a style guide, TSPs sometimes create their own style guides and can ask the requester to approve or otherwise comment on the guide. If no style guide is provided in software localization, the TSP and the requester should at least agree on the maximum length of menu items, messages, and prompts.

When style guides conflict, the TSP should consult with the requester or project manager as to how to resolve such issues.

7.2.2.6.2 Style relevance: 12b

The requester should specify how relevant style is to the current project. For some translations, style matters a great deal. That is why a translator should also be an excellent writer in the target language, although style is not as objective as other factors. One cannot expect to translate with better style than one can write in his

or her A-language. Nevertheless, for many translations style is not as important as accuracy of information in the target content.

7.2.2.6.3 Terminology and style

Terminology is treated here, under the style parameter, because some consider terminology to be an aspect of style.

In specialized language texts, terminology is a crucial element. It is important that terminology be consistent both within the text itself and in comparison to other texts in the same project, subject field, etc. In this document, target-language terminology is treated under translation sub-parameter 6b: Target terminology (7.2.2.1.2). A specification of whether to translate proper nouns or leave them in the source language should be indicated under parameter 9: Content correspondence (7.2.2.3), but if proper nouns are to be translated, they should be found in the terminology database, which should be indicated under parameter 6b: Target terminology (7.2.2.1.2).

7.2.2.6.4 Layout: 13

Anything relevant to the exact layout of the target content which is not found in the style guide should be specified by the requester. Layout details such as margins and font point size can be included in a style guide (see 7.2.2.6.1).

If the requester does not ask the TSP to deal with layout, someone else should be assigned to ensure that the requirements for the layout of the final translation product will be met.

7.3 Production parameters — 14 to 15

7.3.1 Typical production tasks: 14

7.3.1.1 Assigning production tasks

The production tasks listed in 7.3.1.2 to 7.3.1.4 are typical to translation projects. Many of these tasks can be performed by either the requester or the TSP, so it is important that the division of labour be specified. See 5.3 for more detail on the production phase.

Production tasks allow for a nonlinear workflow, e.g. one portion of the source content goes to a senior translator and then directly to final inspection, and another portion to a junior translator, then to a reviser, and then to final inspection, etc.

Production tasks are relevant to both project and product assessment, especially for tracking down the source of a problem in a faulty translation product.

7.3.1.2 Preparation: 14a

Preparatory tasks include identifying terms in the source content and deciding on corresponding target-language terms to be used in this project. Ideally, source-content terms should have already been identified in the pre-production phase (see 5.2). Other preparatory tasks include determining the availability of resources to be used during translation, identifying or creating style guides, and verifying that all relevant parameters, including those related to legal and ethical requirements, have clear values (i.e. project specifications).

7.3.1.3 Initial translation: 14b

Initial translation comprises the first translation of the source content. Depending on project specifications, this can be accomplished by either human or machine translation (see Annex C).

7.3.1.4 In-process quality assurance: 14c

In-process quality assurance often consists of sub-tasks such as those listed below. Because the needs and circumstances of each project are unique, none of these tasks are mandatory. When applicable, these tasks can be performed by someone other than the TSP; the exact division of labour should be specified. When

the TSP is responsible for the in-process quality assurance tasks, the TSP should divulge upon request the number of people involved in the in-process quality assurance tasks and whether those individuals are different from those who performed previous tasks.

EXAMPLE For a very simple translation project, one person might perform both the initial translation and all five in-process quality assurance tasks. In a more complex project, many different people can be involved.

Typical in-process quality assurance tasks include the following (in order).

Self-checking: 14c1

The translator checks his or her own work, or the TSP post-edits machine translation output.

Revision: 14c2

A reviser compares source and target content for correspondence. Revision can also include a completeness check, which involves comparing the target content to the source content to ensure that all of the designated source content has been translated and that content designated as “do not translate” is left in the source language, and a terminology check — verifying the terminological consistency of the target content, often using an external terminology database.

Review: 14c3

A reviewer evaluates the target content, paying particular attention to conventions of the subject field and text type.

Final formatting: 14c4

The target content is formatted for proofreading; in the case of software, the target context (e.g. user interface) is compiled for functional testing.

Proofreading: 14c5

The target content is proofread on its own and a final global comparison is made with the source content.

7.3.2 Additional tasks: 15

This translation parameter allows for the specification of tasks not given elsewhere. Some examples follow.

— Functional testing is necessary for translation and localization projects for software, hardware, and websites. In functional testing, a TSP tries out the user interface to ensure that it works properly.

— Back translation is performed by someone other than the translator. While occasionally required by the requester, back translation to the source content is not usually a good test of the quality of the target content because back translation will only very rarely result in a text that is identical to the source. Ensuring that the revision step is part of the project specifications is a much more reliable predictor of quality in the final translation. However, back translation sometimes plays a valuable role in certain subject fields, such as multilingual health questionnaires, in order to reduce unintended bias that may lead to statistical irregularities.

— On occasion, a requester or TSP randomly selects small samples of a large translation, especially in the case of high ongoing volume, and has them checked by someone else, e.g. using a quantitative measure of translation quality. Results of random sampling conducted by a requester should be at least summarized and made available to the TSP at regular intervals as part of an ongoing improvement plan.

7.4 Environment parameters — 16 to 18

7.4.1 Technology: 16

The requester can specify the preferred technology to be used for the translation project. If the requester does not require particular technology, the TSP should be free to select the technology used.

The TSP should be provided with all relevant information about technology that is to be used in the translation process, as well as any relevant information about the technology that was used in the creation of the source content.

The designated technology affects pre-production planning.

7.4.2 Reference materials: 17

Gathering reference materials is part of the pre-production phase. Typical reference materials include related documents from the requester (both in the source and target languages), glossaries or terminology databases, and translation memories created in related projects. The requester should identify any relevant resources and provide them to the TSP. During translation, the TSP should refer to the reference materials as appropriate.

If reference materials conflict, the TSP should consult with the project manager or requester.

7.4.3 Workplace requirements: 18

The requester should specify any requirements or restrictions on the location at which the work is to be performed. The requester and TSP should also identify any procedures necessary to maintain confidentiality.

EXAMPLE In some government translation projects, all work must be done in a secure facility. In other translation projects, the work can be done anywhere — including at home or over the Internet.

7.5 Relationships parameters — 19 to 21

7.5.1 Permissions: 19

7.5.1.1 Copyright: 19a

The copyright holder of the translation product should be identified. The types of licenses to be granted to other parties should also be identified.

7.5.1.2 Recognition: 19b

It should be explicitly stated whether the translator's or any other TSP's names will appear on the translation product. If so, it is expected that any changes made to the translation product after delivery require the TSP's consent; the project specifications should indicate if that is not the case.

7.5.1.3 Restrictions: 19c

It should be stated whether there are any restrictions on translation memories derived from the source and target content of the project and terminology databases (or project glossaries) associated with the project.

7.5.2 Submissions: 20

7.5.2.1 Qualifications: 20a

When applicable, the requester can specify requirements for a TSP to qualify as eligible to be considered during the TSP selection process.

EXAMPLE A requester can require, among other things, that the TSP be a citizen of a certain country, have insurance, appear on a government-managed list of approved vendors, or be certified against a particular standard or by a particular organization.

7.5.2.2 Deliverables: 20b

The requester and the TSP should carefully identify all items that the TSP should deliver at the end of the production phase. Possible items for delivery, besides the translation product itself, include

— an updated translation memory,

— terminology identified during the translation process, and

— any style guides created by the TSP.

7.5.2.3 Delivery: 20c

The requester and TSP should specify the means of delivery.

EXAMPLE Means of delivery include by email or sFTP (secure file transfer protocol), through a web interface, printed and sent by post, presented in person, etc. Sometimes delivery mechanisms are integrated into translation technology.

7.5.2.4 Deadline: 20d

The requester and the TSP should specify a delivery date for all deliverable items. Requesters and TSPs should carefully identify the consequences of late delivery, partial delivery, or delivery of a product that does not meet all project specifications. From a requester's perspective, the due date of the translation product is often among the most important specifications and can sometimes override all other factors in assessing the success of a project.

7.5.3 Expectations: 21

7.5.3.1 Compensation: 21a

The requester and the TSP should arrange compensation, when applicable. In some situations, such as in an in-house translation department or in a pro bono transaction, there may be no formal invoice or exchange of money. Questions that should be considered include the following.

— What method is used for estimating cost (price per word, lump sum, etc.)?

— How much will the TSP be paid (when explicit payment is involved)?

— Will there be discounts or surcharges applied to the fee?

— How long, once the invoice is sent, will it take for payment to be made?

7.5.3.2 Communication: 21b

Procedures for asking and answering questions should be explained; a contact person for communication between the requester and TSP should be designated. Any other issues and expectations of the involved parties that have not been addressed in the project specifications should also be addressed here.

Annex A
(informative)

Translation project specifications and phases

Figure A.1 is a diagram showing how translation parameters and specifications (see Clauses 6 and 7) are related to activities in the various phases of a translation project (see Clause 5).

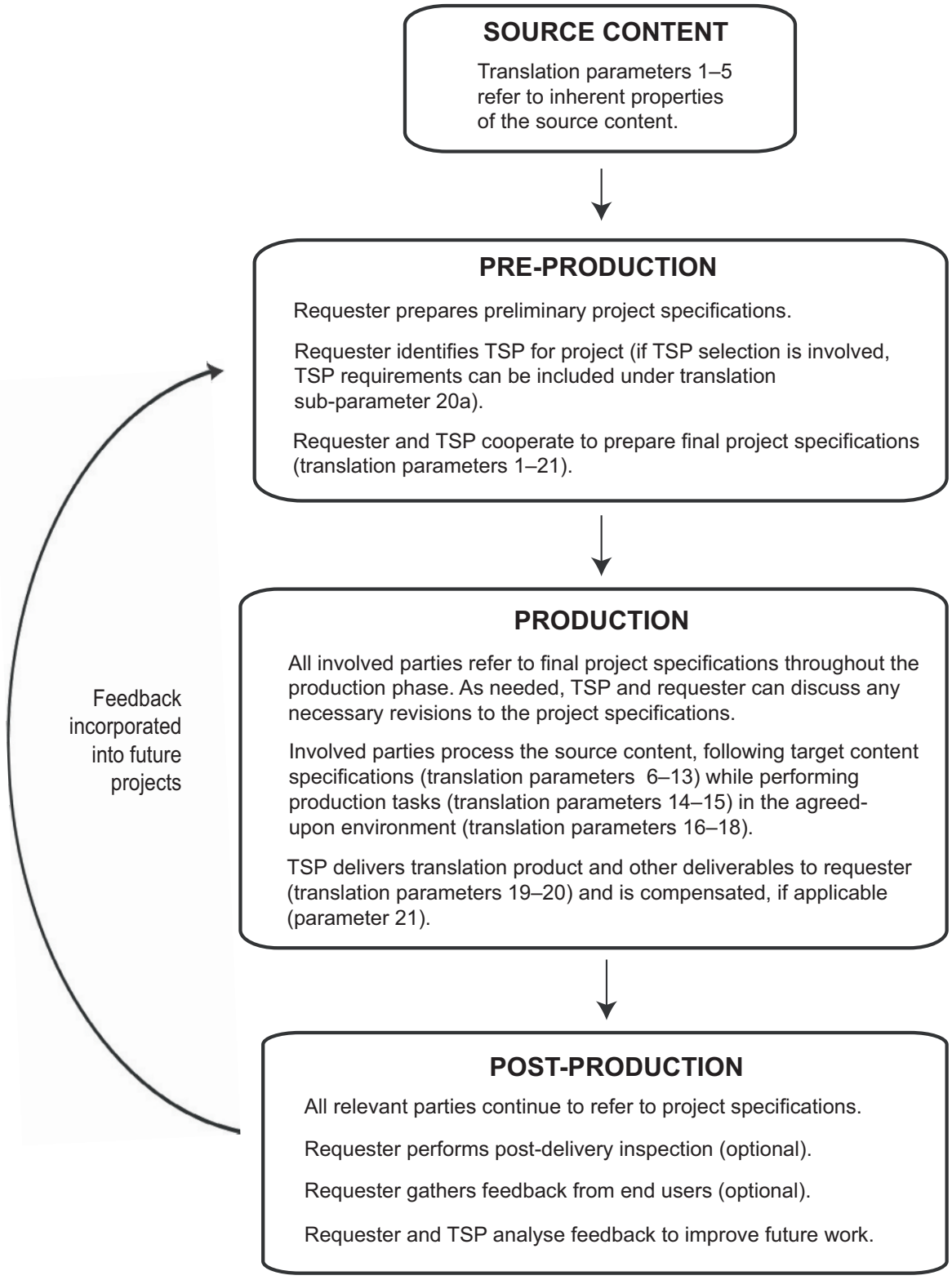

Figure A.1 — Translation project specifications and phases

Annex B
(informative)

Terminology work

B.1 Terminology work

Terminology work applies to all stages of a translation project[1].

NOTE For the purpose of this Technical Specification, phraseology is understood to be included in *terminology work*.

While the use of synonyms and paraphrases in general language is a virtue, and repetitive use of a general-language word needs justification, a given technical concept should always be designated using the same term unless there is a reason to do otherwise. The earlier in the document production chain terminology is made consistent, the better. Indeed, terminology work should begin at the authoring stage, before source content is turned over to a TSP.

B.2 Source terminology in pre-production

Requesters should identify any terms in the source content that TSPs ought to translate in a particular way. If a requester has a terminology database that is relevant to the source content, the requester should provide it, along with instructions on how the TSP ought to use the terms (see also 7.2.2.3).

If a terminology database is provided to the TSP in electronic form, the preferred format is TBX[15].

B.3 Terminology in the production phase

The preparation stage begins with the verification of all aspects of the specifications, including who will perform each task in the production phase and where the various resources are found. Parties that will be involved in the production phase should have access to the specifications that are relevant to them.

During this stage, the TSP should examine the source content for terms that are not included in any terminology resources provided by the requester. This process includes term extraction and can be performed with the aid of a software tool. Such terminology tasks can be vitally important to the translation project and should not be neglected.

Obviously, the content of a terminology database should be kept up to date. Consistent use of an inappropriate term is perhaps easier to correct than inconsistent usage, but can nevertheless cause serious problems for end users.

A detailed treatment of terminology management, though very important to translation projects, is beyond the scope of this Technical Specification.

Annex C
(informative)

Using machine translation

C.1 Types of machine translation

Machine translation as defined here is a process by which people give source content to a computer system and target content is produced without human intervention. This process has a usual capacity of thousands of words per hour. The term for the result of machine translation before a human looks at it and makes corrections is *raw machine translation*. In general, machine translation performs better when tailored to a particular domain or applied to controlled-language source content.

It is beyond the scope of this Technical Specification to discuss the various approaches to machine translation such as rule-based, statistical or hybrid approaches, except to point out that data-driven (or statistical) machine translation is essentially the reuse of massive amounts of human translation without the understanding that is a key component of the contribution of the human translator, reviser or post-editor. Machine translation technology is rapidly evolving and it is impossible to predict its evolution in the long term. Examined here is only *the use* of machine translation, regardless of the approach used in its design.

C.2 Raw machine translation vs. zero translation

Sometimes people use raw machine translation “as is”, without any correction. This approach is typically used when the only alternative is using zero translation, i.e. no translation at all. That is, the end user can choose between using raw machine translation output *or* the untranslated source content; sometimes the end user chooses the raw machine translation output, even though it is neither accurate nor fluent.

Consider the case of instant messaging and texting. People sometimes employ humans to interpret in real time for telephone conversations in which the interlocutors do not speak the same language. However, people seldom if ever employ translators to translate instant messages or text messages in real time.

C.3 Machine translation

Machine translation has become an option that is increasingly used in real-time communication, such as in technical support. It is the only option for people who do not know the source language and who cannot or do not want to consult a human translator.

Supposing German-speaking software engineers in Germany develop a software product that many countries will use. The knowledge-base entries for technical support will be written primarily in German. End users who have limited proficiency in German will be able to choose to consult the knowledge base in German or make a raw machine translation into their own language. The translation will probably contain numerous errors, such as ungrammatical sentences and outright mistakes in content correspondence. Words will be translated in a way that reflects a lack of understanding of the source content. This lack of understanding is a fundamental characteristic of machine translation. The number of errors that raw machine translations make would be flatly unacceptable in a human translation, even before the revision and review process. However, in the raw machine translation vs. zero translation scenario, human translation is not an option and no competition with human translation is implied. Sometimes, a user who is a native speaker of the target language and who has a limited proficiency in the source language will prefer to use a raw machine translation that is full of errors rather than wade through the source-language version. This option is only viable thanks to human intelligence that can infer useful information from inaccurate text and detect those inaccurate aspects that are not useful and should be ignored. For users who have no knowledge of the source language, machine translation is the only option. However, raw machine translation should not be used when misunderstandings based on inaccurate translation can have unacceptable negative consequences.

Another use of raw machine translation involves the use of raw machine translations in conjunction with selection criteria to determine which source contents among many are relevant to their organizations' needs and thus should be translated using the traditional human translation process. In the case of selecting relevant news items based on raw machine translation, analysts who use machine translation are very nearly as accurate as analysts who can read the source content in its original language.

Yet another use of machine translation is to combine it with translation memory lookup. A translation tool first looks up a segment of source content in a translation memory. If a perfect match or near match is not found, the segment can be sent to a machine translation system and the raw output can be presented to the translator. The translator can then evaluate the raw translation and either edit or delete it and translate the segment from scratch.

C.4 Machine translation in the translation process

Machine translation can also be used to produce the initial translation in a process that competes directly with traditional human translation. In machine translation, the initial step results in a raw machine translation that a human then edits to bring it up to a minimum fluency and accuracy level, sometimes even reaching a level as high as that of self-checked human translation. Sometimes, the specifications may require only raw machine translation plus a minimum degree of post-editing. At other times, just as in a traditional translation project, the human revision and/or review process follows. Some proponents of machine translation predict that all translation will soon be made using machine translation; however, this "inevitable" result is not obvious to all professionals in the field of translation. It is often the case that human editing of a raw machine translation is more difficult and time-consuming than simply allowing a professional translator to produce the initial translation. Many professional translators are equipped with modern technology that aids their work, including automatic terminology lookup and translation memory lookup based on both full segments (e.g. sentences) and sub-segments (e.g. noun–noun compounds and other phrases). The objective should be to choose an appropriate mix of human expertise and computer technology for the audience, purpose and other requirements of the project in hand.

C.5 Machine translation and post-editing

Most machine translation output is not subsequently post-edited. It is used in its raw form. There is considerable debate as to the advisability of humans editing raw machine translation output. Sometimes it is cost-effective to do so. Sometimes it is more efficient for a human to translate the source content using translation memory lookup and terminology lookup. An unresolved question is what role machine translation will play in the partially automated creation of terminology databases where the same bi-text corpora are used as the basis for data-driven machine translation.

Another factor in using machine translation is the cost and availability of qualified post-editors. Some studies indicate that post-editing is a distinctly different skill from either initial human translation or revision of human translation. Thus, one should not assume that effective translators, reviewers or revisers will be as effective when editing machine translations.

C.6 Machine translation and translation specifications

When using machine translation, one should not assume that the structured-specification approach is irrelevant. The distinctive feature of machine translation is that the specifications are mostly static or unchanging, except for changes to the machine translation lexicons and aligned corpora of texts and their translations (called bi-texts). Human translators, on the other hand, are able to take into account numerous different sets of specifications. The main way in which a machine translation system can adjust to project specifications is through selecting appropriate lexical-terminological resources such as dictionaries and terminology databases (for rule-based machine translation systems) and an appropriate bi-text training corpus (for statistical machine translation systems). The use of either lexical-terminological or bi-text resources in a machine translation system tunes the system both to particular subject fields and to particular registers. Developing these resources can be very costly.

C.7 Summary

In summary, machine translation has a place in some translation projects, depending on the specifications. Machine translation should be neither accepted as universally appropriate nor rejected as universally inappropriate. For a particular project or class of projects, machine translation may either help or hinder the objective, which is to always efficiently satisfy the agreed-upon specifications, so that the translation product is useable by the targeted end users.

CAUTION Some machine translation systems — especially Internet-based machine translators — incorporate source contents and raw machine translation output, as well as any corrections made to the machine translation output, into a database that is later referenced to produce subsequent translations by other parties. This practice could constitute a violation of confidentiality restrictions in the project specifications, which would thus preclude the use of such machine translation systems.

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2) General Administration of Quality Inspection, Inspection and Quarantine of People's Republic of China, Standardization Administration of the People's Republic of China.

3) Formerly a LISA OSCAR standard. Available at <http://www.ttt.org/oscarstandards

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